
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2009

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-34207

Dynavax Technologies Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

33-0728374

(IRS Employer
Identification No.)

2929 Seventh Street, Suite 100

Berkeley, CA 94710-2753

(510) 848-5100

(Address, including Zip Code, and telephone number, including area code, of the registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:

Common Stock, \$.001 Par Value
Preferred Shares Purchase Rights

Name of Each Exchange on Which Registered:

The Nasdaq Stock Market LLC

Securities Registered Pursuant to Section 12(g) of the Act:

Common Stock, par value \$0.001 per share

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing sale price of the common stock on June 30, 2009 as reported on the Nasdaq Capital Market, was approximately \$50,119,635. Shares of common stock held by each officer and director and by each person known to the Company who owns 5% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 8, 2010, the registrant had outstanding 54,359,311 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the registrant's 2010 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

INDEX

DYNAVAX TECHNOLOGIES CORPORATION

		<u>Page No.</u>
<u>PART I</u>		
Item 1.	BUSINESS	3
Item 1A.	RISK FACTORS	16
Item 1B.	UNRESOLVED STAFF COMMENTS	29
Item 2.	PROPERTIES	29
Item 3.	LEGAL PROCEEDINGS	29
<u>PART II</u>		
Item 5.	MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	30
Item 6.	SELECTED FINANCIAL DATA	32
Item 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	33
Item 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	45
Item 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	47
Item 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES	78
Item 9A.	CONTROLS AND PROCEDURES	78
Item 9B.	OTHER INFORMATION	81
<u>PART III</u>		
Item 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	82
Item 11.	EXECUTIVE COMPENSATION	82
Item 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	82
Item 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	82
Item 14.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	82
<u>PART IV</u>		
Item 15.	EXHIBITS, FINANCIAL STATEMENT SCHEDULES	82
	SIGNATURES	85

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 which are subject to a number of risks and uncertainties. All statements that are not historical facts are forward-looking statements, including statements about our business strategy, our future research and development, our product development efforts, our ability to commercialize our product candidates, the timing of the introduction of our products, the effect of GAAP accounting pronouncements, the potential for entry into collaborative arrangements, uncertainty regarding our future operating results and our profitability, anticipated sources of funds as well as our plans, objectives, expectations and intentions. These statements appear throughout our document and can be identified by the use of forward-looking language such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “future,” “intend,” or “certain” or the negative of these terms or other variations or comparable terminology.

Actual results may vary materially from those in our forward-looking statements as a result of various factors that are identified in “Item 7—Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this document. No assurance can be given that the risk factors described in this Annual Report on Form 10-K are all of the factors that could cause actual results to vary materially from the forward-looking statements. All forward-looking statements speak only as of the date of this Annual Report on Form 10-K. Readers should not place undue reliance on these forward-looking statements and are cautioned that any such forward-looking statements are not guarantees of future performance. We assume no obligation to update any forward-looking statements.

This Annual Report on Form 10-K includes trademarks and registered trademarks of Dynavax Technologies Corporation. Products or service names of other companies mentioned in this Annual Report on Form 10-K may be trademarks or registered trademarks of their respective owners.

PART I

ITEM 1. BUSINESS

Overview

Dynavax Technologies Corporation (“Dynavax” or the “Company”), a clinical-stage biopharmaceutical company, discovers and develops novel products to prevent and treat infectious diseases, asthma and inflammatory and autoimmune diseases. The Company’s lead product candidate is HEPLISAV™, a Phase 3 investigational adult hepatitis B vaccine designed to enhance protection more rapidly and with fewer doses than current licensed vaccines.

Our pipeline of product candidates includes: HEPLISAV; our Universal Flu vaccine; clinical-stage programs for hepatitis C and hepatitis B therapies; and preclinical programs partnered with AstraZeneca and GlaxoSmithKline (“GSK”). We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing therapies to prevent or treat infectious diseases, asthma and inflammatory and autoimmune diseases. Our product candidates are based on the use of immunostimulatory and immunoregulatory sequences. We were incorporated in California in August 1996 under the name Double Helix Corporation, and we changed our name to Dynavax Technologies Corporation in September 1996. We reincorporated in Delaware in 2001. Our principal offices are located at 2929 Seventh Street, Suite 100, Berkeley, California 94710-2753. Our telephone number is (510) 848-5100.

Immunostimulatory Sequences (ISS)

Our proprietary technology platform includes ISS, which are short DNA sequences that enhance the ability of the immune system to fight disease and control chronic inflammation. ISS activate the innate immune response by specifically targeting TLR9, which is found on a specialized subset of immune cells.

[Table of Contents](#)

ISS work by changing or reprogramming the immune responses that cause disease rather than just treating the symptoms of the disease. Since TLR9 is found only in a specialized subset of dendritic cells, ISS do not cause a generalized activation of the immune system and redirect the response of only those T cells involved in a given disease. When linked to or combined with antigens, ISS help generate memory Th1 cells that can reprogram the immune system to induce long-lasting therapeutic effects.

We have developed a number of proprietary ISS compositions and formulations that make use of the different ways in which the innate immune system responds to ISS. Depending on the indication for which ISS is being explored as a therapy, we use ISS in different ways.

ISS Linked to or Combined with Antigens

For viral disease and bacterial infections, ISS are linked to or combined with antigens to increase the visibility of the antigen and stimulate an immune response that will attack and destroy infected or abnormal cells. This treatment induces a highly specific Th1 immune response and generates memory T cells for long-term protection. This treatment has the potential to be used synergistically with other therapies.

ISS Alone

For viral and respiratory diseases, ISS can be used alone to modify the course of this disease by reprogramming the immune system. ISS suppress the Th2 inflammatory response caused by any number of allergens to modify the underlying cause of inflammation as well as provide symptomatic relief.

Advanced ISS Technologies

For several programs, we use our advanced proprietary knowledge to design modifications of the molecular structure of ISS to significantly increase their versatility and potency, allowing use of less ISS. These second-generation ISS stimulate specific immune responses, including potent interferon-alpha induction.

Immunoregulatory Sequences (IRS)

Our proprietary technology platform includes IRS, which are short DNA sequences that specifically inhibit TLRs associated with autoimmune and inflammatory diseases. TLRs are key receptors of the innate immune system that can induce strong inflammatory responses. In animal studies as well as in-vitro, our TLR inhibitors have demonstrated broad potential in multiple autoimmune diseases models, such as lupus, inflammatory skin disorders, and rheumatoid arthritis.

These first-in-class endosomal TLR inhibitors specifically target two types of immune cells, B cells and Plasmacytoid dendritic cells (PDC) that selectively express TLR7 and TLR9. These receptors play a key role in the overproduction of interferon alpha by PDC and in the presence of anti-nuclear autoantibodies generated by B cells, which are hallmarks of some autoimmune diseases such as lupus. Because our TLR inhibitors target only TLR7 and TLR9, they do not inhibit all sources of interferon nor do they affect all antibody responses from B cells. This suggests that these TLR inhibitors would not cause broad immunosuppression.

[Table of Contents](#)

Primary Development Programs

Our pipeline of product candidates includes:

Product Candidate	Clinical Indication(s)	Phase	Partnership/Funding Support
Development Programs			
HEPLISAV	Hepatitis B prevention	Phase 3	Dynavax
Universal Flu vaccine	Influenza prevention	Preclinical	Novartis (Supply and Option Agreement); NIH
SD-101	Hepatitis C infection	Phase 1b	Dynavax
DV-601	Hepatitis B infection	Phase 1b	Dynavax
Partnered Programs			
AZD1419	Asthma	Preclinical	AstraZeneca AB
DV1179	Autoimmune and inflammatory diseases	Preclinical	GlaxoSmithKline; NIH

HEPLISAV Hepatitis B Vaccine

Our lead product candidate is HEPLISAV, a Phase 3 investigational adult hepatitis B vaccine designed to enhance protection more rapidly and with fewer doses than current licensed vaccines. Our global strategy is to develop HEPLISAV for adults who are at risk of hepatitis B infection, initially in populations that are less responsive to current licensed vaccines, including adults over 40 years of age, individuals with chronic kidney disease, and others.

Dynavax has worldwide commercial rights to HEPLISAV, which is based on our proprietary ISS that specifically target TLR9 to stimulate an innate immune response. This vaccine combines our first generation 1018 ISS with hepatitis B surface antigen (HBsAg) manufactured in our Dynavax Europe facility in Düsseldorf, Germany.

In September 2009, we initiated a Phase 3 trial in chronic kidney disease patients and in February 2010, we initiated a Phase 3 lot-to-lot consistency trial in adults over 40 years of age. These studies are directed toward fulfilling licensure requirements in the U.S, Canada and Europe. Data from these trials are expected in mid-2011.

In order to continue the ongoing clinical trials for HEPLISAV, we must raise significant additional funds in the near term. While we are actively seeking financing alternatives, we cannot assure that sufficient funding will be available, or even if available, that such funding will be on terms acceptable to us. If adequate funds are not available in the near term, we have developed contingency plans that would require us to delay, reduce the scope of, or put on hold the HEPLISAV program, and potentially our other development programs while we seek strategic alternatives. In any event, we may be required to reduce costs and expenses within our control, including potentially significant personnel-related costs and other expenditures that are part of our current operations.

Clinical Results

Over 2,500 individuals have been vaccinated with HEPLISAV to date. In the largest clinical trial conducted to date, known as PHAST (Phase 3 Heparin Short-regimen Trial), HEPLISAV met its primary endpoint. The multi-center PHAST trial evaluated more than 2,400 subjects from 11 to 55 years of age in Canada and Germany. This Phase 3 trial randomized subjects three to one and evaluated a two-dose regimen of HEPLISAV administered at 0 and 1 month, compared to a three-dose regimen of Engerix-B^{®1} administered at 0, 1, and 6 months. The primary endpoint was the proportion of subjects who developed protective antibody to hepatitis B after receiving a full course of vaccination.

¹ Engerix-B[®] is a registered trademark of GlaxoSmithKline.

[Table of Contents](#)

Immunogenicity results from this trial demonstrated that subjects receiving HEPLISAV were seroprotected with fewer doses and at an earlier time point than subjects receiving Engerix-B. Results showed 95.1% of subjects who received two doses of HEPLISAV at 0 and 1 month developed protective antibody to hepatitis B when measured at 12 weeks. This compared to 81.1% of subjects who received three doses of Engerix-B at 0, 1, and 6 months when measured at 28 weeks. Data from this trial also demonstrate that subjects over 40 years of age receiving two doses of HEPLISAV over one month achieved a seroprotection rate of 92%, compared to 75% of subjects receiving 3 doses of Engerix-B over six months.

Overall safety results in the PHAST trial showed the profile of HEPLISAV appeared similar to Engerix-B, with the exception that subjects who received HEPLISAV had a higher risk of developing injection site swelling, redness, and pain compared to those who received Engerix-B. The incidence of Adverse Events (AE) was 81.9 percent for the HEPLISAV group, compared to 81.4 percent for the Engerix-B group. The incidence of Serious Adverse Events (SAEs) was 1.5 percent for the HEPLISAV group, compared to 2.1 percent for the Engerix-B group. There were two cases of systemic vasculitis reported as SAEs in this trial, a case of Wegener's granulomatosis, or c-ANCA vasculitis, in the HEPLISAV group and a case of p-ANCA systemic vasculitis in the Engerix-B group. From March 2008 until September 2009, the two Investigational New Drug (IND) applications for HEPLISAV were placed on clinical hold by the FDA following the SAE that occurred in the HEPLISAV group of the PHAST trial. In September 2009, the FDA removed the clinical hold on the IND application for individuals with chronic kidney disease.

Commercial Opportunity

Hepatitis B is a chronic disease which can lead to cirrhosis of the liver and hepatocellular carcinoma. There is no cure for hepatitis B and disease prevention through effective vaccines is critical to reducing the spread of the disease. Available hepatitis B vaccines for adults have several limitations, including:

- Slow onset of protection—the current regimen for adults is usually 3 doses given over 6 months to provide seroprotection of approximately 30%, 75%, and 90% after the first, second, and third doses respectively;
- Poor protection in low responders—current vaccines fail to provide seroprotection to a large percentage of persons over 60 years of age and to immunocompromised persons, such as end-stage renal disease (ESRD) patients; and
- Poor compliance—only 30% of people receive all 3 doses.

HEPLISAV is designed to address the limitations of current vaccines by delivering enhanced protection more rapidly, over a longer duration and with fewer doses than currently licensed vaccines.

We estimate the current worldwide market for adult monovalent hepatitis B vaccines is approximately \$525 million annually. This market is primarily comprised of GSK's Engerix-B and Merck's Recombivax-HB. An estimated \$330 million in additional sales are generated by GSK's combined Hepatitis A/Hepatitis B vaccine, Twinrix. Key market segments include chronic kidney disease (CKD) patients, healthcare workers and first responders, people with high-risk sexual behavior or injection drug use, and chronic liver disease patients.

HEPLISAV is being developed initially for patients less responsive to current licensed vaccines, including those with CKD, HIV or chronic liver disease. The chronic kidney disease market is large, growing rapidly, and is widely recommended for vaccination. In 2006, there were approximately 750,000 ESRD patients in the United States and the 5 major European markets and approximately 150,000 new patients are added annually. These patients do not respond well to current vaccines, so a typical regimen calls for 8 doses of Engerix-B (vs. 3 doses in the general population). Even with this regimen, approximately 35% of these immunocompromised ESRD patients do not respond to vaccination and 20% require boosters. As vaccination for these patients occurs regularly at dialysis centers, this is a concentrated, renewable market that can be served by cost-effective, targeted sales distribution networks.

[Table of Contents](#)

We believe that the potentially differentiating characteristics of HEPLISAV can address key unmet needs in adult hepatitis B vaccination, and may provide an opportunity for growth in under-served market segments such as HIV and chronic liver disease. The HIV positive market segment shares similar characteristics to the ESRD market. Vaccination is critical due to substantially increased morbidity and mortality from co-infection with HIV and HBV. Patients do not respond well to current vaccines, so aggressive vaccination regimens and boosters are common. There are approximately 2 million adults living with HIV in the U.S. and Europe, with approximately 150,000 new cases annually. Chronic liver disease can be caused by hepatitis C infection, alcohol, or genetics. These patients are also recommended for vaccination, but vaccine coverage rates are low, representing a future opportunity for hepatitis B vaccines to grow.

We also believe that the profile of HEPLISAV has potential benefits for individuals who need rapid protection against hepatitis B, including healthcare workers, first responders, and travelers because HEPLISAV provides higher levels of protection in 30 days compared to 6 months for current licensed vaccines.

Universal Flu Vaccine

Our Universal Flu vaccine is in preclinical development and is designed to offer protection against divergent strains as well as increase the efficacy and potentially reduce the dose of standard flu vaccine. This unique approach is based on combining two highly conserved antigens and our proprietary second-generation ISS agonist with standard flu vaccines:

- Standard flu vaccine—Our proprietary component, NP and M2e linked to our TLR9 agonist, is combined with the standard flu vaccine, which generates neutralizing antibodies. Our proprietary component could be combined with any standard flu vaccine, including standard trivalent influenza vaccine (TIV) and vaccines for emerging strains such as H5N1 or H1N1.
- Two highly conserved antigens NP and M2e expected to offer protection against divergent strains—Our Universal Flu vaccine includes two conserved antigens, NP and M2e, which are present in all flu strains. NP, or nucleoprotein, is highly conserved across human and animal strains, while M2e, the extracellular domain of the matrix 2 protein, is conserved but with some variations among species. NP induces cytotoxic T-cell protection and M2e induces protective antibodies for protection against divergent strains.
- Our proprietary second-generation TLR9 agonist to enhance efficacy and enable dose-sparing—NP and M2e are linked to our proprietary second-generation TLR9 agonist, which has demonstrated the potential to boost the immune response and enable dose sparing, which could extend the quantity of standard flu vaccine available.

Our research and development program has been partially funded by grants from the National Institutes of Health (NIH). Dynavax has established a worldwide supply and option agreement with Novartis Vaccines and Diagnostics, Inc. for our Universal Flu vaccine program.

Commercial Opportunity

Human viral influenza is an acute respiratory disease with high morbidity and mortality that occurs in annual epidemics worldwide. There are an estimated 30,000 to 40,000 viral influenza-associated deaths per year in the United States, primarily in those over 65 years of age. Influenza pandemics occur infrequently, on average every 30 to 40 years, but it is estimated that the next pandemic could result in millions of deaths worldwide. Analysts estimate the current worldwide market opportunity for seasonal influenza vaccines to be approximately \$3 billion annually.

Standard flu vaccines can provide protection against the flu strains predicted to be prevalent during a season. The efficacy of these vaccines is often decreased by unpredictable changes in the actual strains causing influenza. Current vaccines are also least effective in those who need prevention the most, the elderly and others with weaker immune systems. Pandemic vaccination is further complicated by the need to produce large quantities of vaccine in a short time period.

[Table of Contents](#)

Our Universal Flu vaccine candidate is designed to offer protection against divergent influenza strains, increase the efficacy of standard vaccines, and potentially reduce the dose of vaccine to extend the quantity available during a pandemic.

SD-101 Hepatitis C Therapy

SD-101, our hepatitis C therapy, has completed a Phase 1b clinical trial. This therapy utilizes a novel Type C TLR9 agonist based on our second-generation ISS. SD-101 is designed to be used in combination with current or emerging therapies to reduce hepatitis C virus (HCV) viral replication and induce a long-lasting immune response.

Clinical Results

Data from the Phase 1b study of SD-101 in 34 chronically infected, treatment-naïve, genotype 1 HCV patients show:

- A safety and tolerability profile that compares favorably to that of IFN-alpha, at all four dose levels tested;
- A dose-dependent antiviral response, with 100% of patients at the highest dose experiencing a greater than one (1) log reduction in viral load; and
- Substantial, dose-related increases in the expression of key antiviral genes (MX-B and ISG-54k) and genes indicating enhanced immunity (IP-10 and MCP-1).

The *in vitro* data from a study of the drug in human blood cells demonstrate that compared to first-generation TLR9 agonists, SD-101 stimulates 20-fold higher levels of both IFN-alpha and IFN-lambda, two classes of IFNs with potent activity against HCV.

In January 2010, we announced the completion of the acquisition of Symphony Dynamo, Inc., which provided Dynavax full development and commercialization rights to SD-101. As such, SD-101 is now part of the portfolio of development programs that are available for partnership.

Commercial Opportunity

According to the World Health Organization, there are 170 million people worldwide chronically infected with HCV. We estimate the current worldwide market for HCV therapeutics is over \$3 billion annually. While there is no vaccine available to prevent HCV, current therapy includes pegylated interferon alpha and the antiviral drug ribavirin. Both of these therapies may cause significant side effects and are only effective in treating half of all patients infected with HCV.

Products offering enhanced efficacy and safety profiles are anticipated to increase the number of patients seeking and continuing treatment. SD-101, used in combination with current and/or emerging therapies, may reduce HCV viral replication and induce a long-lasting immune response.

DV-601 Hepatitis B Therapy

DV-601 is our proprietary hepatitis B therapy and is in a Phase 1b clinical trial. This treatment approach combines both the surface and core hepatitis B virus (HBV) antigens with an adjuvant. DV-601 may induce a potent immune response against HBV-infected cells and offer a more effective and shorter duration therapeutic option for patients chronically infected with HBV. We have retained all commercial rights to this product.

Commercial Opportunity

Over 350 million individuals worldwide are chronically infected with HBV, which can lead to cirrhosis of the liver and hepatocellular carcinoma. The current worldwide market for HBV therapeutics is estimated to be over

[Table of Contents](#)

\$1 billion annually and available therapies have modest efficacy. Current treatment aims to halt progression of the disease and consists of either indefinite use of antiviral medication and/or treatment with pegylated interferon-alpha. Approximately 30% of treated patients achieve treatment goals and fewer than 10% are ever considered cured. Antiviral therapy may need to continue indefinitely to sustain treatment goals and is increasingly subject to antiviral resistance while treatment with interferon-alpha can cause significant side effects.

Our HBV therapy, used in combination with existing antiviral therapies, is intended to induce a potent immune response against HBV-infected cells in the liver with the objective of eradicating HBV infection and thereby provide a more effective and shorter duration therapeutic option for chronically infected patients.

AZD1419 Asthma Therapy

Together with our partner AstraZeneca, we are developing AZD1419, a novel candidate drug for asthma. AZD1419 utilizes our proprietary second-generation ISS and represents a new strategy for the treatment of allergic respiratory diseases such as asthma. This therapy is designed to modify the course of these diseases by changing the basic immune response to environmental allergens, such as house dust and pollens, leading to prolonged reduction in asthma symptoms. We are developing ADZ1419 under our worldwide collaboration with AstraZeneca to discover, develop, and commercialize products for asthma and COPD.

Commercial Opportunity

According to the World Health Organization, asthma affects 300 million people worldwide. Asthma is a chronic disease of the lungs and is caused primarily by allergic inflammation of the airways. In addition, 210 million people worldwide are affected by COPD, a term used to describe chronic lung diseases that limit airflow in the lungs. Analysts estimate the current worldwide market opportunity for asthma and COPD therapies to be over \$15 billion annually.

Current asthma and COPD therapies include corticosteroids and bronchodilators, which treat the symptoms of these respiratory diseases. AZD1419 is intended to be a disease modifying therapy that has demonstrated the potential to inhibit and induce durable changes to the allergic response that causes asthma symptoms.

DV1179 (IRS) for Autoimmune and Inflammatory Diseases

Our IRS program focusing on TLRs, which are key receptors of the innate immune system that can induce strong inflammatory responses, is based on our product candidate DV1179, a bifunctional inhibitor of TLR7 and TLR9. Dynavax and GlaxoSmithKline have entered into a worldwide strategic alliance to discover, develop, and commercialize DV1179 and other novel TLR inhibitors for diseases such as lupus, psoriasis, and rheumatoid arthritis. We will conduct research and early clinical development in up to four programs and are eligible to receive future potential development and commercialization milestones. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK will carry out further development and commercialization of these products. We will receive tiered, up to double-digit royalties on sales and have retained an option to co-develop and co-promote one specified product.

Commercial Opportunity

Over 20 million individuals in the U.S. and Europe have autoimmune diseases such as lupus, psoriasis, and rheumatoid arthritis. Key biologic drugs used to treat these conditions generate over \$15 billion in worldwide sales each year.

Pharmaceutical Partnerships and Other Funding Agreements

Our objective is to discover novel therapies based on our proprietary technologies and develop a diversified pipeline of product candidates to build a product-based business. To reach this objective, an important part of our

[Table of Contents](#)

strategy is to establish partnerships with leading pharmaceutical companies and enter into funding agreements. Our pharmaceutical partners provide valuable resources, development expertise, and commercial abilities that allow us to further advance the development of our product candidate programs. We also have funding agreements with U.S. government institutions.

GlaxoSmithKline

In December 2008, we entered into a worldwide strategic alliance with GSK to discover, develop, and commercialize endosomal TLR inhibitors for diseases such as lupus, psoriasis, and rheumatoid arthritis. We received an initial payment of \$10 million and agreed to conduct research and early clinical development in up to four programs. We are eligible to receive future potential development and commercialization milestones totaling approximately \$200 million per program. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK would carry out further development and commercialization of these products. We are eligible to receive royalties from the mid-single digits up to the high-teens based on product sales and have retained an option to co-develop and co-promote one specified product under the collaboration.

Absent early termination, the agreement will expire when all of GSK's payment obligations expire. Either party may terminate the agreement early upon written notice if the other party commits an uncured material breach of the agreement. Either party may also terminate the agreement in the event of insolvency of the other party. GSK also has the option to terminate the agreement without cause, upon prior written notice within a specified window of time dependent upon stage of clinical development of the programs.

AstraZeneca AB

In September 2006, we entered into a worldwide research and license agreement with AstraZeneca to discover and develop TLR9 agonist products for asthma and COPD. We are eligible to receive a total of \$136 million in payments and, upon commercialization of these products, royalties up to the high-teens based on product sales. AstraZeneca has the right to sublicense its rights upon with our prior consent. We also have the opportunity to co-promote in the United States. In September 2008, we received a \$4.5 million milestone payment from AstraZeneca for the nomination of the first candidate drug AZD1419 for asthma and we have initiated IND-enabling studies.

Absent early termination, the agreement will expire when all of AstraZeneca's payment obligations expire. AstraZeneca has the right to terminate the agreement at any time upon prior written notice and either party may terminate the agreement early upon written notice if the other party commits an uncured material breach of the agreement. Either party also may terminate the agreement in the event of insolvency or a change of control of the other party.

Novartis Vaccines and Diagnostics, Inc.

In July 2008, we entered into a supply and option agreement with Novartis for our Universal Flu vaccine. Under this agreement, Novartis is supplying trivalent influenza vaccine, an essential component of our Universal Flu vaccine. We agreed to conduct early-stage development through a defined proof-of-concept. If Novartis exercises the right to negotiate and enter a further agreement for development and commercialization, we would retain co-commercialization rights in the U.S. and receive product royalties outside of the U.S. If the option is not exercised or the parties do not enter into a further agreement, Novartis remains committed to providing commercial supply of trivalent influenza vaccine with pre-agreed commercial terms and we retain the right to independently continue with late-stage development and commercialization, provided we do not partner with a company that produces or markets a trivalent influenza vaccine product in the U.S.

Either party may terminate the agreement if (a) the other party commits a material uncured breach, (b) there is change in control of the other party, (c) certain specified clinical or regulatory objectives are not achieved development events or failures, or (d) Dynavax ceases development of the product candidate for a certain length of time.

National Institutes of Health and Other Funding

For our TLR agonist programs, since 2003 we have been awarded \$11.6 million in grants from the NIH which have helped fund our research and development, of which a substantial portion has been used to support the development of our Universal Flu vaccine. Although the NIH provides program support, we have the right to seek strategic partners for the future development and commercialization of our Universal Flu vaccine. In September 2008, we were awarded a \$17 million contract to develop our advanced ISS technology using TLR9 agonists as vaccine adjuvants. This five-year contract was awarded by the NIH's National Institute of Allergy and Infectious Diseases (NIAID) and supports adjuvant development for biodefense vaccines, including anthrax as well as other disease models. NIAID is funding 100 percent of the total \$17 million cost of our program under Contract No. HHSN272200800038C and has so far allotted \$4.9 million of that amount for work scheduled through September, 2010. The NIH may terminate performance of work under the contract if the Contracting Officer determines that a termination is in the government's interest or if the Company defaults in performing and fails to cure after notice.

For our TLR inhibitor programs, since 2004 we have been awarded \$2.8 million in grants from the NIH and Alliance for Lupus Research. Certain of these grants have been extended through June 2010.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our drug candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. In addition to seeking patent protection in the United States, we generally file patent applications in Australia, Canada, Japan, Western European countries and additional foreign countries on a selective basis in order to further protect the inventions that we or our partners consider important to the development of our foreign business. We also rely on trade secrets and contracts to protect our proprietary information.

As of December 31, 2009, our intellectual property portfolio included 12 issued U.S. patents, over 50 issued foreign patents and over 200 additional pending US and foreign patent applications claiming compositions and formulations of ISS and IRS, their methods of use or processes for their manufacture. Some of these patents and applications are exclusively licensed to us under two agreements with the Regents of the University of California.

We have an issued U.S. patent covering the ISS contained in our HEPLISAV investigational vaccine that will expire in 2018, unless extended, and corresponding issued patents in several major European and other countries. We own or have an exclusive license to U.S. and foreign patent applications pending for each of our other product candidates and/or their uses. At present, it is not known or determinable whether patents will issue from any of these applications or what the specific expiration dates would be for any patents that do issue.

Individual patents extend for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, patents issued in the United States are effective for:

- the longer of 17 years from the issue date or 20 years from the earliest effective filing date, if the patent application was filed prior to June 8, 1995; and
- 20 years from the earliest effective filing date, if the patent application was filed on or after June 8, 1995.

In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is 20 years from the earliest effective filing date. Our patent estate, based on patents existing now and expected by us to issue based on pending applications, will expire on dates ranging from 2017 to 2029.

[Table of Contents](#)

The actual protection afforded by a patent varies on a product-by-product basis, from country-to-country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patents.

Because patent applications in the United States and many foreign jurisdictions typically are not published until 18 months after filing and publications of discoveries in the scientific literature often lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in each of our issued patents or pending patent applications or that we were the first to file for protection of the inventions set forth in these patent applications. The U.S. Patent and Trademark Office may declare interference proceedings to determine the priority of inventions with respect to our patent applications and those of other parties or reexamination or reissue proceedings to determine if the scope of a patent should be narrowed.

Our commercial success depends significantly on our ability to operate without infringing patents and proprietary rights of third parties. A number of pharmaceutical companies and biotechnology companies including Pfizer, Inc., as well as universities and research institutions, may have filed patent applications or may have been granted patents that cover inventions similar to the inventions owned or licensed to us. We cannot determine with certainty whether patents or patent applications of other parties may materially affect our ability to make, use or sell any products. If another party controls patents or patent applications covering our products, we may not be able to obtain the rights we need to those patents or patent applications in order to commercialize our products. Litigation may be necessary to enforce patents issued or licensed to us or to determine the scope or validity of another party's proprietary rights. The existence of third-party patent applications and patents could significantly reduce the coverage of the patents owned by or licensed to us and limit our ability to obtain meaningful patent protection. For example, Pfizer has issued U.S. patent claims, as well as patent claims pending with the U.S. Patent and Trademark Office, that, if held to be valid, could require us to obtain a license in order to commercialize one or more of our formulations of ISS in the United States. Litigation or any of these other proceedings, such as patent interferences, could result in substantial costs to and diversion of effort by us, and an adverse outcome in a court or patent office could subject us to significant liabilities, require disputed rights to be licensed from other parties, or require us to cease using some of our technology. We may not prevail in any of these actions or proceedings.

In addition, other parties may duplicate, design around or independently develop similar or alternative technologies to ours or our licensors.

We may rely, in some circumstances, on trade secrets and confidentiality agreements to protect our technology. Although trade secrets are difficult to protect, wherever possible, we use confidential disclosure agreements to protect the proprietary nature of our technology. Our policy is to require each of our commercial partners, employees, consultants and advisors to enter into an agreement before beginning their employment, consulting or advisory relationship with us that in general provides that the individuals must keep confidential and not disclose to other parties any of our confidential information developed or learned by the individuals during the course of their relationship with us except in limited circumstances. These agreements also generally provide that we own all inventions conceived by the individuals in the course of rendering their employment or services to us. However, there can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that our trade secrets and/or proprietary information will not otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may also arise as to the rights in related or resulting know-how and inventions.

Under the terms of our license agreements with the Regents of the University of California, we are required to pay license fees, make milestone payments, share a portion of fees from third party partnerships up to a specified amount and pay low single-digit royalties on net sales resulting from successful products originating from the licensed technologies. To date, we have paid the University of California a total of \$1.5 million in

[Table of Contents](#)

license fees, shared third party partnership fees and milestone payments under these agreements. We estimate the total potential milestone payments payable for each such product will total approximately \$3.1 million, not including royalties. We may terminate these agreements in whole or in part on 60 days advance notice. The Regents of the University of California may terminate these agreements if we are in breach for failure to make royalty payments, meet diligence requirements, produce required reports or fund internal research and we do not cure such breach within 60 days after being notified of the breach. Otherwise, the agreements generally continue in effect until the last patent claiming a product licensed under the agreement or its manufacture or use expires, or in the absence of patents, until the date the last patent application claiming a licensed product is abandoned.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Many of our competitors, including biotechnology and pharmaceutical companies, academic institutions and other research organizations, are actively engaged in the discovery, research and development of products that could compete directly or indirectly with our products under development.

HEPLISAV, a two-dose hepatitis B vaccine, if developed, approved and commercialized, will compete directly with three-dose marketed vaccines produced by GSK, Merck & Co., (“Merck”) and Crucell N.V., among others. There are also modified schedules of conventional hepatitis B vaccines for limited age ranges that are approved in European Union and United States. In addition, HEPLISAV will compete against a number of multivalent vaccines that simultaneously protect against hepatitis B in addition to other diseases.

Our Universal Flu vaccine, if developed, approved and commercialized, will compete with traditional and emerging influenza vaccines from companies currently marketing these products, including: GSK, Novartis, Sanofi Pasteur MSD, MedImmune/AstraZeneca and CSL Ltd. In addition, there are several companies developing potentially competing universal vaccines for influenza, including Acambis, VaxInnate, Merck and Vical.

Our hepatitis C therapy, SD-101, if developed, approved, and commercialized, may compete directly with interferon alpha and indirectly with ribavirin, products currently marketed by Roche and Merck. Other companies, such as Vertex Pharmaceuticals, Inc./Tibotec Pharmaceuticals, Gilead Sciences, Inc. (Gilead), Merck, Human Genome Sciences, Inc./Novartis, and Roche/Pharmasset, Inc./InterMune, Inc. are developing direct acting antiviral therapy, including protease inhibitors and polymerase inhibitors, and long-acting interferons. As these products may enter the market within the next two to five years, combination therapy is likely to evolve. Novel therapies aim to improve the efficacy, safety and convenience of current hepatitis C treatment and may compete both directly and indirectly with SD-101.

Our hepatitis B therapy, DV-601, if developed, approved and commercialized, will compete directly with existing hepatitis B therapy products, including antiviral drugs and interferon alpha, manufactured by Roche, Merck, Gilead, Bristol-Myers Squibb, GSK, and Novartis. In addition, our hepatitis B therapy faces competition from several companies developing novel antivirals, including Pharmasset and LG Life Sciences, as well as companies developing therapy vaccines, including Emergent BioSolutions and Genexine Co., Ltd.

Our asthma therapy, AZD1419, if developed, approved and commercialized, will compete indirectly with existing asthma therapies, such as inhaled beta-agonists, corticosteroids, leukotriene inhibitors and IgE monoclonal antibodies, including those marketed by Merck, Genentech, Inc. (Genentech), Novartis, AstraZeneca, Schering-Plough and GSK. In addition, directly competing products are in development by Sanofi-aventis and Idera Pharmaceuticals.

Our therapy for autoimmune and inflammatory diseases, DV-1179, is a bifunctional inhibitor of TLR7 and TLR9 that if developed, approved and commercialized will compete with key biologic therapies from companies such as Genentech, Biogen Idec, Roche and Abbott Laboratories. In addition, our product would compete with

[Table of Contents](#)

generic drugs commonly used to treat autoimmune diseases, including corticosteroids, NSAIDs, antimalarials and immunosuppressive agents. Other companies, such as MedImmune, Genentech, Idera, Pfizer, Human Genome Sciences/GSK and UCB/Immunomedics, Inc., are developing anti-IFN-alpha-antibodies, B-cell targeted antibodies, immunosuppressants, and other TLR inhibitors that may compete directly with our product candidate.

Many of the entities developing and marketing these competing products have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing than Dynavax. Smaller or early-stage companies may also prove to be significant competitors, particularly for collaborative agreements with large, established companies and access to capital. These entities may also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to or necessary for our programs.

Regulatory Considerations

The advertising, labeling, storage, record-keeping, safety, efficacy, research, development, testing, manufacture, promotion, marketing and distribution of our potential products are subject to extensive regulation by numerous governmental authorities in the U.S. and other countries. In the U.S., pharmaceutical and biological products are subject to rigorous review by the FDA under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations. The steps ordinarily required by the FDA before a new drug or biologic may be marketed in the U.S. are similar to steps required in most other countries and include but are not limited to the following:

- completion of preclinical laboratory tests, preclinical trials and formulation studies;
- submission to the FDA of an investigational new drug application, or IND, for a new drug or biologic which must become effective before clinical trials may begin;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug or biologic for each proposed indication;
- the submission of a new drug application, or NDA, or a biologics license application, or BLA, to the FDA; and
- FDA review and approval of the NDA or BLA before any commercial marketing, sale or shipment of the drug.

If we do not comply with applicable requirements, U.S. regulatory authorities may fine us, require that we recall our products, seize our products, require that we totally or partially suspend the production of our products, refuse to approve our marketing applications, criminally prosecute us, and/or revoke previously granted marketing authorizations.

To secure FDA approval, we must submit extensive non-clinical and clinical data, manufacturing information, and other supporting information to the FDA for each indication to establish a product candidate's safety and efficacy. The number of preclinical studies and clinical trials that will be required for FDA and foreign regulatory agency approvals varies depending on the product candidate, the disease or condition for which the product candidate is in development and regulations applicable to any particular drug candidate. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval or clearance. Further, the results from preclinical testing and early clinical trials may not be predictive of results obtained in later clinical trials. The approval process takes many years, requires the expenditures of substantial resources, involves post-marketing surveillance and may involve requirements for additional post-marketing studies. The FDA may also require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. The FDA may withdraw product approvals if we do not continue to comply with regulatory standards or if problems occur following initial marketing. Delays experienced during the governmental approval process may materially reduce the period during which we will have exclusive rights to

[Table of Contents](#)

exploit patented products or technologies. Delays can occur at any stage of drug development and as result of many factors, certain of which are not under our control, including but not limited to the following:

- lack of efficacy, or incomplete or inconclusive results from clinical trials;
- unforeseen safety issues;
- failure by investigators to adhere to protocol requirements, including patient enrollment criteria;
- slower than expected rate of patient recruitment;
- failure by subjects to comply with trial protocol requirements;
- inability to follow patients adequately after treatment;
- inability to qualify and enter into arrangements with third parties to manufacture sufficient quality and quantities of materials for use in clinical trials;
- failure by a contract research organization to fulfill contractual obligations; and
- adverse changes in regulatory policy during the period of product development or the period of review of any application for regulatory approval or clearance.

Non-clinical studies involve laboratory evaluation of product characteristics and animal studies to assess the initial efficacy and safety of the product. The FDA, under its good laboratory practices regulations, regulates non-clinical studies. Violations of these regulations can, in some cases, lead to invalidation of those studies, requiring these studies to be replicated. The results of the non-clinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an investigational new drug application, which must be approved by the FDA before we can commence clinical investigations in humans. Unless the FDA objects to an investigational new drug application, the investigational new drug application will become effective 30 days following its receipt by the FDA. Clinical trials involve the administration of the investigational product to humans under the supervision of a qualified principal investigator. We must conduct our clinical trials in accordance with good clinical practice under protocols submitted to the FDA as part of the investigational new drug application. In addition, each clinical trial must be approved and conducted under the auspices of an investigational review board and with patient informed consent. The investigational review board will consider, among other things, ethical factors, the safety of human subjects and the possibility of liability of the institution conducting the trial.

The stages of the FDA regulatory process include research and preclinical studies and clinical trials in three sequential phases that may overlap. Research and preclinical studies do not involve the introduction of a product candidate in human subjects. These activities involve identification of potential product candidates, modification of promising candidates to optimize their biological activity, as well as preclinical studies to assess safety and effectiveness in animals. In clinical trials, the product candidate is administered to humans. Phase 1 clinical trials typically involve the administration of a product candidate into a small group of healthy human subjects. These trials are the first attempt to evaluate a drug's safety, determine a safe dose range and identify side effects. During Phase 2 trials, the product candidate is introduced into patients who suffer from the medical condition that the product candidate is intended to treat. Phase 2 studies are designed to evaluate whether a product candidate shows evidence of effectiveness, to further evaluate dosage, and to identify possible adverse effects and safety risks. When Phase 2 evaluations demonstrate that a product candidate appears to be both safe and effective, Phase 3 trials are undertaken to confirm a product candidate's effectiveness and to test for safety in an expanded patient population. If the results of Phase 3 trials appear to confirm effectiveness and safety, the data gathered in all phases of clinical trials form the basis for an application for FDA regulatory approval of the product candidate.

We and all of our contract manufacturers are required to comply with the applicable FDA current good manufacturing practice (GMP) regulations. Manufacturers of biologics also must comply with FDA's general biological product standards. Failure to comply with the statutory and regulatory requirements subjects the

[Table of Contents](#)

manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product or voluntary recall of a product. Good manufacturing practice regulations require quality control and quality assurance as well as the corresponding maintenance of records and documentation. Prior to granting product approval, the FDA must determine that our or our third party contractor's manufacturing facilities meet good manufacturing practice requirements before we can use them in the commercial manufacture of our products. In addition, our facilities are subject to periodic inspections by the FDA for continued compliance with good manufacturing practice requirements during clinical development as well as following product approval. Adverse experiences with the product must be reported to the FDA and could result in the imposition of market restriction through labeling changes or in product removal.

Outside the U.S., our ability to market a product is contingent upon receiving marketing authorization and pricing or reimbursement approval from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country.

At present, foreign marketing authorizations may be applied for at a national level, although within the European Union registration procedures are mandatory for biotechnology and some other drugs and are available to companies wishing to market a product in more than one European Union member state. The regulatory authority generally will grant marketing authorization if it is satisfied that we have presented it with adequate evidence of safety, quality and efficacy.

We are also subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research. We cannot accurately predict the extent of government regulation that might result from any future legislation or administrative action.

Research and Development

Conducting a significant amount of research and development has been central to our business model. Our research and development expenses were \$38.7 million for the year ended December 31, 2009, \$44.8 million for the year ended December 31, 2008 and \$65.9 million for the year ended December 31, 2007.

Employees

As of December 31, 2009, we had 130 full-time employees, including 25 Ph.D.s, 4 M.D.s and 14 others with advanced degrees. Of the 130 employees, 103 were dedicated to research and development activities. None of our employees is subject to a collective bargaining agreement, and we believe our relations with our employees are good.

Available Information and Website Address

Our website address is www.dynavax.com. We make available free of charge through our website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to these reports as soon as reasonably practicable after filing, by providing a hyperlink to the SEC's website directly to our reports. The contents of our website are not incorporated by reference into this report.

ITEM 1A. RISK FACTORS

This Annual Report on Form 10-K contains forward-looking statements concerning our future products, product candidates, development plans, expenses, revenues, liquidity and cash needs, as well as our commercialization plans and strategies. These forward-looking statements are based on current expectations and we assume no obligation to update this information. Numerous factors could cause our actual results to differ significantly from the results described in these forward-looking statements, including the following risk factors.

We have incurred substantial losses since inception and do not have any commercial products that generate significant revenue.

We have experienced significant net losses in each year since our inception. Our accumulated deficit was \$259.6 million as of December 31, 2009. To date, our revenue has resulted from collaboration agreements, services and license fees from customers of Dynavax Europe, and government and private agency grants. The grants are subject to annual review based on the achievement of milestones and other factors. We anticipate that we will incur substantial additional net losses for the foreseeable future as the result of our investment in research and development activities.

We do not have any products that generate revenue. There can be no assurance whether HEPLISAV can be further developed, financed or commercialized in a timely manner without significant additional studies or patient data or significant expense; whether our future development efforts will be sufficient to support product approval; or whether the market for HEPLISAV will be substantial enough for us to reach profitability.

Clinical trials for certain of our other product candidates are ongoing. These and our other product candidates may never be commercialized, and we may never achieve profitability. Our ability to generate revenue depends upon:

- demonstrating in clinical trials that our product candidates are safe and effective, in particular, in the current and planned trials for our product candidates;
- obtaining regulatory approvals for our product candidates; and
- entering into and maintaining successful collaborative relationships.

If we are unable to generate significant revenues or achieve profitability, we may be required to reduce or discontinue our current and planned operations, enter into a transaction that constitutes a change in control of the company, or raise additional capital on less than favorable terms.

We require substantial additional capital to continue development of our product candidates, in particular our most advanced candidate, HEPLISAV. We cannot be certain that funds will be available and, if they are not available, there may be a question as to whether we would be able to continue as a going concern which may result in actions that could adversely impact our stockholders.

In order to continue development of our product candidates, particularly HEPLISAV, we will have to raise significant additional funds in the near term. We expect to continue to spend substantial funds in connection with:

- development and manufacturing of our product candidates, particularly HEPLISAV;
- various human clinical trials for our product candidates; and
- protection of our intellectual property.

We are engaged in active and ongoing discussions to pursue additional capital through a combination of public and private equity offerings and strategic alliance and licensing arrangements. We are also exploring various initiatives to reduce costs across our operations in order to preserve our cash resources.

We currently estimate that we will have sufficient cash resources to meet our cash needs through the next twelve months based on cash and cash equivalents on hand at December 31, 2009, anticipated revenues, reductions in our current spending levels, and the successful completion of ongoing financing activities. Our failure to raise capital in the near term or to timely reduce costs could shorten this period.

Sufficient funding may not be available, or if available, may be on terms that significantly dilute or otherwise adversely affect the rights of existing shareholders. If adequate funds are not available in the near term,

[Table of Contents](#)

we have developed contingency plans that would require us to delay, reduce the scope of, or put on hold the HEPLISAV program, and potentially our other development programs while we seek strategic alternatives. In any event, we may be required to reduce costs and expenses within our control, including potentially significant personnel-related costs and other expenditures that are part of our current operations.

Our independent registered public accountants have indicated that our financial condition raises substantial doubt as to our ability to continue as a going concern.

Our independent registered public accounting firm has included in their audit opinion for the year ended December 31, 2009 a statement with respect to our ability to continue as a going concern. However, our consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. If we became unable to continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our consolidated financial statements. The reaction of investors to the inclusion of a going concern statement by our independent auditors, our lack of cash resources, and our potential inability to continue as a going concern may materially adversely affect our share price and our ability to raise new capital or to enter into strategic alliances.

We may not realize the expected benefits of our initiatives to reduce costs across our operations.

We may pursue a number of initiatives to reduce costs across our operations, including workforce reductions and renegotiation of our leases and other long-term obligations. We may incur some amount of restructuring charges as we implement these cost reduction initiatives and may not realize some or all of the expected benefits of our future initiatives to reduce costs. In addition to restructuring or other charges, the changes may result in significant disruptions in our operations now and in the future as a result of these initiatives.

The success of our product candidates depends on timely achievement of successful clinical results and regulatory approval. Failure to obtain regulatory approvals could require us to discontinue operations.

None of our product candidates have been approved for sale. Any product candidate we develop is subject to extensive regulation by federal, state and local governmental authorities in the U.S., including the FDA, and by foreign regulatory agencies. Our success is primarily dependent on our ability to timely enroll patients in clinical trials, achieve successful clinical results and obtain regulatory approvals for our most advanced product candidates. Approval processes in the U.S. and in other countries are uncertain, take many years and require the expenditure of substantial resources.

We will need to demonstrate in clinical trials that a product candidate is safe and effective before we can obtain the necessary approvals from the FDA and foreign regulatory agencies. If we identify any safety issues associated with our product candidates, we may be restricted from initiating further trials for those products. Moreover, we may not see sufficient signs of efficacy in those studies. The FDA or foreign regulatory agencies may require us to conduct additional clinical trials prior to approval. Despite the time and money expended, regulatory approvals are uncertain. In addition, our products will compete in highly competitive markets and failure to timely and successfully complete clinical trials and show that our products are safe and effective would have a material adverse effect on our business and results of operations. Even if approved, the labeling of the product may significantly limit the commercial opportunity for such product.

Our clinical trials may be extended, suspended, delayed or terminated at any time. Even short delays in the commencement and progress of our trials may lead to substantial delays in the regulatory approval process for our product candidates, which will impair our ability to generate revenues.

We may extend, suspend or terminate clinical trials at any time for various reasons, including regulatory actions by the FDA or foreign regulatory agencies, actions by institutional review boards, failure to comply with

[Table of Contents](#)

good clinical practice requirements, concerns regarding health risks to test subjects, failure to enroll patients in a timely manner, or delays due to inadequate supply of the product candidate. Even a short delay in a trial for any product candidate could require us to delay commencement or continuation of a trial until the target population is available for testing, which could result in a delay of a year or more.

Our registration and commercial timelines depend on successful completion of current and planned clinical trials, successful results from such trials, and further discussions with the FDA and corresponding foreign regulatory agencies. Any extension, suspension, modification, termination or unanticipated delays of our clinical trials could:

- adversely affect our ability to timely and successfully commercialize or market these product candidates;
- result in significant additional costs;
- potentially diminish any competitive advantages for those products;
- potentially limit the markets for those products;
- adversely affect our ability to enter into collaborations, receive milestone payments or royalties from potential collaborators;
- cause us to abandon the development of the affected product candidate; or
- limit our ability to obtain additional financing on acceptable terms, if at all.

If we receive regulatory approval for our product candidates, we will be subject to ongoing FDA and foreign regulatory obligations and continued regulatory review.

Any regulatory approvals that we receive for our product candidates are likely to contain requirements for post-marketing follow-up studies, which may be costly. Product approvals, once granted, may be modified based on data from subsequent studies or long-term use. As a result, limitations on labeling indications or marketing claims, or withdrawal from the market may be required if problems occur after commercialization.

In addition, we or our contract manufacturers will be required to adhere to federal regulations setting forth current good manufacturing practice. The regulations require that our product candidates be manufactured and our records maintained in a prescribed manner with respect to manufacturing, testing and quality control activities. Furthermore, we or our contract manufacturers must pass a pre-approval inspection of manufacturing facilities by the FDA and foreign regulatory agencies before obtaining marketing approval and will be subject to periodic inspection by the FDA and corresponding foreign regulatory agencies under reciprocal agreements with the FDA. Further, to the extent that we contract with third parties for the manufacture of our products, our ability to control third-party compliance with FDA requirements will be limited to contractual remedies and rights of inspection.

Failure to comply with regulatory requirements could prevent or delay marketing approval or require the expenditure of money or other resources to correct. Failure to comply with applicable requirements may also result in warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to renew marketing applications and criminal prosecution, any of which could be harmful to our ability to generate revenues and our stock price.

Our most advanced product candidate and most of our earlier stage programs rely on ISS-based technology. Serious adverse safety data relating to either 1018 ISS or other ISS-based technology may require us to reduce the scope of or discontinue our operations.

Our most advanced product candidate in clinical trials is based on our 1018 ISS compound, and most of our research and development programs use ISS-based technology. If any of our product candidates in clinical trials

[Table of Contents](#)

produce serious adverse safety data, we may be required to delay, discontinue or modify our clinical trials or our clinical trial strategy. For example, from March 2008 until September 2009, the two IND applications for HEPLISAV were placed on clinical hold by the FDA following a serious adverse event that occurred in one of our clinical trials. In September 2009, the FDA removed the clinical hold on the IND application for individuals with chronic kidney disease but the other IND application for HEPLISAV remains on clinical hold. In addition, most of our clinical product candidates contain ISS, and a common safety risk across therapeutic areas may hinder our ability to enter into potential collaborations and if adverse safety data are found to apply to our ISS-based technology as a whole, we may be required to significantly reduce or discontinue our operations.

We rely on our facility in Düsseldorf, Germany and third parties to supply materials necessary to manufacture our clinical product candidates for our clinical trials. If we reduce our clinical product candidates, we may not require this manufacturing capacity. We have limited experience in manufacturing our product candidates in commercial quantities. Failure to comply with applicable regulatory requirements or loss of these suppliers or key employees in Düsseldorf, or failure to timely replace them may delay our clinical trials and research and development efforts and may result in additional costs, delays or significantly higher costs in manufacturing our product candidates.

We rely on our facility in Düsseldorf and a number of third parties for the multiple steps involved in the manufacturing process of our product candidates, including, for example, ISS, a key component material that is necessary for our product candidates, the production of certain antigens, the combination of the antigens and ISS, and the fill and finish. Termination or interruption of these relationships may occur due to circumstances that are outside of our control, resulting in higher cost or delays in our product development efforts.

We and these third parties are required to comply with applicable FDA current good manufacturing practice regulations and other international regulatory requirements. If one of these parties fails to maintain compliance with these regulations, the production of our product candidates could be interrupted, resulting in delays and additional costs. Additionally, these third parties and our manufacturing facility must undergo a pre-approval inspection before we can obtain marketing authorization for any of our product candidates.

We have relied on a single supplier to produce our ISS for clinical trials. To date, we have manufactured only small quantities of ISS ourselves for research purposes. If we were unable to maintain or replace our existing source for ISS, we would have to establish internal ISS manufacturing capability which would result in increased capital and operating costs and delays in developing and commercializing our product candidates. We or other third parties may not be able to produce ISS at a cost, quantity and quality that are available from our current third-party supplier.

We currently utilize our facility in Düsseldorf to manufacture the hepatitis B surface antigen for HEPLISAV. The commercial manufacturing of vaccines and other biological products is a time-consuming and complex process, which must be performed in compliance with the FDA's current good manufacturing practices regulations. We may not be able to comply with these and comparable foreign regulations, and our manufacturing process may be subject to delays, disruptions or quality control problems. Noncompliance with these regulations or other problems with our manufacturing process may limit or delay the development or commercialization of our product candidates and could result in significant expense.

If HEPLISAV cannot be successfully developed or is not commercially viable, we will have to use the Düsseldorf facility for alternative manufacturing or research activities that may not fully utilize the facility's capacity, resulting in continued operating costs that may not be offset by corresponding revenues. We may also consider other alternatives for the Düsseldorf facility, including its sale or closure which would result in certain costs of disposal or discontinuation of operations. Discontinuation of operations in Düsseldorf would be complex, expensive, time-consuming and difficult to execute without significant additional costs due to among other things, international legal and tax considerations related to those operations. As a result, we may not realize cost savings associated with closure of the Düsseldorf operations in a reasonable time frame, if at all.

[Table of Contents](#)

We rely on contract research organizations to conduct our clinical trials. If these third parties do not fulfill their contractual obligations or meet expected deadlines, our planned clinical trials may be delayed and we may fail to obtain the regulatory approvals necessary to commercialize our product candidates.

We rely on third parties to conduct our clinical trials. If these third parties do not perform their obligations or meet expected deadlines our planned clinical trials may be extended, delayed, modified or terminated. Any extension, delay, modification or termination of our clinical trials could delay or otherwise adversely affect our ability to commercialize our products and could have a material adverse effect on our business and operations.

If any products we develop are not accepted by the market or if regulatory agencies limit our labeling indications or marketing claims, we may be unable to generate significant revenues, if any.

Even if we obtain regulatory approval for our product candidates and are able to commercialize them, our products may not gain market acceptance among physicians, patients, health care payors and the medical community.

The degree of market acceptance of any of our approved products will depend upon a number of factors, including:

- the indication for which the product is approved and its approved labeling;
- the presence of other competing approved therapies;
- the potential advantages of the product over existing and future treatment methods;
- the relative convenience and ease of administration of the product;
- the strength of our sales, marketing and distribution support;
- the price and cost-effectiveness of the product; and
- sufficient third-party reimbursement.

The FDA or other regulatory agencies could limit the labeling indication for which our product candidates may be marketed or could otherwise limit marketing efforts for our products. For example, in connection with the removal of the clinical hold on HEPLISAV in September 2009 and related discussions with the FDA, it is expected that, further development of HEPLISAV in the U.S. initially will be limited to individuals who are less responsive to current licensed vaccines, including adults over 40 years of age and individuals with chronic kidney disease. If we are unable to successfully market any approved product candidates, or marketing efforts are restricted by regulatory limits, our ability to generate revenues could be significantly impaired.

A key part of our business strategy is to establish collaborative relationships to commercialize and fund development of our product candidates. We may not succeed in establishing and maintaining collaborative relationships, which may significantly limit our ability to develop and commercialize our products successfully, if at all.

We will need to establish collaborative relationships to obtain domestic and international sales, marketing and distribution capabilities for our product candidates, in particular with respect to the commercialization of HEPLISAV. We also will need to enter into collaborative relationships to provide funding to support our research and development programs. The process of establishing and maintaining collaborative relationships is difficult, time-consuming and involves significant uncertainty, including:

- our partners may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, a change in business strategy, a change of control or other reasons;
- our shortage of capital resources may impact a willingness on the part of potential companies to collaborate;

[Table of Contents](#)

- our contracts for collaborative arrangements are terminable for convenience on written notice and may otherwise expire or terminate and we may not have alternative funding available;
- our partners may choose to pursue alternative technologies, including those of our competitors;
- we may have disputes with a partner that could lead to litigation or arbitration;
- we do not have day to day control over the activities of our partners and have limited control over their decisions;
- our ability to generate future event payments and royalties from our partners depends upon the abilities of our partners to establish the safety and efficacy of our drug candidates, obtain regulatory approvals and achieve market acceptance of products developed from our drug candidates;
- we or our partners may fail to properly initiate, maintain or defend our intellectual property rights, where applicable, or a party may utilize our proprietary information in such a way as to invite litigation that could jeopardize or potentially invalidate our proprietary information or expose us to potential liability;
- our partners may not devote sufficient capital or resources towards our product candidates; and
- our partners may not comply with applicable government regulatory requirements.

If any collaborator fails to fulfill its responsibilities in a timely manner, or at all, our research, clinical development or commercialization efforts related to that collaboration could be delayed or terminated, or it may be necessary for us to assume responsibility for expenses or activities that would otherwise have been the responsibility of our collaborator. If we are unable to establish and maintain collaborative relationships on acceptable terms or to successfully transition terminated collaborative agreements, we may have to delay or discontinue further development of one or more of our product candidates, undertake development and commercialization activities at our own expense or find alternative sources of capital.

The financial terms of future collaborative or licensing or financing arrangements could result in significant dilution of our share value.

Funding from collaboration partners and other parties may in the future involve issuance of our equity securities. Because we do not currently have any such arrangements, we cannot be certain how the terms under which such shares are issued will be determined or when such determinations will be made. The current market for financing or collaborative arrangements often involves the issuance of warrants as additional consideration in establishing the purchase price of the equity securities issued. Any such issuance could result in significant dilution in the value of our issued and outstanding shares.

Many of our competitors have greater financial resources and expertise than we do. If we are unable to successfully compete with existing or potential competitors despite these disadvantages we may be unable to generate revenues and our business will be harmed.

We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing therapies to prevent or treat infectious diseases, asthma and inflammatory and autoimmune diseases. Competitors may develop more effective, more affordable or more convenient products or may achieve earlier patent protection or commercialization of their products. These competitive products may render our product candidates obsolete or limit our ability to generate revenues from our product candidates. Many of the companies developing competing technologies and products have significantly greater financial resources and expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and marketing than we do.

Existing and potential competitors may also compete with us for qualified scientific and management personnel, as well as for technology that would be advantageous to our business. If we are unable to compete successfully, we may not be able to obtain financing, enter into collaborative arrangements, sell our product candidates or generate revenues.

[Table of Contents](#)

The loss of key personnel, including our Chief Executive Officer, could delay or prevent achieving our objectives.

Our research, product development and business efforts could be adversely affected by the loss of one or more key members of our scientific or management staff, including our Chief Executive Officer, Dr. Dino Dina. We currently have no key person insurance on any of our employees.

Because we are a relatively small biopharmaceutical company with limited resources, we may not be able to attract and retain qualified personnel.

Our success in developing marketable products and achieving a competitive position will depend, in part, on our ability to attract and retain qualified scientific and management personnel, particularly in areas requiring specific technical, scientific or medical expertise. There is intense competition for the services of these personnel. If we do not succeed in attracting new personnel and retaining and motivating existing personnel, our operations may suffer and we may be unable to implement our current initiatives.

We may develop, seek regulatory approval for and market our product candidates outside the United States, requiring a significant commitment of resources. Failure to successfully manage our international operations could result in significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates.

We may introduce certain of our product candidates in various markets outside the U.S. Developing, seeking regulatory approval for and marketing our product candidates outside the U.S. could impose substantial burdens on our resources and divert management's attention from domestic operations. International operations are subject to risk, including:

- the difficulty of managing geographically distant operations, including recruiting and retaining qualified employees, locating adequate facilities and establishing useful business support relationships in the local community;
- compliance with varying international regulatory requirements, laws and treaties;
- securing international distribution, marketing and sales capabilities;
- adequate protection of our intellectual property rights;
- legal uncertainties and potential timing delays associated with tariffs, export licenses and other trade barriers;
- adverse tax consequences;
- the fluctuation of conversion rates between foreign currencies and the U.S. dollar; and
- regional and geopolitical risks.

To date, we have not filed for marketing approval for any of our product candidates outside the U.S. We may not obtain foreign regulatory approvals on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory agencies in other foreign countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in other jurisdictions, including approval by the FDA. If we are unable to successfully manage our international operations, we may incur significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates, which would impair our ability to generate revenues.

We rely on licenses to intellectual property from third parties. Impairment of these licenses or our inability to maintain them would severely harm our business.

Our current research and development efforts depend upon our license arrangements for intellectual property owned by third parties. Our dependence on these licenses subjects us to numerous risks, such as disputes

[Table of Contents](#)

regarding the use of the licensed intellectual property and the creation and ownership of new discoveries under such license agreements. In addition, these license arrangements require us to make timely payments in order to maintain our licenses and typically contain diligence or milestone-based termination provisions. Our failure to meet any obligations pursuant to these agreements could allow our licensors to terminate our agreements or undertake other remedies such as converting exclusive to non-exclusive licenses if we are not able to cure or obtain waivers for such failures or amend the term of such agreements on terms acceptable to us. In addition, our license agreements may be terminated or may expire by their terms, and we may not be able to maintain the exclusivity of these licenses. If we cannot maintain licenses that are advantageous or necessary to the development or the commercialization of our product candidates, we may be required to expend significant time and resources to develop or license similar technology or to find other alternatives to maintaining the competitive position of our products. If such alternatives are not available to us in a timely manner or on acceptable terms, we may be unable to continue development or commercialize our product candidates.

If third parties successfully assert that we have infringed their patents and proprietary rights or challenge our patents and proprietary rights, we may become involved in intellectual property disputes and litigation that would be costly, time consuming, and delay or prevent development or commercialization of our product candidates.

We may be exposed to future litigation by third parties based on claims that our product candidates or proprietary technologies infringe their intellectual property rights, or we may be required to enter into litigation to enforce patents issued or licensed to us or to determine the ownership, scope or validity of our or another party's proprietary rights, including a challenge as to the validity of our issued and pending claims. We are involved in various interference and other administrative proceedings related to our intellectual property which has caused us to incur certain legal expenses. If we become involved in any litigation and/or other significant interference proceedings related to our intellectual property or the intellectual property of others, we will incur substantial additional expenses and it will divert the efforts of our technical and management personnel.

Two of our potential competitors, Merck, and GSK, are exclusive licensees of broad patents covering hepatitis B surface antigen, a component of HEPLISAV. In addition, the Institut Pasteur also owns or has exclusive licenses to patents covering hepatitis B surface antigen. While some of these patents have expired or will soon expire outside the U.S., they remain in force in the U.S. To the extent we are able to commercialize HEPLISAV in the U.S. while these patents remain in force, Merck, GSK or the Institut Pasteur may bring claims against us.

If we or our collaborators are unsuccessful in defending or prosecuting our issued and pending claims or in defending potential claims against our products, for example, as may arise in the commercialization of HEPLISAV or any similar product candidate in the U.S., we or our collaborator could be required to pay substantial damages or be unable to commercialize our product candidates or use our proprietary technologies without a license from such third party. A license may require the payment of substantial fees or royalties, require a grant of a cross-license to our technology or may not be available on acceptable terms, if at all. In addition, we must make timely payments or meet diligence obligations in order to maintain any such licenses in effect. In the absence of a current license, we may be required to redesign our technology so it does not infringe a third party's patents, which may not be possible or could require substantial funds and time. Any of these outcomes could require us to change our business strategy and could materially impact our business and operations.

One of our potential competitors, Pfizer Inc. ("Pfizer"), has issued patent claims, as well as patent claims pending with the U.S. Patent and Trademark Office and foreign patent offices, that may be asserted against our ISS products. We may need to obtain a license to one or more of these patent claims held by Pfizer by paying fees or royalties or offering rights to our own proprietary technologies in order to commercialize one or more of our formulations of ISS in other than with respect to HEPLISAV, for which we have a license. A license for other uses may not be available to us on acceptable terms, if at all, which could preclude or limit our ability to commercialize our products.

[Table of Contents](#)

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property is inadequate, the value of our product candidates will decrease.

Our success depends on our ability to:

- obtain and protect commercially valuable patents or the rights to patents both domestically and abroad;
- operate without infringing upon the proprietary rights of others; and
- prevent others from successfully challenging or infringing our proprietary rights.

We will be able to protect our proprietary rights from unauthorized use only to the extent that these rights are covered by valid and enforceable patents or are effectively maintained as trade secrets. We try to protect our proprietary rights by filing and prosecuting U.S. and foreign patent applications. However, in certain cases such protection may be limited, depending in part on existing patents held by third parties, which may only allow us to obtain relatively narrow patent protection. In the U.S., legal standards relating to the validity and scope of patent claims in the biopharmaceutical field can be highly uncertain, are still evolving and involve complex legal and factual questions for which important legal principles remain unresolved.

The biopharmaceutical patent environment outside the U.S. is even more uncertain. We may be particularly affected by this uncertainty since several of our product candidates may initially address market opportunities outside the U.S., where we may only be able to obtain limited patent protection.

The risks and uncertainties that we face with respect to our patents and other proprietary rights include the following:

- we may not receive an issued patent for any of our patent applications or for any patent applications that we have exclusively licensed;
- the pending patent applications we have filed or to which we have exclusive rights may take longer than we expect to result in issued patents;
- the claims of any patents that are issued may not provide meaningful protection or may not be valid or enforceable;
- we might not be able to develop additional proprietary technologies that are patentable;
- the patents licensed or issued to us or our collaborators may not provide a competitive advantage;
- patents issued to other parties may limit our intellectual property protection or harm our ability to do business;
- other parties may independently develop similar or alternative technologies or duplicate our technologies and commercialize discoveries that we attempt to patent; and
- other parties may design around technologies we have licensed, patented or developed.

We also rely on trade secret protection and confidentiality agreements to protect our interests in proprietary know-how that is not patentable and for processes for which patents are difficult to enforce. We cannot be certain that we will be able to protect our trade secrets adequately. Any disclosure of confidential data in the public domain or to third parties could allow our competitors to learn our trade secrets. If we are unable to adequately obtain or enforce proprietary rights we may be unable to commercialize our products, enter into collaborations, generate revenues or maintain any advantage we may have with respect to existing or potential competitors.

We face product liability exposure, which, if not covered by insurance, could result in significant financial liability.

While we have not experienced any product liability claims to date, the use of any of our product candidates in clinical trials and the sale of any approved products will subject us to potential product liability claims and

[Table of Contents](#)

may raise questions about a product's safety and efficacy. As a result, we could experience a delay in our ability to commercialize one or more of our product candidates or reduced sales of any approved product candidates. In addition, a product liability claim may exceed the limits of our insurance policies and exhaust our internal resources. We have obtained limited product liability and umbrella insurance coverage for our clinical trials. This coverage may not be adequate or may not continue to be available in sufficient amounts, at an acceptable cost or at all. We also may not be able to obtain commercially reasonable product liability insurance for any product approved for marketing in the future. A product liability claim, product recalls or other claims, as well as any claims for uninsured liabilities or in excess of insured liabilities, would divert our management's attention from our business and could result in significant financial liability.

We face uncertainty related to coverage, pricing and reimbursement and the practices of third party payors, which may make it difficult or impossible to sell our product candidates on commercially reasonable terms.

In both domestic and foreign markets, our ability to achieve profitability will depend in part on the negotiation of a favorable price or the availability of appropriate reimbursement from third party payors, in particular for HEPLISAV where existing products are approved for our target indications. Existing laws affecting the pricing and coverage of pharmaceuticals and other medical products by government programs and other third party payors may change before any of our product candidates are approved for marketing. In addition, third party payors are increasingly challenging the price and cost-effectiveness of medical products and services, and pricing and reimbursement decisions may not allow our products to compete effectively with existing or competitive products. Because we intend to offer products, if approved, that involve new technologies and new approaches to treating disease, the willingness of third party payors to reimburse for our products is particularly uncertain. We will have to charge a price for our products that is sufficiently high to enable us to recover our considerable investment in product development. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to achieve profitability and could harm our future prospects and reduce our stock price.

The current administration has stated that it is committed to reforming the health care system in the U.S. and the Senate and House of Representatives each have passed a health care reform bill. However, the differences between the two bills must be reconciled and we are unable to predict whether a final bill will be passed and, if enacted, what impact reform legislation will have on our business or future prospects. It is likely that any legislation that is enacted will affect the biopharmaceutical industry and the uncertainty as to the nature and scope of any proposed reforms limits our ability to forecast changes that may affect our business and to manage our business accordingly. This uncertainty also may make it more difficult for us to enter into collaboration agreements for our product candidates and to obtain financing for future development of our product candidates.

We use hazardous materials in our business. Any claims or liabilities relating to improper handling, storage or disposal of these materials could be time consuming and costly to resolve.

Our research and product development activities involve the controlled storage, use and disposal of hazardous and radioactive materials and biological waste. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and certain waste products. We are currently in compliance with all government permits that are required for the storage, use and disposal of these materials. However, we cannot eliminate the risk of accidental contamination or injury to persons or property from these materials. In the event of an accident related to hazardous materials, we could be held liable for damages, cleanup costs or penalized with fines, and this liability could exceed the limits of our insurance policies and exhaust our internal resources. We may have to incur significant costs to comply with future environmental laws and regulations.

Our stock price is subject to volatility, and your investment may suffer a decline in value.

The market prices for securities of biopharmaceutical companies have in the past been, and are likely to continue in the future to be, very volatile. The market price of our common stock is subject to substantial volatility depending upon many factors, many of which are beyond our control, including:

- progress or results of any of our clinical trials or regulatory efforts, in particular any announcements regarding the progress or results of our planned trials and communications from the FDA or other regulatory agencies;
- our ability to establish and maintain collaborations for the development and commercialization of our product candidates;
- our ability to raise additional capital to fund our operations;
- technological innovations, new commercial products or drug discovery efforts and preclinical and clinical activities by us or our competitors;
- changes in our intellectual property portfolio or developments or disputes concerning the proprietary rights of our products or product candidates;
- our ability to obtain component materials and successfully enter into manufacturing relationships for our product candidates or establish manufacturing capacity on our own;
- our ability to establish and maintain licensing agreements for intellectual property necessary for the development of our product candidates;
- changes in government regulations, general economic conditions or industry announcements;
- issuance of new or changed securities analysts' reports or recommendations;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- our ability to maintain continued listing on the NASDAQ markets or similar exchanges; and
- volume of trading in our common stock.

One or more of these factors could cause a substantial decline in the price of our common stock. In October 2008, we experienced a decline in our market capitalization of nearly 80% based on the FDA's communication to us regarding the continuation of a clinical hold on two U.S. IND applications for HEPLISAV. While the FDA has removed the clinical hold on the IND application for individuals with chronic kidney disease, our market capitalization remains well below levels prior to the announcement of the FDA's clinical hold. In November 2008, we transferred our listing of Dynavax shares to The NASDAQ Capital Market from The NASDAQ Global Market. We may be delisted from The NASDAQ Capital Market if our share price or market value of publicly held shares does not meet certain thresholds. In addition, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk may be particularly relevant for us because we have experienced greater than average stock price volatility, as have other biotechnology companies in recent years. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs, and divert management's attention and resources, which could harm our business, operating results and financial condition.

The anti-takeover provisions of our certificate of incorporation, bylaws, Delaware law and our share purchase rights plan may prevent or frustrate a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Provisions of our certificate of incorporation and bylaws may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting or other rights of the holders of our common stock. These provisions include:

- authorizing our Board of Directors to issue additional preferred stock with voting rights to be determined by the Board of Directors;

Table of Contents

- limiting the persons who can call special meetings of stockholders;
- prohibiting stockholder actions by written consent;
- creating a classified board of directors pursuant to which our directors are elected for staggered three year terms;
- providing that a supermajority vote of our stockholders is required for amendment to certain provisions of our certificate of incorporation and bylaws; and
- establishing advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

Our share purchase rights plan may have certain anti-takeover effects. Specifically, the rights issued pursuant to the plan will cause substantial dilution to a person or group that attempts to acquire the Company on terms not approved by the Company's Board of Directors. Although the rights should not interfere with any merger or other business combination approved by the Board of Directors since the rights issued may be amended to permit such acquisition or redeemed by the Company at \$0.001 per right prior to the earliest of (i) the time that a person or group has acquired beneficial ownership of 20% or more of the Common Shares or (ii) the final expiration date of the rights, the effect of the rights plan may deter a potential acquisition of the Company. In addition, we remain subject to the provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for three years unless the holder's acquisition of our stock was approved in advance by our Board of Directors.

We may need to implement additional financial and accounting systems, procedures or controls as our business and organization changes and to comply with reporting requirements.

We are required to comply with the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC. Compliance with Section 404 of the Sarbanes-Oxley Act of 2002 ("Section 404"), and other requirements may increase our costs and require additional management resources. We may need to continue to implement additional finance and accounting systems, procedures and controls in order to accommodate changes in our business and organization and to comply with new reporting requirements. There can be no assurance that we will be able to maintain a favorable assessment as to the adequacy of our internal control over financial reporting. If we are unable to reach an unqualified assessment, or our independent registered public accounting firm is unable to issue an unqualified attestation as to the effectiveness of our internal control over financial reporting as of the end of our fiscal year, investors could lose confidence in the reliability of our financial reporting which could harm our business and could impact the price of our common stock.

Future sales of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of December 31, 2009, we had 54,279,270 shares of common stock outstanding, all of which shares were eligible for sale in the public market, subject in some cases to the volume limitations and manner of sale requirements under Rule 144.

In addition, we have filed registration statements on Form S-8 under the Securities Act of 1933, as amended (the "Securities Act"), to register the shares of our common stock reserved for issuance under our stock option plans, and intend to file additional registration statements on Form S-8 to register the shares automatically added each year to the share reserves under these plans.

Entities affiliated with Symphony Capital Partners, L.P. collectively control a substantial percentage of the voting power of our outstanding common stock as well as \$15 million of our debt.

Entities affiliated with Symphony Capital Partners, L.P. ("Symphony") currently collectively control approximately 8,340,800 shares of our common stock and warrants to purchase approximately 1,283,200 shares

[Table of Contents](#)

of our common stock. Based on our currently outstanding shares of common stock, these stockholders own approximately 15% of our total outstanding shares of common stock. If these stockholders exercise the warrants to purchase approximately 1,283,200 shares of our common stock, assuming no other issuances of shares, based on our currently outstanding shares of common stock, these stockholders would own approximately 17% of our total outstanding shares of our common stock. In addition, Symphony holds a promissory note in the principal amount of \$15 million, which may be satisfied in cash, Dynavax common stock or a combination of cash and Dynavax common stock, at our election. Finally, under the terms of the Standstill and Corporate Governance Letter Agreement we entered into with Symphony Dynamo Holdings LLC (“Holdings”) on December 30, 2009, for as long as Holdings and its affiliates, which include Symphony, beneficially own 10% or more of our outstanding common stock, we agreed to use our commercially reasonable efforts to cause to be elected and remain as directors on our Board of Directors one individual designated by Holdings and a second individual who shall be an independent third party designated by Holdings and reasonably acceptable to us. Holdings has designated Mark Kessel, a partner of Symphony, as its designee and Mr. Kessel has been appointed to our Board of Directors. The independent nominee has not yet been designated. As a result, Symphony, Holdings and their affiliates will be able to exercise substantial influence over the direction of the Company.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease approximately 67,000 square feet of laboratory and office space in Berkeley, California (the Berkeley Lease) under agreements expiring in September 2014, of which approximately 3,000 square feet is subleased through August 2010. The Berkeley Lease can be terminated at no cost to us in February 2011 but otherwise extends automatically until September 2014. We also lease approximately 5,600 square meters of laboratory and office space in Düsseldorf, Germany (the Düsseldorf Lease) under lease agreements expiring in March 2023.

ITEM 3. LEGAL PROCEEDINGS

From time to time in the ordinary course of business, we receive claims or allegations regarding various matters, including employment, vendor and other similar situations in the conduct of our operations. We do not believe any of the current claims or allegations are material to our current business or operations.

PART II**ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****Market Information and Holders**

Our common stock is traded on the Nasdaq Capital Market under the symbol "DVAX". Public trading of our common stock commenced on February 19, 2004. The following table sets forth for the periods indicated the high and low sale prices per share of our common stock.

	Common Stock Price	
	High	Low
2009		
First Quarter	\$1.04	\$ 0.50
Second Quarter	\$2.19	\$ 0.64
Third Quarter	\$3.35	\$ 1.15
Fourth Quarter	\$1.94	\$ 1.11
2008		
First Quarter	\$6.55	\$ 1.87
Second Quarter	\$2.59	\$ 1.40
Third Quarter	\$2.04	\$ 0.97
Fourth Quarter	\$2.60	\$ 0.15

As of March 8, 2010, there were approximately 111 holders of record of our common stock, as shown on the records of our transfer agent. We believe that our stockholders exceed 300 as the number of record holders does not include shares held in "street name" through brokers.

Dividends

We have never paid any cash dividends on our common stock. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

Recent Sales of Unregistered Securities

On December 30, 2009, the Company, Symphony and Holdings entered into a series of related agreements with us to cancel warrants previously issued in April 2006 in exchange for new warrants to purchase 2 million shares of our common stock at a price of \$1.94 per share ("Warrants"), representing a 25% premium over the applicable 30-day trading range average of \$1.55 per share through November 9, 2009. Also in connection with the Company's amendment of the Purchase Option Agreement and acquisition of SDI, the Company issued 13 million shares of its common stock to Holdings ("Shares"). We filed a registration statement on Form S-3 (File No. 333-164255) on January 8, 2010 covering the resale of shares of common stock including the common stock subject to purchase upon exercise of the warrants issued to Holdings and its affiliates. The Shares and Warrants were issued pursuant to an exemption from registration under Rule 506 promulgated under Regulation D.

Use of Proceeds from Sales of Registered Securities

On August 17, 2009 the Company entered into an equity distribution agreement (the "Agreement") with Wedbush Morgan Securities, Inc. ("Wedbush") pursuant to which we may offer and sell shares of our common stock having an aggregate offering price of up to \$15 million from time to time through Wedbush as our sales agent or to Wedbush as a principal. We filed the related prospectus supplement to Form S-3 (File No. 333-137608) on August 17, 2009. During the period from August 17, 2009 through October 26, 2009, we sold through Wedbush as our sales agent an aggregate of 1,281,100 shares of common stock for net proceeds

[Table of Contents](#)

of \$2.2 million after deducting commissions paid to Wedbush and offering expenses. The Company later filed another prospectus supplement to Form S-3 (File No. 333-139664) on October 30, 2009 for the remaining portion of \$12.2 million. As of December 31, 2009, we could offer and sell from time to time through Wedbush up to an additional \$12.2 million in aggregate offering proceeds of our common stock under the Agreement.

Pursuant to agreements with Deerfield, we issued to Deerfield Management and their affiliates the following warrants to purchase shares of our common stock:

<u>Warrant Issuance Date</u>	<u>Shares Issued (in thousands)</u>	<u>Form S- 3 File No.</u>	<u>Expiration Date</u>	<u>Exercise Price per Share</u>
July 18, 2007		333- 145836 ⁽¹⁾	2/26/2014	\$ 5.13
October 18, 2007	1,250	333- 147455 ⁽²⁾	2/26/2014	\$ 1.68
December 27, 2007	1,300	333- 149117 ⁽³⁾	2/26/2014	\$ 5.65
December 27, 2007	300	333- 149117 ⁽³⁾	2/26/2014	\$ 1.68
	700			
Total	3,550			

- (1) We filed a registration statement on Form S-3 (File No. 333-145836) on August 31, 2007 with the Securities and Exchange Commission and the related prospectus supplement dated September 14, 2007.
- (2) We filed a registration statement on Form S-3 (File No. 333-147455) on November 16, 2007, as amended on November 30, 2007 with the Securities and Exchange Commission and the related prospectus supplement dated December 5, 2007.
- (3) We filed a registration statement on Form S-3 (File No. 333-149117) on February 8, 2008 with the Securities and Exchange Commission and the related prospectus supplement dated May 9, 2008.

On December 6, 2006, pursuant to agreements with Azimuth Opportunity Ltd., we issued 1,663,456 shares at a weighted average price of \$9.02 per share and realized aggregate proceeds of \$15.0 million. The shares were issued pursuant to the Registration Statement on Form S-3 (File No. 333-127930) filed on August 29, 2005 with the Securities and Exchange Commission and the related prospectus supplement dated December 6, 2006.

On October 10, 2006, we completed an underwritten public offering of 7,130,000 shares of common stock, including 930,000 shares subject to the underwriters' over-allotment option at a public offering price of \$4.40 per share and realized aggregate proceeds of \$31.4 million. The offering was made pursuant to the Registration Statement on Form S-3 (File No. 333-137608) filed on September 27, 2006 with the Securities and Exchange Commission and the related prospectus supplement dated October 4, 2006.

On November 10, 2005, we completed an underwritten public offering of 5,720,000 shares of common stock, including 720,000 shares subject to the underwriters' over-allotment option at a public offering price of \$6.25 per share and realized aggregate proceeds of \$35.7 million. The offering was made pursuant to the Registration Statement on Form S-3 (File No. 333-127930) filed on August 29, 2005 with the Securities and Exchange Commission and the related prospectus supplement dated October 10, 2005.

On February 24, 2004, we completed our initial public offering of 6,900,000 shares of common stock, including 900,000 shares subject to the underwriters' over-allotment option at a public offering price of \$7.50 per share and realized aggregate proceeds of \$51.8 million. Our registration statement on Form S-1 (Reg. No. 333-109965) was declared effective by the Securities and Exchange Commission on February 11, 2004.

We retain broad discretion over the use of the net proceeds received from our offerings. The amount and timing of our actual expenditures may vary significantly depending on numerous factors, such as the progress of our product candidate development and commercialization efforts and the amount of cash used by our operations.

[Table of Contents](#)

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations, and with the Consolidated Financial Statements and Notes thereto which are included elsewhere in this Form 10-K. The Consolidated Statements of Operations Data for the years ended December 31, 2009, 2008 and 2007 and the Consolidated Balance Sheets Data as of December 31, 2009 and 2008 are derived from the audited Consolidated Financial Statements included elsewhere in this Form 10-K. The Consolidated Statements of Operations Data for the years ended December 31, 2006 and 2005 and the Consolidated Balance Sheets Data as of December 31, 2007, 2006 and 2005 are derived from Consolidated Financial Statements that are not included in this Form 10-K. Historical results are not necessarily indicative of results to be anticipated in the future.

	Years Ended December 31,				2005
	2009(1)	2008(1)	2007(1)	2006(1)	
(In thousands, except per share data)					
Consolidated Statements of Operations Data:					
Total revenues	\$ 40,318	\$ 37,094	\$ 14,093	\$ 4,847	\$ 14,655
Operating expenses:					
Research and development(2)	38,708	44,771	65,888	50,116	27,887
General and administrative	15,745	15,463	18,293	14,836	9,258
Acquired in-process research and development(3)	—	—	—	4,180	—
Amortization of intangible assets	980	980	1,004	698	—
Total operating expenses	55,433	61,214	85,185	69,830	37,145
Loss from operations	(15,115)	(24,120)	(71,092)	(64,983)	(22,490)
Interest and other income, net	112	1,741	4,165	3,287	2,125
Loan forgiveness(4)	—	5,000	—	—	—
Interest expense(5)	(124)	(9,157)	(1,719)	(99)	(190)
Net loss.	(15,127)	(26,536)	(68,646)	(61,795)	(20,555)
Consideration paid in excess of carrying value of the noncontrolling interest in Symphony Dynamo, Inc. (SDI)	(19,671)	—	—	—	—
Add: Loss attributable to noncontrolling interest in Symphony Dynamo, Inc.	4,233	5,707	8,675	9,743	—
Net loss attributable to Dynavax	\$ (30,565)	\$ (20,829)	\$ (59,971)	\$ (52,052)	\$ (20,555)
Basic and diluted net loss per share attributable to Dynavax common stockholders	\$ (0.76)	\$ (0.52)	\$ (1.51)	\$ (1.61)	\$ (0.79)
Shares used in computing basic and diluted net loss per share attributable to Dynavax common stockholders	40,350	39,819	39,746	32,339	25,914

- (1) Our net loss for the years ended December 31, 2009, 2008, 2007 and 2006 includes approximately \$3.0 million, \$3.2 million, \$3.5 million, and \$3.2 million respectively, in stock-based compensation expense for our employee stock option and employee stock purchase plans that we recorded as a result of adopting Topic 718, *Compensation-Stock Compensation*.
- (2) Research and development expenses for the year ended December 31, 2007 include an impairment charge of approximately \$0.4 million for certain intangible assets and related inventory.
- (3) Represents acquired in-process research and development. This amount relates to the Rhein Biotech GmbH acquisition in April 2006.

[Table of Contents](#)

- (4) Represents a \$5.0 million portion of the loan from Deerfield that was forgiven upon termination of the loan agreement. See Note 9 to the Consolidated Financial Statements.
- (5) Represents the consideration paid in excess of the carrying value of the noncontrolling interest in SDI and is treated as a deemed dividend for purposes of reporting earnings per share, increasing loss per share for the year ended December 31, 2009. For a description of these charges, see Note 8 to the Consolidated Financial Statements.

	2009	2008	December 31, 2007 (In thousands)	2006	2005
Consolidated Balance Sheets Data:					
Cash, cash equivalents and marketable securities	\$ 36,720	\$ 43,367	\$ 56,617	\$ 72,831	\$ 75,110
Investments held by Symphony Dynamo, Inc.	—	25,109	31,631	13,363	—
Working capital	24,404	35,688	82,035	75,985	71,941
Total assets	50,470	90,623	120,449	102,890	80,093
Noncontrolling interest in Symphony Dynamo, Inc.	—	2,634	8,341	2,016	—
Accumulated deficit	(259,637)	(248,743)	(227,914)	(167,943)	(115,891)
Total Dynavax stockholders' equity	6,376	13,522	30,790	77,056	74,363

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve a number of risks and uncertainties. Our actual results could differ materially from those indicated by forward-looking statements as a result of various factors, including but not limited to, the period for which we estimate our cash resources are sufficient, the availability of additional funds, as well as those set forth under "Risk Factors" and those that may be identified from time to time in our reports and registration statements filed with the Securities and Exchange Commission.

The following discussion and analysis is intended to provide an investor with a narrative of our financial results and an evaluation of our financial condition and results of operations. The discussion should be read in conjunction with "Item 6 — Selected Financial Data" and the Consolidated Financial Statements and the related notes thereto set forth in "Item 8 — Financial Statements and Supplementary Data."

Overview

Dynavax Technologies Corporation ("Dynavax" or the "Company"), a clinical-stage biopharmaceutical company, discovers and develops novel products to prevent and treat infectious diseases, asthma and inflammatory and autoimmune diseases. The Company's lead product candidate is HEPLISAV™, a Phase 3 investigational adult hepatitis B vaccine designed to enhance protection more rapidly and with fewer doses than current licensed vaccines.

Our pipeline of product candidates includes: HEPLISAV; our Universal Flu vaccine; clinical-stage programs for hepatitis C and hepatitis B therapies; and preclinical programs partnered with AstraZeneca and GlaxoSmithKline ("GSK"). We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing therapies to prevent or treat infectious diseases, asthma and inflammatory and autoimmune diseases.

Critical Accounting Policies and the Use of Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements and the related disclosures, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet dates and the reported amounts of revenues and expenses for the periods presented. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, research and development activities, stock-based compensation, investments, asset impairment, the estimated useful life of assets, income taxes and contingencies. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to the consolidated financial statements, we believe the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

Our revenues are derived from collaborative agreements as well as grants. Collaborative agreements may include upfront license payments, cost reimbursement for the performance of research and development, milestone payments, contract manufacturing services, and royalty fees. We recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Our revenue arrangements that contain multiple elements are evaluated under established accounting guidance. The different elements of the revenue arrangement are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration we receive is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Advance payments received in excess of amounts earned are classified as deferred revenue until earned. For agreements which do not meet the criteria of separate units of accounting under established accounting guidance, the total consideration received is grouped as one unit and the applicable revenue recognition methodology is applied to the single unit.

Revenue from non-refundable upfront license fees and other payments under collaboration agreements where we have continuing performance obligations is deferred and recognized as performance occurs. Revenue is recognized on a ratable basis, unless we determine that another methodology is more appropriate, through the date at which our performance obligations are completed. We recognize cost reimbursement revenue under collaborative agreements as the related research and development costs are incurred, as provided for under the terms of these agreements.

Revenue from milestones that are contingent upon the achievement of substantive at-risk performance criteria is recognized in full upon achievement of those milestone events in accordance with the terms of the agreement and assuming all other revenue recognition criteria have been met. All revenue recognized to date under our collaborative agreements has been nonrefundable.

Revenues from the manufacturing and sale of vaccine and other materials are recognized upon meeting the criteria for substantial performance and acceptance by the customer.

Revenue from royalty payments is contingent on future sales activities by our licensees. As a result, we recognize royalty revenue when reported by our licensees and when collection is reasonably assured.

[Table of Contents](#)

Revenue from government and private agency grants are recognized as the related research expenses are incurred and to the extent that funding is approved. Additionally, we recognize revenue based on the facilities and administrative cost rate reimbursable per the terms of the grant awards. Any amounts received in advance of performance are recorded as deferred revenue until earned.

Research and Development Expenses and Accruals

Research and development expenses include personnel and facility-related expenses, outside contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services, and non-cash stock-based compensation. Research and development costs are expensed as incurred. For agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities entered into prior to January 1, 2008, costs were expensed upon the earlier of when non-refundable amounts were due or as services were performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables. Non-refundable advance payments under agreements entered into after January 1, 2008 are capitalized and expensed as the related goods are delivered or services are performed.

Our accruals for clinical trials are based on estimates of the services received and efforts expended pursuant to contracts with clinical trial centers and clinical research organizations. We contract with third parties to perform various clinical trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients, the completion of portions of the clinical trial or similar conditions. We may terminate these contracts upon written notice and we are generally only liable for actual effort expended by the organizations to the date of termination, although in certain instances we may be further responsible for termination fees and penalties.

Stock-Based Compensation

Determining the appropriate fair value model and calculating the fair value of stock-based awards at the grant date requires judgment and estimates. The fair value of each option is amortized on a straight-line basis over the option's vesting period, assuming an annual forfeiture rate of 15% for both the executive level and non-executive level employee groups, and is estimated on the date of grant using the Black-Scholes option valuation model, which requires the input of highly subjective assumptions, including the expected forfeiture rate, expected life of the option and expected stock price volatility. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level and non-executive employees were grouped and considered separately for valuation purposes. In 2008, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years, which remains consistent for fiscal year ended December 31, 2009. Expected volatility is based on historical volatility of our stock and comparable peer data over the life of the options granted to executive and non-executive level employees.

Goodwill and Other Intangible Assets

Goodwill amounts are recorded as the excess purchase price over tangible assets, liabilities and intangible assets acquired based on their estimated fair value, by applying the acquisition method of accounting. The valuation in connection with the initial purchase price allocation and the ongoing evaluation for impairment of goodwill and intangible assets requires significant management estimates and judgment. The purchase price allocation process requires management estimates and judgment as to expectations for various products and business strategies. If any of the significant assumptions differ from the estimates and judgments used in the purchase price allocation, this could result in different valuations for goodwill and intangible assets. The

[Table of Contents](#)

Company operates in one segment and we evaluate goodwill for impairment on an annual basis and on an interim basis if events or changes in circumstances between annual impairment tests indicate that the asset might be impaired.

Impairment of Long-lived Assets

Long-lived assets to be held and used, including property and equipment and identified intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important that could indicate the need for an impairment review include the following:

- significant changes in the strategy for our overall business;
- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of acquired assets;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period;
- a current expectation that, more likely than not, a long lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; and
- our market capitalization relative to net book value.

Determination of recoverability is based on an estimate of undiscounted cash flows resulting from the use of the asset and its eventual disposition. Measurement of impairment charges for long-lived assets that management expects to hold and use are based on the fair value of such assets.

Consolidation of Variable Interest Entities

On April 18, 2006, we, Symphony Capital Partners, L.P. and Symphony Dynamo Holdings LLC (“Holdings”) entered into a transaction involving a series of related agreements providing for the advancement of specific Dynavax immunostimulatory sequences-based programs for cancer, hepatitis B and hepatitis C therapy (collectively, the “Programs”). Pursuant to these agreements, Symphony Capital Partners, L.P. and certain of its affiliates (collectively, “Symphony”) formed Symphony Dynamo, Inc (“SDI”) and invested \$50 million to fund the Programs, and we licensed to Holdings our intellectual property rights related to the Programs, which were assigned to SDI. As a result of these agreements, Symphony owns 100% of the equity of Holdings, which owns 100% of the equity of SDI.

In connection with the transaction described above, Holdings granted to us an exclusive purchase option that gave us the right, but not the obligation, to acquire the outstanding equity securities of SDI, which would result in our reacquisition of the intellectual property rights that we licensed to Holdings (the “Original Purchase Option”). The Original Purchase Option would have been exercisable for a price of \$106.9 million as of October 1, 2009, which purchase price would have increased quarterly by a predetermined amount up to \$144.1 million if the Original Purchase Option were exercised on April 18, 2011. If not exercised, the Original Purchase Option would have expired on April 18, 2011. The exercise price of the Original Purchase Option could have been paid for in cash or a combination of cash and our common stock. In exchange for the Original Purchase Option, we granted Holdings five-year warrants to purchase up to 2,000,000 shares of our common stock at an exercise price of \$7.32 per share pursuant to a warrant purchase agreement, and granted certain registration rights to Holdings pursuant to a registration rights agreement.

We also received an exclusive option to purchase either the hepatitis B or hepatitis C program (the “Program Option”) during the first year of the arrangement. In April 2007, we exercised the Program Option for the hepatitis B program. We have remained primarily responsible for the development of the cancer and hepatitis C therapy programs in accordance with a development plan and related development budgets that we have agreed to with Holdings.

[Table of Contents](#)

A variable interest entity, or VIE, is (i) an entity that has equity that is insufficient to permit the entity to finance its activities without additional subordinated financial support, or (ii) an entity that has equity investors that cannot make significant decisions about the entity's operations or that do not absorb their proportionate share of the expected losses or do not receive the expected residual returns of the entity. A VIE is required to be consolidated by the party that is deemed to be the primary beneficiary, which is the party that has exposure to a majority of the potential variability in the VIE's outcomes. Significant management judgment is required in the determination of an entity being considered a VIE.

Prior to the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option on December 30, 2009, as described below, we have consolidated the financial position and results of operations of SDI. We have not consolidated Holdings because we believe our variable interest, the Purchase Option, is on the stock of SDI. We believe SDI is a VIE because we have the Purchase Option to acquire its outstanding voting stock at prices that were fixed upon entry into the arrangement, with the specific price based upon the date the option is exercised. The fixed nature of the Purchase Option price limits Symphony's returns, as the investor in SDI.

Parties are deemed to be de facto agents if they cannot sell, transfer, or encumber their interests without the prior approval of an enterprise. Symphony is considered to be a de facto agent of the Company pursuant to this provision, and because we and Symphony as a related party group absorb a majority of SDI's variability, we evaluated whether, pursuant to FIN 46R's requirements, we are most closely associated with SDI. We concluded that we are most closely associated with SDI and should consolidate SDI because (1) we originally developed the technology that was assigned to SDI, (2) we continued to oversee and monitor the Development Programs, (3) our employees continued to perform substantially all of the development work, (4) we significantly influenced the design of the responsibilities and management structure of SDI, (5) SDI's operations are substantially similar to our activities, and (6) through the Purchase Option, we had the ability to participate in the benefits of a successful development effort.

Symphony was required to absorb the development risk for its equity investment in SDI. Symphony's equity investment in SDI was classified as noncontrolling interest in the consolidated balance sheet. The noncontrolling interest held by Symphony has been reduced by the \$5.6 million fair value of the warrants it received and \$2.6 million of fees we immediately paid to Symphony upon the transaction's closing because the total consideration provided by us to Symphony effectively reduces Symphony's at-risk equity investment in SDI. While we performed the research and development on behalf of SDI, our development risk was limited to the consideration we provided to Symphony (the warrants and fees). We exercised the Program Option in April 2007, which resulted in the recognition of a \$15.0 million liability to Symphony. The noncontrolling interest was further reduced for this obligation as it would have been paid to Symphony at the expiration of the SDI collaboration in 2011 if we did not exercise the Purchase Option, or would be included as part of the applicable purchase price upon exercise of the Purchase Option.

Net losses incurred by SDI and charged to the noncontrolling interest were \$4.2 million, \$5.7 million and \$8.7 million for the years ended December 31, 2009, 2008 and 2007, respectively. We ceased to charge net losses incurred by SDI against the noncontrolling interest upon our acquisition of SDI on December 30, 2009.

In December 2007, the FASB new guidance that required: (i) noncontrolling interests in subsidiaries be reported as a component of stockholders' equity in the consolidated balance sheet, (ii) noncontrolling interests continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance, (iii) that earnings or losses attributed to the noncontrolling interests be reported as part of consolidated earnings and not as a separate component of income or expense, and (iv) disclosure of the attribution of consolidated earnings to the controlling and noncontrolling interests on the face of the consolidated statement of operations. On January 1, 2009, we adopted these provisions. Had the previous requirements been applied, the consolidated net loss attributable to Dynavax's common stockholders would have increased by \$1.9 million and the loss per share attributable to Dynavax common stockholders would have increased by \$0.05, during the year ended December 31, 2009.

[Table of Contents](#)

In November 2009, we entered into an agreement with Holdings to modify the provisions of and to exercise the purchase option. We completed the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option on December 30, 2009. In exchange for all of the outstanding equity of SDI, we issued to the Symphony Investors: (i) 13 million shares of common stock; (ii) 5 year warrants to purchase 2 million shares of common stock with an exercise price of \$1.94 per share; (iii) a note in the principal amount of \$15 million, due December 31, 2012, payable in cash, our common stock or a combination thereof at our discretion, which obligation was previously payable solely in cash on April 18, 2011; and (iv) agreed to contingent cash payments from us equal to 50% of the first \$50 million from any upfront, pre-commercialization milestone or similar payments received by us from any agreement with any third party with respect to the development and/or commercialization of the cancer and hepatitis C therapies. The outstanding warrants to purchase 2 million shares of common stock held by the Symphony Investors were cancelled as part of this transaction.

We recorded the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option as a return of equity to the noncontrolling interest. The acquisition was accounted for as a capital transaction that did not affect our net loss. However, because the acquisition was accounted for as a capital transaction, the consideration paid in excess of the carrying value of the noncontrolling interest in SDI is treated as a deemed dividend for purposes of reporting net loss and earnings per share, increasing net loss and net loss per share attributable to Dynavax for the year ended December 31, 2009.

The fair value of the Dynavax common stock issued to the Symphony investors was based on the closing sales price of our common stock on the NASDAQ Capital Market on December 30, 2009, the date the transaction was completed.

The estimated fair values of the warrants transferred were calculated using the Black-Scholes valuation model. We estimated the fair value of the non-interest bearing note payable to Holdings using a net present value model using a discount rate of 17%. Imputed interest will be recorded as interest expense over the term of the loan. The principal amount of \$15 million is due on December 31, 2012 and is payable in cash, our common stock or a combination thereof at our discretion. If we elect to pay the note solely in shares of our common stock, the number of shares issued will be determined by our stock price at the date of payment.

We estimated the fair value of the contingent consideration liability for potential future payments using a discounted cash flow model. The discounted cash flow model was derived from management's assumptions regarding the timing, amounts, and probability of potential upfront and milestone payments for the development and/or commercialization of the hepatitis C program based on transactions for similar stage programs by other companies. These cash flows were discounted at an 18% rate.

Changes in the fair value of the acquisition-related contingent consideration liability subsequent to the December 30, 2009 acquisition date will be recognized in other income and expense on our consolidated statement of operations in the period of the change. Certain events including, but not limited to the timing and terms of a strategic partnership, and the commercial success of the programs could have a material impact on the fair value of the contingent liability, and as a result, our results of operations.

Results of Operations

Revenues

Revenues consist of amounts earned from collaborations, grants, services and license fees. Collaboration revenue includes revenue recognized under our collaboration agreements. Grant revenue includes amounts earned under government and private agency grants. Services and license fees include research and development and contract manufacturing services, license fees and royalty payments.

[Table of Contents](#)

The following is a summary of our revenues for the years ended December 31, 2009, 2008 and 2007 (in thousands, except for percentages):

Revenues:	Years Ended December 31,			Increase (Decrease) from 2008 to 2009		Increase (Decrease) from 2007 to 2008	
	2009	2008	2007	\$	%	\$	%
Collaboration revenue	\$35,534	\$31,666	\$ 9,315	\$ 3,868	12%	\$22,351	240%
Grant revenue	3,477	2,999	3,046	478	16%	(47)	(2)%
Services and license revenue	1,307	2,429	1,732	(1,122)	(46)%	697	40%
Total revenues	<u>\$40,318</u>	<u>\$37,094</u>	<u>\$14,093</u>	<u>\$ 3,224</u>	9%	<u>\$23,001</u>	163%

Collaboration revenue in 2009 included recognition of \$28.5 million of deferred revenue associated with the upfront payment from Merck, which was accelerated through June 2009 following Merck's termination of the collaboration for HEPLISAV in December 2008. Total revenues for the year ended December 31, 2009 increased by \$3.2 million, or 9%, over the same period in 2008 primarily due to the accelerated recognition of deferred revenue upon termination of the Merck collaboration. In addition, collaboration revenue from AstraZeneca included the recognition of \$1.7 million of deferred revenue related to a milestone payment received in the third quarter of 2008. Grant revenue for the year ended December 31, 2009, increased over the same periods in 2008 due primarily to revenues earned from the National Institute of Health ("NIH") contract we were awarded in September 2008. Services and license revenue of \$1.3 million for the year ended December 31, 2009, respectively, were derived primarily from research and development services provided to customers of Rhein Biotech GmbH ("Rhein" or "Dynavax Europe").

Total revenues for the year ended December 31, 2008 increased by \$23.0 million, or 163%, over the same period in 2007 primarily due to an increase in revenue recognized from our collaboration agreements with Merck and AstraZeneca. Collaboration revenue in 2008 included the recognition of \$5 million of previously deferred revenue associated with the upfront payment from Merck, a portion of which was accelerated due to Merck's termination of the collaboration in December 2008. In addition, collaboration revenue from AstraZeneca increased by \$2 million, resulting from the receipt of a milestone payment in the third quarter of 2008. Grant revenue for the year ended December 31, 2008 included revenue recognized from NIH awards to continue development of our Universal Flu vaccine, a therapy for systemic lupus erythematosus (SLE) and our advanced ISS technology using TLR9 agonists as vaccine adjuvants. Services and license revenue of \$2.4 million for the year ended December 31, 2008, was derived primarily from royalties received from customers of Dynavax Europe.

Research and Development

Research and development expenses consist of compensation and related personnel costs which include benefits, recruitment, travel and supply costs; outside services; allocated facility costs and non-cash stock-based compensation. Outside services relate to our preclinical experiments and clinical trials, regulatory filings, manufacturing our product candidates, and cost of sales relating to service and license revenue.

The following is a summary of our research and development expense (in thousands, except percentages):

Research and Development:	Years Ended December 31,			Increase (Decrease) from 2008 to 2009		Increase (Decrease) from 2007 to 2008	
	2009	2008	2007	\$	%	\$	%
Compensation and related personnel costs	\$15,601	\$18,020	\$19,170	\$(2,419)	(13)%	\$ (1,150)	(6)%
Outside services	14,985	18,477	38,726	(3,492)	(19)%	(20,249)	(52)%
Facility costs	6,983	6,871	6,414	112	2%	457	7%
Impairment	—	—	444	—	—	(444)	(100)%
Non-cash stock-based compensation	1,139	1,403	1,134	(264)	(19)%	269	24%
Total research and development	<u>\$38,708</u>	<u>\$44,771</u>	<u>\$65,888</u>	<u>\$(6,063)</u>	(14)%	<u>\$(21,117)</u>	(32)%

[Table of Contents](#)

Research and development expenses for the year ended December 31, 2009 decreased by \$6.1 million, or 14%, compared to the same period in 2008. The decrease from fiscal 2008 was due primarily to a reduction in outside services resulted primarily from a reduction in clinical development costs associated with HEPLISAV and the discontinuation of clinical development for the TOLAMBA ragweed allergy program. We discontinued clinical development of TOLAMBA, our ragweed allergy product candidate, in May 2008. Compensation and related personnel costs decreased in 2009 due to a reduction in the number of employees engaged in research and development.

Research and development expenses for the year ended December 31, 2008 decreased by \$21.1 million, or 32%, compared to the same period in 2007. The decrease from fiscal 2007 was due primarily to a reduction in outside services which included a non-recurring \$5 million payment in June 2007 for a non-exclusive license to certain patents and patent applications for the purpose of commercializing HEPLISAV. The remaining decline in outside services resulted primarily from a reduction in clinical development costs associated with HEPLISAV and the discontinuation of clinical development for the TOLAMBA ragweed allergy program.

Research and development expenses in 2010 will depend in large part on our spending associated with the ongoing clinical trials for HEPLISAV, which will not be able to continue unless we raise significant additional funds in the near term. While we are actively seeking financing alternatives, we cannot assure that sufficient funding will be available on terms acceptable to us. If adequate funds are not available in the near term, we have developed contingency plans that would require us to delay, reduce the scope of, or put on hold the HEPLISAV program, and potentially our other development programs while we seek strategic alternatives. In any event, we may be required to reduce costs and expenses within our control, including potentially significant personnel-related costs and other expenditures that are part of our current operations.

General and Administrative

General and administrative expenses consist primarily of compensation and related personnel costs; outside services such as accounting, consulting, business development, investor relations and insurance; legal costs that include corporate and patent expenses; allocated facility costs; and non-cash stock-based compensation. The following is a summary of our general and administrative expenses (in thousands, except for percentages):

General and Administrative:	Years Ended December 31,			Increase (Decrease) from 2008 to 2009		Increase (Decrease) from 2007 to 2008	
	2009	2008	2007	\$	%	\$	%
Compensation and related personnel costs	\$ 5,886	\$ 6,810	\$ 7,101	\$ (924)	(14)%	\$ (291)	(4)%
Outside services	4,033	4,209	5,248	(176)	(4)%	(1,039)	(20)%
Legal costs	3,003	1,696	2,951	1,307	77%	(1,255)	(43)%
Facility costs	927	946	596	(19)	(2)%	350	59%
Non-cash stock-based compensation	1,896	1,802	2,397	94	5%	(595)	(25)%
Total general and administrative	<u>\$15,745</u>	<u>\$15,463</u>	<u>\$18,293</u>	<u>\$ 282</u>	2%	<u>\$(2,830)</u>	(15)%

General and administrative expenses for the year ended December 31, 2009 increased by \$0.3 million, or 2%, compared to the same period in 2008. The increase is primarily due to an increase in legal costs related to patent activities and partially offset by a decrease in compensation and related personnel costs. The decrease in compensation and related personnel costs for 2009 is due to a reduction in the number of administrative employees providing organizational support.

General and administrative expenses for the year ended December 31, 2008 decreased by \$2.8 million, or 15%, compared to the same period in 2007. The decrease is primarily due to a reduction in legal costs related to patent activities. Outside services decreased in 2008 due to the decline in consulting and other professional fees incurred in conjunction with various corporate activities.

[Table of Contents](#)

Amortization of Intangible Assets

Intangible assets consist primarily of the manufacturing process and customer relationships resulting from our April 2006 acquisition of Rhein and are being amortized over 5 years from the date of acquisition. Amortization of intangible assets was \$1.0 million for all three years ended December 31, 2009, 2008 and 2007, respectively.

Interest and Other Income, Loan Forgiveness and Interest Expense

Interest income is reported net of amortization of premiums and discounts on marketable securities and realized gains and losses on investments. Other income includes gains and losses on foreign currency translation of our activities primarily with Dynavax Europe and gains and losses on disposals of property and equipment. Interest expense includes amortization of deferred transaction costs and commitment fees related to the Deerfield financing agreement. The following is a summary of our interest and other income, loan forgiveness and interest expense (in thousands, except for percentages):

	Years Ended December 31,			Increase (Decrease) from 2008 to 2009		Increase (Decrease) from 2007 to 2008	
	2009	2008	2007	\$	%	\$	%
Interest and other income	\$ 112	\$ 1,741	\$ 4,165	\$(1,629)	(94)%	\$(2,424)	(58)%
Loan forgiveness	\$ —	\$ 5,000	\$ —	\$(5,000)	(100)%	\$ 5,000	100%
Interest expense	\$(124)	\$(9,157)	\$(1,719)	\$(9,033)	(99)%	\$ 7,438	433%

Interest and other income for the year ended December 31, 2009 decreased by \$1.6 million, or 94%, compared to the same period in 2008 due primarily to lower investment balances and the decline in returns on our investment portfolio resulting from current market conditions.

Loan forgiveness represents a \$5.0 million portion of the loan from Deerfield that was forgiven upon termination of the loan agreement.

Amount Attributed to Noncontrolling Interest in Symphony Dynamo, Inc.

Pursuant to the agreements that we entered into with SDI in April 2006 and accounted for as variable interest entities, or VIEs, the results of operations of SDI have been included in our consolidated financial statements from the date of formation on April 18, 2006. We have deducted the losses attributed to the noncontrolling interest in the determination of net loss in our consolidated statements of operations through December 30, 2009, the date we acquired all the outstanding equity interest in SDI. For the fiscal years ended December 31, 2009, 2008 and 2007, the loss attributed to the noncontrolling interest was \$4.2 million, \$5.7 million, and \$8.7 million, respectively.

Consideration paid in excess of carrying value of the noncontrolling interest in Symphony Dynamo, Inc.

Upon closing of the acquisition of all of the outstanding equity of SDI pursuant to the amended Purchase Option, we recorded the acquisition as a capital transaction that did not affect its net loss. However, because the acquisition was accounted for as a capital transaction, the excess consideration transferred over the carrying value of the noncontrolling interest in SDI was treated as a deemed dividend for purposes of reporting net loss and net loss per share attributable to Dynavax, increasing net loss per share attributable to Dynavax common stockholders by \$19.7 million for the year ended December 31, 2009.

Recent Accounting Pronouncements

Accounting Standards Codification Topic No. 810 (“ASC 810”)

ASC 810 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income (loss) attributable to the parent and to the

[Table of Contents](#)

noncontrolling interests, changes in a parent's ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. ASC 810 requires that the noncontrolling interest continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance. ASC 810 also establishes additional reporting requirements that identify and distinguish between the ownership interest of the parent and the interest of the noncontrolling owners. In addition, consolidated net loss has been adjusted to include the net loss attributed to the noncontrolling interest in SDI and consolidated comprehensive income or loss has been adjusted to include the comprehensive income or loss attributed to the noncontrolling interest in SDI.

On January 1, 2009, we adopted these provisions of and reporting standards of ASC 810 and our adoption did not impact our financial statements, except for the presentation and disclosure requirements affecting all periods presented as follows:

- The noncontrolling interest in SDI was reclassified to equity.
- Consolidated net income or loss was adjusted to include the net income or loss attributed to the noncontrolling interest in SDI.
- Consolidated comprehensive income or loss was adjusted to include the comprehensive income or loss attributed to the noncontrolling interest in SDI.
- The Company must disclose for each reporting period the amounts of consolidated income or loss attributed to the Company and to the noncontrolling interest in SDI. In addition, for each reporting period the Company must present a reconciliation at the beginning and end of the period of the carrying amount of total equity and equity attributable to the Company and to the noncontrolling interest in SDI.

Had the previous requirements been applied, the consolidated net loss attributable to Dynavax Technologies Corporation's common stockholders would have increased by \$1.9 million and the loss per share attributable to Dynavax common stockholders would have increased by \$0.05, for the year ended December 31, 2009.

Accounting Standards Codification Topic No. 855 ("ASC 855")

ASC 855 establishes principles and requirements for the evaluation, recognition and disclosure of subsequent events. In particular, this topic sets forth: (i) the period after the balance sheet date during which management of a reporting entity shall evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, (ii) the circumstances under which an entity shall recognize events or transactions occurring after the balance sheet date in its financial statements and (iii) the disclosures that an entity shall make about events or transactions that occurred after the balance sheet date. Our adoption of ASC 855 in the year ended December 31, 2009 did not have an impact on its financial position or results of operations.

Accounting Standards Update 2009-05

In August 2009, the FASB issued Accounting Standards Update No. 2009-05, *Measuring Liabilities at Fair Value* ("ASU 2009-05"). This update provides amendments to Accounting Standards Codification Topic 820, *Fair Value Measurements and Disclosure* for the fair value measurement of liabilities ("ASC 820"). ASU 2009-05 states that in the absence of a market for a liability a company can use: (i) the quoted price of the identical liability when traded as an asset, (ii) a quoted price for similar liabilities or similar liabilities when traded as assets; or (iii) another valuation technique that is consistent with the principles of ASC 820 such as a present value technique. ASU 2009-05 was adopted on October 1, 2009 and did not have a material impact on our financial position, results of operations or cash flows.

Accounting Standards Update 2009-13

In October 2009, the FASB issued Accounting Standards Update (ASU) No. 2009-13, *Multiple-Deliverable Revenue Arrangements* (ASU No. 2009-13). ASU No. 2009-13, which amends existing revenue recognition

[Table of Contents](#)

accounting pronouncements and provides accounting principles and application guidance on whether multiple deliverables exist, how the arrangement should be separated, and the consideration allocated. This guidance eliminates the requirement to establish the fair value of undelivered products and services and instead provides for separate revenue recognition based upon management's estimate of the selling price for an undelivered item when there is no other means to determine the fair value of that undelivered item. Previous accounting principles required that the fair value of the undelivered item be the price of the item either sold in a separate transaction between unrelated third parties or the price charged for each item when the item is sold separately by the vendor. This was difficult to determine when the product was not individually sold because of its unique features. If the fair value of all of the elements in the arrangement was not determinable, then revenue was deferred until all of the items were delivered or fair value was determined. This new approach is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, which for Dynavax means no later than January 1, 2011. Early adoption is permitted; however, adoption of this guidance as of a date other than January 1, 2011, will require us to apply this guidance retrospectively effective as of January 1, 2010 and will require disclosure of the effect of this guidance as applied to all previously reported interim periods in the fiscal year of adoption. While we do not expect the adoption of this standard to have a material impact on our financial position and results of operations, this standard may impact us in the event we complete future transactions or modify existing collaborative relationships.

Liquidity and Capital Resources

As of December 31, 2009, we had \$36.7 million in cash and cash equivalents. Our funds are currently invested in highly liquid institutional money market funds.

Cash used in operating activities during the year ended December 31, 2009 was \$33.6 million compared to \$17.0 million for the same period in 2008. The increase in cash usage over the prior year was due primarily to the decline in payments received from the collaboration with Merck, which was terminated in December 2008 and an increase in our net loss for 2009. Cash used in operating activities during the year ended December 31, 2008 was \$17.0 million compared to \$32.0 million for the same period in 2007. The decrease in cash usage was due primarily to the reduction in our net loss for 2008 resulting from the increase in revenues, in particular, revenue associated with the Merck collaboration for HEPLISAV.

Cash provided by investing activities during the year ended December 31, 2009 was \$19.9 million compared to \$30.1 million for the same period in 2008. The decrease in cash provided was primarily attributed to lower net proceeds from maturities of marketable securities. Cash provided by investing activities during the year ended December 31, 2008 was \$30.1 million compared to cash used of \$3.6 million for the same period in 2007. The increase in cash provided was primarily attributed to higher net proceeds from maturities of marketable securities.

Cash provided by financing activities during the year ended December 31, 2009 was \$22.1 million compared to \$1.4 million for the same period in 2008. Cash provided by financing activities primarily included gross proceeds of \$20.1 million from the acquisition of SDI and \$2.2 million from the sales of our common stock under an equity distribution agreement entered into with Wedbush Morgan Securities ("Wedbush") on August 17, 2009. Cash provided by financing activities during the year ended December 31, 2008 was \$1.4 million compared to \$35.7 million for the same period in 2007. Cash provided by financing activities primarily included \$2 million in loan proceeds from Deerfield, offset by a \$0.8 million cash repayment to Deerfield upon termination of the loan agreement.

In order to continue development of our product candidates, particularly HEPLISAV, we will have to raise significant additional funds in the near term. We expect to continue to spend substantial funds in connection with:

- development and manufacturing of our product candidates, particularly HEPLISAV;
- various human clinical trials for our product candidates; and
- protection of our intellectual property.

[Table of Contents](#)

We are engaged in active and ongoing discussions to pursue additional capital through a combination of public and private equity offerings and strategic alliance and licensing arrangements. We are also exploring various initiatives to reduce costs across our operations in order to preserve our cash resources.

We currently estimate that we will have sufficient cash resources to meet our cash needs through the next twelve months based on cash and cash equivalents on hand at December 31, 2009, anticipated revenues, reductions in our current spending levels, and the successful completion of ongoing financing activities. Our failure to raise capital in the near term or to timely reduce costs could shorten this period.

Sufficient funding may not be available, or if available, may be on terms that significantly dilute or otherwise adversely affect the rights of existing shareholders. If adequate funds are not available in the near term, we have developed contingency plans that would require us to delay, reduce the scope of, or put on hold the HEPLISAV program, and potentially our other development programs while we seek strategic alternatives. In any event, we may be required to reduce costs and expenses within our control, including potentially significant personnel-related costs and other expenditures that are part of our current operations.

Our independent registered public accounting firm has included in their audit opinion for the year ended December 31, 2009 a statement with respect to our ability to continue as a going concern. However, our consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. If we became unable to continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our consolidated financial statements. The reaction of investors to the inclusion of a going concern statement by our auditors, our lack of cash resources, and our potential inability to continue as a going concern may materially adversely affect our share price and our ability to raise new capital or to enter into strategic alliances.

Contractual Obligations

The following summarizes our significant contractual obligations as of December 31, 2009 and the effect those obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

<u>Contractual Obligations:</u>	<u>Total</u>	<u>Less Than 1 Year</u>	<u>1-3 Years</u>	<u>4-5 Years</u>	<u>More Than 5 Years</u>
Future minimum payments under our operating leases, excluding payments from the sublease agreement	\$17,994	\$ 2,629	\$ 8,221	\$2,658	\$ 4,486
Long-term note payable to Symphony Dynamo Holdings	15,000	—	15,000	—	—
Total	\$32,994	\$ 2,629	\$23,221	\$2,658	\$ 4,486

We lease our facilities in Berkeley, California, or the Berkeley Lease, and Düsseldorf, Germany, or the Düsseldorf Lease, under operating leases that expire in September 2014 and March 2023, respectively. The Berkeley Lease can be terminated at no cost to us in February 2011 but otherwise extends automatically until September 2014. We have entered into a sublease agreement under the Berkeley Lease for a certain portion of the leased space with remaining scheduled payments to us totaling \$40 thousand until August 2010. The sublease rental income is offset against rent expense.

As part of the consideration transferred from Dynavax to Holdings for the acquisition of SDI, the Company is obligated to make contingent cash payments equal to 50% of the first \$50 million from any upfront, pre-commercialization milestone or similar payments received by us from any agreement with any third party with respect to the development and/or commercialization of the cancer and hepatitis C therapies. Using a discounted cash flow model, we estimated the fair value of the contingent liability to be \$3.0 million as of December 31, 2009.

[Table of Contents](#)

During the fourth quarter of 2004, we established a letter of credit with Silicon Valley Bank as security for our Berkeley Lease in the amount of \$0.4 million. The letter of credit remained outstanding as of December 31, 2009 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheets as of December 31, 2009 and 2008. Under the terms of the Berkeley Lease, if the total amount of our cash, cash equivalents and marketable securities falls below \$20.0 million for a period of more than 30 consecutive days during the lease term, the amount of the required security deposit will increase to \$1.1 million, until such time as our projected cash and cash equivalents will exceed \$20.0 million for the remainder of the lease term, or until our actual cash and cash equivalents remains above \$20.0 million for a period of 12 consecutive months.

We established a letter of credit with Deutsche Bank as security for our Düsseldorf Lease in the amount of \$0.3 million. The letter of credit remained outstanding as of December 31, 2009 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheet as of December 31, 2009.

In addition to the non-cancelable commitments included above, we have entered into contractual arrangements that obligate us to make payments to the contractual counterparties upon the occurrence of future events. In the normal course of operations, we have entered into license and other agreements and intend to continue to seek additional rights relating to compounds or technologies in connection with our discovery, manufacturing and development programs. Under the terms of the agreements, we may be required to pay future up-front fees, milestones and royalties on net sales of products originating from the licensed technologies. We consider these potential obligations to be contingent and have summarized all significant arrangements below.

We rely on research institutions, contract research organizations, clinical investigators and clinical material manufacturers. As of December 31, 2009, under the terms of our agreements, we are obligated to make future payments as services are provided of approximately \$15.5 million through 2013. These agreements are terminable by us upon written notice. We are generally only liable for actual effort expended by the organizations at any point in time during the contract, subject to certain termination fees and penalties.

Under the terms of our exclusive license agreements with the Regents of the University of California, as amended, for certain technology and related patent rights and materials, we pay annual license or maintenance fees and will be required to pay milestones and royalties on net sales of products originating from the licensed technologies. As of December 31, 2009, we estimate that such fees to the Regents could approximate \$0.3 million during 2010.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined by rules enacted by the SEC and accordingly, no such arrangements are likely to have a current or future effect on our financial position. As described above, SDI is considered a variable interest entity and is included in our financial statements through December 30, 2009, the date we acquired all the outstanding equity in SDI. Our financing arrangement with SDI does not qualify as an off-balance sheet arrangement as defined by applicable SEC regulations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and Qualitative Disclosure About Market Risk

The primary objective of our investment activities is to preserve principal while at the same time maximize the income we receive from our investments without significantly increasing risk. Some of the securities that we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, we currently maintain our portfolio of cash equivalents and investments in a variety of securities, including money market funds, government agency securities and corporate obligations, some of which are government-secured. We do not invest in auction rate

[Table of Contents](#)

securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans. Our investment portfolio approach has been consistent for our recent fiscal years. Because of the short-term maturities of our cash equivalents and marketable securities, we do not believe that an increase in market rates would have any significant negative impact on the realized value of our investments.

Interest Rate Risk. We do not use derivative financial instruments in our investment portfolio. Due to the short duration and conservative nature of our cash equivalents and marketable securities, we do not expect any material loss with respect to our investment portfolio.

Foreign Currency Risk. We have certain investments outside the U.S. for the operations of Dynavax Europe and have some exposure to foreign exchange rate fluctuations. The cumulative translation adjustment reported in the consolidated balance sheet as of December 31, 2009 was \$0.2 million primarily related to translation of Dynavax Europe activities from Euro to U.S. dollars.

[Table of Contents](#)

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page No.</u>
Report of Independent Registered Public Accounting Firm	48
Audited Consolidated Financial Statements:	
Consolidated Balance Sheets	49
Consolidated Statements of Operations	50
Consolidated Statements of Stockholders' Equity	51
Consolidated Statements of Cash Flows	52
Notes to Consolidated Financial Statements	53

Report of Independent Registered Public Accounting Firm

To The Board of Directors and Stockholders
Dynavax Technologies Corporation

We have audited the accompanying consolidated balance sheets of Dynavax Technologies Corporation as of December 31, 2009 and 2008, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2009. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Dynavax Technologies Corporation at December 31, 2009 and 2008, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2009, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, Dynavax Technologies Corporation's recurring losses from operations and cash and cash equivalents balance at December 31, 2009 raise substantial doubt about its ability to continue as a going concern. Management's plans as to these matters also are described in Note 2. The 2009 consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Also, as discussed in Note 2 to the consolidated financial statements, the Company retrospectively changed its method of accounting for and presentation of its noncontrolling interest as required by the issuance of authoritative accounting pronouncements.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Dynavax Technologies Corporation's internal control over financial reporting as of December 31, 2009, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 15, 2010, expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Francisco, California
March 15, 2010

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share amounts)

	<u>December 31,</u>	
	<u>2009</u>	<u>2008</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 36,720	\$ 28,103
Marketable securities	—	15,264
Investments held by Symphony Dynamo, Inc. (SDI)	—	25,109
Restricted cash	681	668
Accounts receivable	895	6,407
Prepaid expenses and other current assets	586	991
Total current assets	38,882	76,542
Property and equipment, net	7,997	9,510
Goodwill	2,312	2,312
Other intangible assets, net	1,279	2,259
Total assets	<u>\$ 50,470</u>	<u>\$ 90,623</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 1,686	\$ 905
Accrued liabilities	7,507	6,816
Deferred revenues	2,718	33,133
Warrant liability to Symphony Dynamo Holdings LLC (Holdings)	2,567	—
Total current liabilities	14,478	40,854
Deferred revenues, noncurrent	17,083	18,512
Liability from program option exercised under the SDI collaboration	—	15,000
Long-term note payable to Holdings	9,342	—
Long-term contingent liability to Holdings	3,040	—
Other long-term liabilities	151	101
Commitments and contingencies (Note 10)		
Dynavax stockholders' equity:		
Preferred stock: \$0.001 par value; 5,000 shares authorized and no shares issued and outstanding at December 31, 2009 and 2008	—	—
Common stock: \$0.001 par value; 150,000 and 100,000 shares authorized at December 31, 2009 and 2008, respectively; 54,279 and 39,854 shares issued and outstanding at December 31, 2009 and 2008, respectively	54	40
Additional paid-in capital	266,127	262,579
Accumulated other comprehensive income (loss):		
Unrealized gain on marketable securities available-for-sale	—	49
Cumulative translation adjustment	(168)	(403)
Accumulated other comprehensive income (loss)	(168)	(354)
Accumulated deficit	(259,637)	(248,743)
Total Dynavax stockholders' equity	6,376	13,522
Noncontrolling interest in SDI	—	2,634
Total stockholders' equity	6,376	16,156
Total liabilities and stockholders' equity	<u>\$ 50,470</u>	<u>\$ 90,623</u>

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Years Ended December 31,		
	2009	2008	2007
Revenues:			
Collaboration revenue	\$ 35,534	\$ 31,666	\$ 9,315
Grant revenue	3,477	2,999	3,046
Service and license revenue	1,307	2,429	1,732
Total revenues	40,318	37,094	14,093
Operating expenses:			
Research and development	38,708	44,771	65,888
General and administrative	15,745	15,463	18,293
Amortization of intangible assets	980	980	1,004
Total operating expenses	55,433	61,214	85,185
Loss from operations	(15,115)	(24,120)	(71,092)
Interest and other income	112	1,741	4,165
Loan forgiveness	—	5,000	—
Interest expense	(124)	(9,157)	(1,719)
Net loss	(15,127)	(26,536)	(68,646)
Consideration paid in excess of carrying value of the noncontrolling interest in SDI	(19,671)	—	—
Add: Losses attributable to noncontrolling interest in SDI	4,233	5,707	8,675
Net loss attributable to Dynavax	<u>\$ (30,565)</u>	<u>\$ (20,829)</u>	<u>\$ (59,971)</u>
Basic and diluted net loss per share attributable to Dynavax common stockholders	<u>\$ (0.76)</u>	<u>\$ (0.52)</u>	<u>\$ (1.51)</u>
Shares used to compute basic and diluted net loss per share attributable to Dynavax common stockholders	<u>40,350</u>	<u>39,819</u>	<u>39,746</u>

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands)

	Common Stock		Additional	Accumulated	Accumulated	Total	Noncontrolling	Total
	Shares	Par Amount	Paid-In Capital	Other Comprehensive Income (Loss)	Deficit	Dynavax Stockholders' Equity	Interest in SDI	Stockholders' Equity
Balances at December 31, 2006	39,715	\$ 40	\$ 244,787	\$ 172	\$ (167,943)	\$ 77,056	\$ 2,016	\$ 79,072
Exercise of stock options	6	—	22	—	—	22	—	22
Issuance of common stock under Employee Stock Purchase Plan	44	—	149	—	—	149	—	149
Proceeds from issuance of common stock, net of fees	—	—	(19)	—	—	(19)	—	(19)
Proceeds from the purchase of noncontrolling interest by the shareholders in SDI, net of fees	—	—	—	—	—	—	30,000	30,000
Liability from program option exercise	—	—	—	—	—	—	(15,000)	(15,000)
Issuance of warrants in conjunction with Deerfield financing agreement	—	—	9,796	—	—	9,796	—	9,796
Stock compensation expense	—	—	3,531	—	—	3,531	—	3,531
Comprehensive loss:								
Change in unrealized gain on marketable securities	—	—	—	110	—	110	—	110
Cumulative translation adjustment	—	—	—	116	—	116	—	116
Net loss	—	—	—	—	(59,971)	(59,971)	(8,675)	(68,646)
Comprehensive loss						(59,745)	(8,675)	(69,488)
Balances at December 31, 2007	39,765	40	258,266	398	(227,914)	30,790	8,341	39,131
Exercise of stock options	2	—	5	—	—	5	—	5
Issuance of common stock under Employee Stock Purchase Plan	87	—	204	—	—	204	—	204
Modification of warrants in conjunction with Deerfield financing agreement	—	—	899	—	—	899	—	899
Stock compensation expense	—	—	3,205	—	—	3,205	—	3,205
Comprehensive loss:								
Change in unrealized gain on marketable securities	—	—	—	(89)	—	(89)	—	(89)
Cumulative translation adjustment	—	—	—	(663)	—	(663)	—	(663)
Net loss	—	—	—	—	(20,829)	(20,829)	(5,707)	(26,536)
Comprehensive loss						(21,581)	(5,707)	(21,581)
Balances at December 31, 2008	39,854	40	262,579	(354)	(248,743)	13,522	2,634	16,156
Issuance of common stock upon financing	13,000	13	18,577	—	—	18,590	—	18,590
Issuance of common stock upon exercise of stock options and restricted stock awards	8	—	13	—	—	13	—	13
Issuance of common stock under Employee Stock Purchase Plan	136	—	72	—	—	72	—	72
Proceeds from issuance of common stock, net of fees	1,281	1	2,241	—	—	2,242	—	2,242
Modification of warrants in conjunction with Deerfield agreement	—	—	84	—	—	84	—	84
Reclassification of warrant liability issued in conjunction with the SDI transaction	—	—	(2,567)	—	—	(2,567)	—	(2,567)
Issuance of warrants in conjunction with SDI agreements	—	—	1,764	—	—	1,764	—	1,764
Excess consideration paid for the noncontrolling interest in SDI	—	—	(19,671)	—	—	(19,671)	—	(19,671)
Stock compensation expense	—	—	3,035	—	—	3,035	—	3,035
Dividends paid to SDI shareholders	—	—	—	—	—	—	(335)	(335)
Dividends paid to SDI shareholders	—	—	—	—	—	—	1,934	1,934
Comprehensive loss:								
Change in unrealized gain on marketable securities	—	—	—	(49)	—	(49)	—	(49)
Cumulative translation adjustment	—	—	—	235	—	235	—	235
Net loss	—	—	—	—	(10,894)	(10,894)	(4,233)	(15,127)
Comprehensive loss						(10,708)	(4,233)	(14,941)
Balances at December 31, 2009	54,279	\$ 54	\$ 266,127	\$ (168)	\$ (259,637)	\$ 6,376	\$ —	\$ 6,376

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Years Ended December 31,		
	2009	2008	2007
Operating activities			
Net loss attributable to Dynavax	\$(30,565)	\$(20,829)	\$(59,971)
Adjustments to reconcile net loss to net cash used in operating activities:			
Consideration paid in excess of carrying value of the noncontrolling interest in SDI	19,671	—	—
Amount attributed to noncontrolling interest in SDI	(4,233)	(5,707)	(8,675)
Depreciation and amortization	1,857	1,850	1,483
Amortization of intangible assets	980	980	1,004
(Gain) loss on disposal of property and equipment	12	32	—
Accretion and amortization on marketable securities	4	(721)	(1,855)
Interest associated with Deerfield financing agreement	84	9,090	1,248
Loan forgiveness	—	(5,000)	—
Stock-based compensation expense	3,035	3,205	3,531
Changes in operating assets and liabilities:			
Accounts receivable	5,512	827	(5,080)
Prepaid expenses and other current assets	405	1,533	(1,851)
Inventory	—	—	257
Other assets	(13)	(79)	1,269
Accounts payable	781	(3,513)	2,237
Accrued liabilities	762	(6,129)	930
Deferred revenues	(31,844)	7,426	33,441
Net cash used in operating activities	<u>(33,552)</u>	<u>(17,035)</u>	<u>(32,032)</u>
Investing activities			
Change in investments held by SDI	5,041	6,522	(18,268)
Purchases of marketable securities	(14,289)	(35,755)	(80,232)
Proceeds from maturities of marketable securities	29,500	59,401	98,550
Proceeds from sales of marketable securities	—	4,046	—
Purchases of property and equipment	(377)	(4,098)	(3,647)
Net cash provided by (used in) investing activities	<u>19,875</u>	<u>30,116</u>	<u>(3,597)</u>
Financing activities			
Proceeds from purchase of noncontrolling interest by preferred shareholders in SDI, net of fees	—	—	30,000
Cash acquired from the purchase of noncontrolling interest in SDI	19,732	—	—
Proceeds from notes payable issued to Deerfield	—	2,000	5,500
Repayment of notes payable issued to Deerfield	—	(817)	—
Proceeds from issuance of common stock, net of issuance costs	2,242	—	(19)
Proceeds from exercise of stock options	13	5	22
Proceeds from employee stock purchase plan	72	204	149
Net cash provided by financing activities	<u>22,059</u>	<u>1,392</u>	<u>35,652</u>
Effect of exchange rate on cash and cash equivalents	235	(663)	116
Net increase in cash and cash equivalents	8,617	13,810	139
Cash and cash equivalents at beginning of year	28,103	14,293	14,154
Cash and cash equivalents at end of year	<u>\$ 36,720</u>	<u>\$ 28,103</u>	<u>\$ 14,293</u>
Supplemental disclosure of cash flow information			
Cash paid during the year for interest	<u>\$ —</u>	<u>\$ 885</u>	<u>\$ 356</u>
Non-cash activities:			
Note payable to Holdings from purchase option exercised under the SDI collaboration	<u>\$ 9,342</u>	<u>\$ —</u>	<u>\$ —</u>
Shares issued in conjunction with the SDI transaction	<u>\$ 18,590</u>	<u>\$ —</u>	<u>\$ —</u>
Liability from program option exercised under the SDI collaboration	<u>\$(15,000)</u>	<u>\$ —</u>	<u>\$ 15,000</u>
Warrants issued in conjunction with the SDI transaction	<u>\$ 1,764</u>	<u>\$ —</u>	<u>\$ —</u>
Warrants issued in conjunction with the Deerfield financing agreement	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 9,796</u>
Loan forgiveness	<u>\$ —</u>	<u>\$ 5,000</u>	<u>\$ —</u>
Modification of warrants previously issued to Deerfield	<u>\$ 84</u>	<u>\$ 899</u>	<u>\$ —</u>
Disposal of fully depreciated property and equipment	<u>\$ 1,215</u>	<u>\$ —</u>	<u>\$ 238</u>

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization

Dynavax Technologies Corporation (“Dynavax” or the “Company”), a clinical-stage biopharmaceutical company, discovers and develops novel products to prevent and treat infectious diseases, asthma and inflammatory and autoimmune diseases. Our pipeline of product candidates includes: HEPLISAV; clinical-stage programs for hepatitis C and hepatitis B therapies; and preclinical programs including those partnered with AstraZeneca and GlaxoSmithKline (“GSK”) and our Universal Flu vaccine. We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing therapies to prevent or treat infectious diseases, asthma and inflammatory and autoimmune diseases. We originally incorporated in California on August 29, 1996 under the name Double Helix Corporation, and we changed our name to Dynavax Technologies Corporation in September 1996. We reincorporated in Delaware on March 26, 2001.

Subsidiaries

In December 2009, we completed the acquisition of Symphony Dynamo, Inc. (SDI). In April 2006, we completed the acquisition of Rhein Biotech GmbH, or Rhein, a wholly-owned subsidiary in Düsseldorf, Germany.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of Dynavax and our wholly-owned subsidiaries. On December 30, 2009, Dynavax acquired all of the outstanding equity of Symphony Dynamo, Inc. (SDI) (see Note 8). Prior to December 30, 2009, Dynavax consolidated the financial results of SDI, as Dynavax was deemed a variable interest entity and Dynavax was deemed the primary beneficiary. All significant intercompany accounts and transactions have been eliminated. We operate in one business segment, which is the discovery and development of biopharmaceutical products. In fiscal years 2009, 2008 and 2007, respectively, 97%, 93% and 88% of our revenues were earned in the U.S. and the remaining revenues were earned in Europe. As of December 31, 2009 and 2008, respectively, 43% and 48% of our long-lived assets were located in the U.S. and the remaining assets were located in Europe.

Liquidity and Financial Condition

We have incurred significant operating losses and negative cash flows from operations since our inception. As of December 31, 2009, we had cash and cash equivalents of \$36.7 million, restricted cash of \$0.7 million and working capital of \$24.4 million. We currently estimate that we will have sufficient cash resources to meet our anticipated cash needs through the next twelve months based on cash and cash equivalents on hand at December 31, 2009, anticipated revenues, reductions in our current spending levels, and the successful completion of ongoing financing activities.

In order to continue development of our product candidates, particularly HEPLISAV, we will have to raise significant additional funds in the near term. We are engaged in active and ongoing discussions to pursue additional capital through a combination of public and private equity offerings and strategic alliance and licensing arrangements. We are also exploring various initiatives to reduce costs across our operations in order to preserve our cash resources. Sufficient funding may not be available, or if available, may be on terms that significantly dilute or otherwise adversely affect the rights of existing shareholders. If adequate funds are not

[Table of Contents](#)

available in the near term, we have developed contingency plans that would require us to delay, reduce the scope of, or put on hold the HEPLISAV program, and potentially our other development programs while we seek strategic alternatives. In any event, we may be required to reduce costs and expenses within our control, including potentially significant personnel-related costs and other expenditures that are part of our current operations.

The accompanying financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. The consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from uncertainty related to the Company's ability to continue as a going concern.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results may differ from these estimates.

Foreign Currency

We consider the local currency to be the functional currency for our international subsidiaries. Accordingly, assets and liabilities denominated in foreign currencies are translated into U.S. dollars using the exchange rate on the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing throughout the year. Currency translation adjustments are charged or credited to accumulated other comprehensive income (loss) in the consolidated balance sheets. The cumulative translation adjustment reported in the consolidated balance sheet as of December 31, 2009 was \$0.2 million. Gains and losses resulting from currency transactions are included in the consolidated statements of operations. We reported a \$54 thousand loss resulting from currency translations in our consolidated statement of operations for the year ended December 31, 2009.

Cash, Cash Equivalents, Marketable Securities and Investments held by SDI

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Management determines the appropriate classification of marketable securities at the time of purchase. We invest in short-term money market funds, government agency securities and corporate obligations, some of which are government-secured. We believe these types of investments are subject to minimal credit and market risk. We do not invest in auction rate securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans.

We have classified our entire investment portfolio as available-for-sale. We view our available-for-sale portfolio as available for use in current operations, and accordingly, have classified all investments as short-term. Available-for-sale securities are carried at fair value based on quoted market prices, with unrealized gains and losses included in accumulated other comprehensive income in stockholders' equity. Realized gains and losses and declines in value, if any, judged to be other than temporary on available-for-sale securities are included in interest income or expense. The cost of securities sold is based on the specific identification method. Management assesses whether declines in the fair value of investment securities are other than temporary. In determining whether a decline is other than temporary, management considers the following factors:

- Length of the time and the extent to which the market value has been less than cost;
- The financial condition and near-term prospects of the issuer; and
- Our intent and ability to retain our investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value.

To date, there have been no declines in fair value that have been identified as other than temporary.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that are subject to concentration of credit risk consist primarily of cash and cash equivalents, accounts receivable, and marketable securities. Our policy is to invest cash in institutional money market funds and marketable securities of U.S. government and corporate issuers with high credit quality in order to limit the amount of credit exposure. We currently maintain a portfolio of cash equivalents and investments in a variety of securities, including money market funds, government agency securities and corporate obligations, some of which are government-secured. We do not invest in auction rate securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans. We have not experienced any losses on our cash and cash equivalents and marketable securities.

Trade accounts receivable are recorded at invoice value. We review our exposure to accounts receivable, including the potential for allowances based on management's judgment. We have not historically experienced any significant losses. We do not currently require collateral for any of our trade accounts receivable.

Our future products will require approval from the U.S. Food and Drug Administration and foreign regulatory agencies before commercial sales can commence. There can be no assurance that our products will receive any of these required approvals. The denial or delay of such approvals would have a material adverse impact on our consolidated financial position and results of operations.

We rely on a single contract manufacturer to produce material for certain of our clinical trials. The loss of our current supplier could delay development or commercialization of our product candidates. To date, we have manufactured only small quantities of material for research purposes.

We are subject to risks common to companies in the biopharmaceutical industry, including, but not limited to, new technological innovations, clinical development risk, protection of proprietary technology, compliance with government and environmental regulations, uncertainty of market acceptance of products, product liability, the volatility of our stock price and the need to obtain additional financing.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. The assets held in the Berkeley facility have estimated useful lives of three years for computer equipment and furniture, and five years for laboratory equipment. The assets in the Düsseldorf, Germany facility have estimated useful lives of three years for computer equipment and thirteen years for furniture and laboratory equipment. Leasehold improvements in both facilities are amortized over the remaining life of the initial lease term or the estimated useful lives of the assets, whichever is shorter. Repair and maintenance costs are charged to expense as incurred.

Impairment of Long-lived Assets

Long-lived assets to be held and used, including property and equipment and identified intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important that could indicate the need for an impairment review include the following:

- significant changes in the strategy for our overall business;
- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of acquired assets;
- significant negative industry or economic trends;

[Table of Contents](#)

- significant decline in our stock price for a sustained period;
- a current expectation that, more likely than not, a long lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; and
- our market capitalization relative to net book value.

Recoverability is measured by comparison of the assets' carrying amounts to the future net undiscounted cash flows resulting from the use of the asset and its eventual disposition. If these assets are considered impaired, the impairment recognized is measured by the amount by which the carrying value of the assets exceed the projected discounted future net cash flows associated with the assets. For the years ended December 31, 2009 and 2008, we recognized no impairment charge as it relates to our long-lived assets. For the year ended December 31, 2007, we recognized an impairment charge included in research and development expenses of \$0.4 million to write off the carrying amount of the intangible asset related to the Supervax developed technology acquired as part of the Rhein Biotech GmbH acquisition and related inventory (See Note 6).

Revenue Recognition

Our revenues are derived from collaborative agreements as well as grants. Collaborative agreements may include upfront license payments, cost reimbursement for the performance of research and development, milestone payments, contract manufacturing services, and royalty fees. We recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Our revenue arrangements that contain multiple elements are evaluated under established accounting guidance. The different elements of the revenue arrangement are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration we receive is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Advance payments received in excess of amounts earned are classified as deferred revenue until earned. For agreements which do not meet the criteria of separate units of accounting under established accounting guidance, the total consideration received is grouped as one unit and the applicable revenue recognition methodology is applied to the single unit.

Revenue from non-refundable upfront license fees and other payments under collaboration agreements where we have continuing performance obligations is deferred and recognized as performance occurs. Revenue is recognized on a ratable basis, unless we determine that another methodology is more appropriate, through the date at which our performance obligations are completed. We recognize cost reimbursement revenue under collaborative agreements as the related research and development costs are incurred, as provided for under the terms of these agreements.

Revenue from milestones that are contingent upon the achievement of substantive at-risk performance criteria is recognized in full upon achievement of those milestone events in accordance with the terms of the agreement and assuming all other revenue recognition criteria have been met. All revenue recognized to date under our collaborative agreements has been nonrefundable.

Revenues from the manufacturing and sale of vaccine and other materials are recognized upon meeting the criteria for substantial performance and acceptance by the customer.

Revenue from royalty payments is contingent on future sales activities by our licensees. As a result, we recognize royalty revenue when reported by our licensees and when collection is reasonably assured.

Revenue from government and private agency grants are recognized as the related research expenses are incurred and to the extent that funding is approved. Additionally, we recognize revenue based on the facilities

[Table of Contents](#)

and administrative cost rate reimbursable per the terms of the grant awards. Any amounts received in advance of performance are recorded as deferred revenue until earned.

Research and Development Expenses and Accruals

Research and development expenses include personnel and facility-related expenses, outside contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services, and non-cash stock-based compensation. Research and development costs are expensed as incurred. For agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities entered into prior to January 1, 2008, costs were expensed upon the earlier of when non-refundable amounts were due or as services were performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables. Non-refundable advance payments under agreements entered into after January 1, 2008 are capitalized and expensed as the related goods are delivered or services are performed.

Our accruals for clinical trials are based on estimates of the services received and efforts expended pursuant to contracts with clinical trial centers and clinical research organizations. We contract with third parties to perform various clinical trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients, the completion of portions of the clinical trial or similar conditions. We may terminate these contracts upon written notice and we are generally only liable for actual effort expended by the organizations to the date of termination, although in certain instances we may be further responsible for termination fees and penalties.

Goodwill and Other Intangible Assets

Goodwill amounts are recorded as the excess purchase price over tangible assets, liabilities and intangible assets acquired based on their estimated fair value, by applying the acquisition method of accounting. The valuation in connection with the initial purchase price allocation and the ongoing evaluation for impairment of goodwill and intangible assets requires significant management estimates and judgment. The purchase price allocation process requires management estimates and judgment as to expectations for various products and business strategies. If any of the significant assumptions differ from the estimates and judgments used in the purchase price allocation, this could result in different valuations for goodwill and intangible assets. We determined that we have only one operating segment and there are no components of that operating segment that are deemed to be reporting units. Since we are one reporting unit, we have allocated goodwill to that one reporting unit based on the relative fair value of the reporting unit. We evaluate goodwill for impairment on an annual basis and on an interim basis if events or changes in circumstances between annual impairment tests indicate that the asset might be impaired.

Consolidation of Variable Interest Entities

Arrangements that are not controlled through voting or similar rights are accounted for as variable interest entities, or VIEs. An enterprise is required to consolidate a VIE if it is the primary beneficiary of the VIE. The enterprise that is deemed to absorb a majority of the expected losses or receive a majority of expected residual returns of the VIE is considered the primary beneficiary.

We have concluded that under certain circumstances when we enter into agreements that contain an option to purchase assets or equity securities from an entity, or enter into an arrangement with a financial partner for the formation of joint ventures which engage in research and development projects, a VIE may be created. For each VIE created, we compute expected losses and residual returns based on the probability of future cash flows. If we

[Table of Contents](#)

are determined to be the primary beneficiary of the VIE, the assets, liabilities and operations of the VIE will be consolidated with our financial statements. Prior to the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option on December 30, 2009 our consolidated financial statements include the accounts of Symphony Dynamo, Inc., a variable interest entity, of which we were the primary beneficiary (refer to Note 8 below).

Stock-Based Compensation

Determining the appropriate fair value model and calculating the fair value of stock-based awards at the grant date requires judgment and estimates. The fair value of each option is amortized on a straight-line basis over the option's vesting period, assuming an annual forfeiture rate of 15% for both the executive level and non-executive level employee groups, and is estimated on the date of grant using the Black-Scholes option valuation model, which requires the input of highly subjective assumptions, including the expected forfeiture rate, expected life of the option and expected stock price volatility. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level and non-executive employees were grouped and considered separately for valuation purposes. In 2008, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years, which remains consistent for fiscal year ended December 31, 2009. Expected volatility is based on historical volatility of our stock and comparable peer data over the life of the options granted to executive and non-executive level employees.

Income Taxes

We account for income taxes using the liability method under ASC 740, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on temporary differences resulting from the different treatment of items for tax and financial reporting purposes. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse. Additionally, we must assess the likelihood that deferred tax assets will be recovered as deductions from future taxable income. We have provided a full valuation allowance on our deferred tax assets because we believe it is more likely than not that our deferred tax assets will not be realized. We evaluate the realizability of our deferred tax assets on a quarterly basis. Currently, there is no provision for income taxes as we have incurred losses to date.

Effective January 1, 2007, we adopted the provisions for accounting for uncertainty in income taxes, which specifies how tax benefits for uncertain tax positions are to be recognized, measured and derecognized in financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim-period guidance, among other provisions.

At the date of adoption, there was no impact on our consolidated financial position, results of operations and cash flows as a result of adoption. We have no unrecognized tax benefit as of December 31, 2009, including no accrued amounts for interest and penalties. Our policy will be to recognize interest and penalties related to income taxes as a component of general and administrative expense. We are subject to income tax examinations for U.S. incomes taxes and state income taxes from 1996 forward. We are subject to tax examinations in Singapore and Germany from 2003 and 2004 forward, respectively. We do not anticipate that total unrecognized tax benefits will significantly change prior to December 31, 2010.

Recent Accounting Pronouncements

Accounting Standards Codification Topic No. 810 ("ASC 810")

ASC 810 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income (loss) attributable to the parent and to the

[Table of Contents](#)

noncontrolling interests, changes in a parent's ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. ASC 810 requires that the noncontrolling interest continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance. ASC 810 also establishes additional reporting requirements that identify and distinguish between the ownership interest of the parent and the interest of the noncontrolling owners. In addition, consolidated net loss has been adjusted to include the net loss attributed to the noncontrolling interest in SDI and consolidated comprehensive income or loss has been adjusted to include the comprehensive income or loss attributed to the noncontrolling interest in SDI.

On January 1, 2009, we adopted these provisions of and reporting standards of ASC 810 and our adoption did not impact our financial statements, except for the presentation and disclosure requirements affecting all periods presented as follows:

- The noncontrolling interest in SDI was reclassified to equity.
- Consolidated net income or loss was adjusted to include the net income or loss attributed to the noncontrolling interest in SDI.
- Consolidated comprehensive income or loss was adjusted to include the comprehensive income or loss attributed to the noncontrolling interest in SDI.
- The Company must disclose for each reporting period the amounts of consolidated income or loss attributed to the Company and to the noncontrolling interest in SDI. In addition, for each reporting period the Company must present a reconciliation at the beginning and end of the period of the carrying amount of total equity and equity attributable to the Company and to the noncontrolling interest in SDI.

Had the previous requirements been applied, the consolidated net loss attributable to Dynavax Technologies Corporation's common stockholders would have increased by \$1.9 million and the loss per share attributable to Dynavax common stockholders would have increased by \$0.05, for the year ended December 31, 2009.

Accounting Standards Codification Topic No. 855 ("ASC 855")

In May 2009, ASC 855 establishes principles and requirements for the evaluation, recognition and disclosure of subsequent events. In particular, this topic sets forth: (i) the period after the balance sheet date during which management of a reporting entity shall evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements, (ii) the circumstances under which an entity shall recognize events or transactions occurring after the balance sheet date in its financial statements and (iii) the disclosures that an entity shall make about events or transactions that occurred after the balance sheet date. Our adoption of ASC 855 in the year ended December 31, 2009 did not have an impact on its financial position or results of operations.

Accounting Standards Update 2009-05

In August 2009, the FASB issued Accounting Standards Update No. 2009-05, *Measuring Liabilities at Fair Value* ("ASU 2009-05"). This update provides amendments to Accounting Standards Codification Topic 820, *Fair Value Measurements and Disclosure* for the fair value measurement of liabilities ("ASC 820"). ASU 2009-05 states that in the absence of a market for a liability a company can use: (i) the quoted price of the identical liability when traded as an asset, (ii) a quoted price for similar liabilities or similar liabilities when traded as assets; or (iii) another valuation technique that is consistent with the principles of ASC 820 such as a present value technique. ASU 2009-05 was adopted on October 1, 2009 and did not have a material impact on our financial position, results of operations or cash flows.

Accounting Standards Update 2009-13

In October 2009, the FASB issued Accounting Standards Update (ASU) No. 2009-13, *Multiple-Deliverable Revenue Arrangements* (ASU No. 2009-13). ASU No. 2009-13, which amends existing revenue recognition

[Table of Contents](#)

accounting pronouncements and provides accounting principles and application guidance on whether multiple deliverables exist, how the arrangement should be separated, and the consideration allocated. This guidance eliminates the requirement to establish the fair value of undelivered products and services and instead provides for separate revenue recognition based upon management's estimate of the selling price for an undelivered item when there is no other means to determine the fair value of that undelivered item. Previous accounting principles required that the fair value of the undelivered item be the price of the item either sold in a separate transaction between unrelated third parties or the price charged for each item when the item is sold separately by the vendor. This was difficult to determine when the product was not individually sold because of its unique features. If the fair value of all of the elements in the arrangement was not determinable, then revenue was deferred until all of the items were delivered or fair value was determined. This new approach is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, which for Dynavax means no later than January 1, 2011. Early adoption is permitted; however, adoption of this guidance as of a date other than January 1, 2011, will require us to apply this guidance retrospectively effective as of January 1, 2010 and will require disclosure of the effect of this guidance as applied to all previously reported interim periods in the fiscal year of adoption. While we do not expect the adoption of this standard to have a material impact on our financial position and results of operations, this standard may impact us in the event we complete future transactions or modify existing collaborative relationships.

3. Fair Value Measurements

ASC 820 defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1 - Quoted prices in active markets for identical assets or liabilities;
- Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The following table represents the fair value hierarchy for our financial assets (cash equivalents and marketable securities) and investments held by SDI measured at fair value on a recurring basis as of years ended December 31, 2009 and 2008 (in thousands):

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
December 31, 2009				
Assets				
Money market funds	\$ 33,788	\$ —	\$ —	\$ 33,788
Total assets	\$ 33,788	\$ —	\$ —	\$ 33,788
Liabilities				
Warrant liability	\$ —	\$ —	\$ 2,567	\$ 2,567
Long-term note payable to Symphony Dynamo Holdings LLC ("Holdings")	—	—	9,342	9,342
Long-term contingent consideration liability to Holdings	—	—	3,040	3,040
Total Liabilities	\$ —	\$ —	\$ 14,949	\$ 14,949

[Table of Contents](#)

	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
December 31, 2008				
Money market funds	\$ 43,773	\$ —	\$ —	\$ 43,773
U.S. Government agency securities	—	12,774	—	12,774
FDIC insured corporate debt securities	—	3,749	—	3,749
Corporate debt securities	—	2,500	—	2,500
Total	<u>\$ 43,773</u>	<u>\$ 19,023</u>	<u>\$ —</u>	<u>\$ 62,796</u>

Assets

The Company had zero and \$4.0 million sales of marketable securities during the years ended December 31, 2009 and 2008, respectively. As of December 31, 2009, the Company had no marketable securities.

When determining if there are any “other-than-temporary” impairments on its investments, the Company evaluates: (i) whether the investment has been in a continuous realized loss position for over twelve months, (ii) the duration to maturity of the Company’s investments, (iii) the Company’s intention to hold the investments to maturity and if it is not more likely than not that the Company will be required to sell the investment before recovery of the amortized cost bases, (iv) the credit rating of each investment, and (v) the type of investments made. Through December 31, 2009, the Company has not recognized any “other-than-temporary” losses on its investments.

Liabilities

In connection with the exercise of the Company’s purchase of all of the outstanding equity of SDI, the Company issued the following components of consideration which were accounted for as liabilities on the consolidated balance sheet as of December 31, 2009 (in thousands):

<u>Description</u>	<u>Amount</u>
Warrant consideration	\$ 2,567
Note payable to Holdings	9,342
Contingent consideration liability to Holdings	3,040
Balance as of December 31, 2009	\$ 14,949

The Company issued warrants to Symphony which contained provisions for anti-dilution protection in the event that the Company issues other equity securities within six months from the closing date of the transaction. Due to this adjustment provision, the warrants do not meet the criteria set forth in ASC 815 to be considered indexed to the Company’s own stock. Accordingly, the Company has recorded these warrants as a liability at fair value, which was estimated at the issuance date using the Black-Scholes Model. This fair value measurement is based on significant inputs not observed in the market and thus represents a Level 3 measurement. Level 3 instruments are valued based on unobservable inputs that are supported by little or no market activity and reflect the Company’s assumptions in measuring fair value.

In connection with the acquisition of SDI, the Company entered into a \$15 million non-interest bearing note payable in full on December 31, 2012. We estimated the fair value of the non-interest bearing note payable to Holdings using a net present value model using a discount rate of 17%. Imputed interest will be recorded as interest expense over the term of the loan. The principal amount of \$15 million is due on December 31, 2012 and is payable in cash, our common stock or a combination thereof at our discretion. If we elect to pay the note solely in shares of our common stock, the number of shares issued will be determined by our stock price at the date of payment. This fair value measurement is based on significant inputs not observed in the market and thus represents a Level 3 measurement. Level 3 instruments are valued based on unobservable inputs that are supported by little or no market activity and reflect the Company’s assumptions in measuring fair value.

[Table of Contents](#)

The Company is also obligated to make future contingent cash payments to the former Holdings shareholders related to certain payments received by the Company from future partnering agreements pertaining to its hepatitis C and cancer therapy programs (see Note 8). The Company estimated the fair value of this contingent liability using a discounted cash flow model. The discounted cash flow model was derived from management's assumptions regarding the timing, amounts, and probability of potential upfront and milestone payments for the development and/or commercialization of the hepatitis C program based on transactions for similar stage programs by other companies. These cash flows were discounted at an 18% rate. This fair value measurement is based on significant inputs not observed in the market and thus represents a Level 3 measurement. Level 3 instruments are valued based on unobservable inputs that are supported by little or no market activity and reflect the Company's assumptions in measuring fair value.

The Company assumed these liabilities at December 30, 2009 and determined that the adjustment to the fair value measurement for the period ending December 31, 2009 was not material.

4. Available-for-Sale Securities

The following is a summary of available-for-sale securities included in cash and cash equivalents, marketable securities, investments held by SDI and restricted cash as of December 31, 2009 and 2008 (in thousands):

	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Estimated Fair Value</u>
December 31, 2009:				
Certificates of deposit and money market funds	\$ 34,634	\$ —	\$ —	\$ 34,634
Total	<u>\$ 34,634</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 34,634</u>
December 31, 2008:				
Certificates of deposit and money market funds	\$ 44,498	\$ —	\$ —	\$ 44,498
U.S. Government agency securities	12,743	31	—	12,774
FDIC insured corporate debt securities	3,736	13	—	3,749
Corporate debt securities	2,495	5	—	2,500
Total	<u>\$ 63,472</u>	<u>\$ 49</u>	<u>\$ —</u>	<u>\$ 63,521</u>

There were zero realized gains from the sale of marketable securities for the year ended December 31, 2009, and immaterial realized gain for the year ended December 31, 2008 and no realized gain for the year ended December 21, 2007. Realized losses from the sale of marketable securities were zero in 2009, 2008 and 2007. As of December 31, 2009, we had zero marketable securities. As of December 31, 2008, all of our investments have a stated maturity date that is within one year of the current balance sheet date. All of our investments are classified as short-term and available-for-sale, as we may not hold our investments until maturity.

[Table of Contents](#)

5. Property and Equipment

Property and equipment as of December 31, 2009 and 2008 consist of the following (in thousands):

	December 31,	
	2009	2008
Laboratory equipment	\$ 14,937	\$ 15,433
Computer equipment	1,331	1,461
Furniture and fixtures	1,581	1,810
Leasehold improvements	3,734	3,593
	<u>21,583</u>	<u>22,297</u>
Less accumulated depreciation and amortization	(13,586)	(12,787)
Total	<u>\$ 7,997</u>	<u>\$ 9,510</u>

Depreciation and amortization expense on property and equipment was \$1.9 million, \$1.9 million and \$1.5 million for the years ended December 31, 2009, 2008, and 2007, respectively.

6. Intangible Assets

Intangible assets consist primarily of manufacturing process and customer relationships. The manufacturing process derives from the methods for making proteins in Hansenula yeast, which is a key component in the production of hepatitis B vaccine. The customer relationships derive from Rhein's ability to sell existing, in-process and future products to its existing customers. Purchased intangible assets other than goodwill are amortized on a straight-line basis over their respective useful lives. The following tables present details of the purchased intangible assets at December 31, 2009 and December 31, 2008 (in thousands, except years):

	Estimated Useful Life (In years)	December 31, 2009			December 31, 2008		
		Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Intangible Assets:							
Manufacturing process	5	\$ 3,670	\$ (2,712)	\$ 958	\$ 3,670	\$ (1,978)	\$ 1,692
Customer relationships	5	1,230	(909)	321	1,230	(663)	567
Total		<u>\$ 4,900</u>	<u>\$ (3,621)</u>	<u>\$ 1,279</u>	<u>\$ 4,900</u>	<u>\$ (2,641)</u>	<u>\$ 2,259</u>

The estimated future amortization expense of purchased intangible assets is as follows (in thousands):

Year ending December 31,	
2010	\$ 980
2011	299
Total	<u>\$ 1,279</u>

Long-lived assets to be held and used, including property and equipment and identified intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important that could indicate the need for an impairment review which are listed in Note 1. Recoverability is measured by comparison of the assets' carrying amounts to the future net undiscounted cash flows resulting from the use of the asset and its eventual disposition. If these assets are considered impaired, the impairment recognized is measured by the amount by which the carrying value of the assets exceed the projected discounted future net cash flows associated with the assets. For the years ended December 31, 2009 and 2008, we recognized no impairment charge as it relates to our intangible assets.

[Table of Contents](#)

For the year ended December 31, 2007, we recognized an impairment charge included in research and development expenses of \$0.4 million to write off the carrying amount of the intangible asset related to developed technology acquired as part of the Rhein Biotech GmbH acquisition and related inventory.

7. Current Accrued Liabilities

Current accrued liabilities as of December 31, 2009 and 2008 consist of the following (in thousands):

	December 31,	
	2009	2008
Payroll and related expenses	\$ 2,521	\$ 2,419
Legal expenses	1,140	1,387
Third party scientific research expense	2,155	1,730
Other accrued liabilities	1,691	1,280
Total	<u>\$ 7,507</u>	<u>\$ 6,816</u>

8. Symphony Dynamo, Inc.

On April 18, 2006, we, Symphony and Holdings entered into a transaction involving a series of related agreements providing for the advancement of specific Dynavax immunostimulatory sequences-based programs for cancer, hepatitis B and hepatitis C therapy (collectively, the “Programs”). Pursuant to these agreements, Symphony and certain of its affiliates formed Symphony Dynamo Inc. (“SDI”) and invested \$50 million to fund the Programs, and we licensed to Holdings our intellectual property rights related to the Programs, which were assigned to SDI. As a result of these agreements, Symphony owns 100% of the equity of Holdings, which owns 100% of the equity of SDI.

In connection with the transaction described above, Holdings granted to us an exclusive purchase option that gave us the right, but not the obligation, to acquire the outstanding equity securities of SDI, which would result in our reacquisition of the intellectual property rights that we licensed to Holdings (the “Original Purchase Option”). The Original Purchase Option would have been exercisable for a price of \$106.9 million as of October 1, 2009, which purchase price would have increased quarterly by a predetermined amount up to \$144.1 million if the Original Purchase Option were exercised on April 18, 2011. If not exercised, the Original Purchase Option would have expired on April 18, 2011. The exercise price of the Original Purchase Option could have been paid for in cash or a combination of cash and our common stock. In exchange for the Original Purchase Option, we granted Holdings five-year warrants to purchase up to 2,000,000 shares of our common stock at an exercise price of \$7.32 per share pursuant to a warrant purchase agreement (the “Original Warrants”), and granted certain registration rights to Holdings pursuant to a registration rights agreement.

We also received an exclusive option to purchase either the hepatitis B or hepatitis C program (the “Program Option”) during the first year of the arrangement. In April 2007, we exercised the Program Option for the hepatitis B program. We have remained primarily responsible for the development of the cancer and hepatitis C therapy programs in accordance with a development plan and related development budgets that we have agreed to with Holdings.

A variable interest entity, or VIE, is (i) an entity that has equity that is insufficient to permit the entity to finance its activities without additional subordinated financial support, or (ii) an entity that has equity investors that cannot make significant decisions about the entity’s operations or that do not absorb their proportionate share of the expected losses or do not receive the expected residual returns of the entity. A VIE is required to be consolidated by the party that is deemed to be the primary beneficiary, which is the party that has exposure to a majority of the potential variability in the VIE’s outcomes. Significant management judgment is required in the determination of an entity being considered a VIE.

[Table of Contents](#)

Prior to the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option on December 30, 2009, as described below, we have consolidated the financial position and results of operations of SDI. We have not consolidated Holdings because we believe our variable interest, the Purchase Option, is on the stock of SDI. We believe SDI is a VIE because we have the Purchase Option to acquire its outstanding voting stock at prices that were fixed upon entry into the arrangement, with the specific price based upon the date the option is exercised. The fixed nature of the Purchase Option price limits Symphony's returns, as the investor in SDI.

Parties are deemed to be de facto agents if they cannot sell, transfer, or encumber their interests without the prior approval of an enterprise. Symphony is considered to be a de facto agent of the Company pursuant to this provision, and because we and Symphony as a related party group absorb a majority of SDI's variability, we evaluated whether we are most closely associated with SDI. We concluded that we are most closely associated with SDI and should consolidate SDI because (1) we originally developed the technology that was assigned to SDI, (2) we continued to oversee and monitor the Development Programs, (3) our employees continued to perform substantially all of the development work, (4) we significantly influenced the design of the responsibilities and management structure of SDI, (5) SDI's operations are substantially similar to our activities, and (6) through the Purchase Option, we had the ability to participate in the benefits of a successful development effort.

Symphony was required to absorb the development risk for its equity investment in SDI. Symphony's equity investment in SDI was classified as noncontrolling interest in the consolidated balance sheet. The noncontrolling interest held by Symphony has been reduced by the \$5.6 million fair value of the warrants it received and \$2.6 million of fees we immediately paid to Symphony upon the transaction's closing because the total consideration provided by us to Symphony effectively reduces Symphony's at-risk equity investment in SDI. While we performed the research and development on behalf of SDI, our development risk was limited to the consideration we provided to Symphony (the warrants and fees). We exercised the Program Option in April 2007, which resulted in the recognition of a \$15.0 million liability to Symphony. The noncontrolling interest was further reduced for this obligation as it would have been paid to Symphony at the expiration of the SDI collaboration in 2011 if we did not exercise the Purchase Option, or would be included as part of the applicable purchase price upon exercise of the Purchase Option.

Net losses incurred by SDI and charged to the noncontrolling interest were \$4.2 million, \$5.7 million and \$8.7 million for the years ended December 31, 2009, 2008 and 2007, respectively. We ceased to charge net losses incurred by SDI against the noncontrolling interest upon our acquisition of SDI on December 30, 2009.

In December 2007, the FASB new guidance that required: (i) noncontrolling interests in subsidiaries be reported as a component of stockholders' equity in the consolidated balance sheet, (ii) noncontrolling interests continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance, (iii) that earnings or losses attributed to the noncontrolling interests be reported as part of consolidated earnings and not as a separate component of income or expense, and (iv) disclosure of the attribution of consolidated earnings to the controlling and noncontrolling interests on the face of the consolidated statement of operations. On January 1, 2009, we adopted these provisions. Had the previous requirements been applied, the net loss attributable to Dynavax would have increased by \$1.9 million and the loss per share attributable to Dynavax common stockholders would have increased by \$0.05 for the year ended December 31, 2009.

In November 2009, we entered into an agreement with Holdings to modify the provisions of and to exercise the purchase option. We completed the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option on December 30, 2009. In exchange for all of the outstanding equity of SDI, we issued to the Symphony Investors: (i) 13 million shares of common stock (Shares); (ii) 5 year warrants to purchase 2 million shares of common stock with an exercise price of \$1.94 per share (Warrants); (iii) a note in the principal amount of \$15 million, due December 31, 2012, payable in cash, our common stock or a combination thereof at our discretion, which obligation was previously payable solely in cash on April 18, 2011; and

[Table of Contents](#)

(iv) agreed to contingent cash payments from us equal to 50% of the first \$50 million from any upfront, pre-commercialization milestone or similar payments received by us from any agreement with any third party with respect to the development and/or commercialization of the cancer and hepatitis C therapies. The outstanding warrants to purchase 2 million shares of common stock held by the Symphony Investors were cancelled. The Shares and Warrants are subject to certain anti-dilution protection in the event that the Company issues other equity securities within six months from the closing date of the transaction. Due to this adjustment provision, the warrants do not meet the criteria set forth in ASC 815 to be considered indexed to the Company's own stock. Accordingly, the Company has recorded these warrants as a liability at fair value, which was estimated at the issuance date using the Black-Scholes Model. The warrants will be revalued every reporting period using the Black-Scholes Model and the change in the fair value of the warrants will be recognized in the other income (expense) line item in the Company's consolidated statement of operations.

We recorded the acquisition of all of the outstanding equity of SDI pursuant to the amended purchase option as a return of equity to the noncontrolling interest. The acquisition was accounted for as a capital transaction that did not affect our net loss. However, because the acquisition was accounted for as a capital transaction, the excess consideration transferred over the carrying value of the noncontrolling and is treated as a deemed dividend for purposes of reporting net loss and earnings per share, increasing net loss attributable to Dynavax and loss per share attributable to Dynavax common stockholders for the year ended December 31, 2009.

The following table outlines the estimated fair value of consideration transferred by us and the computation of the excess consideration transferred over the carrying value of the noncontrolling interest in SDI (in thousands):

<u>Description</u>	<u>Fair Value</u>
Fair value of consideration transferred:	
13,000,000 shares of Dynavax common stock	\$ 18,590
Warrant consideration	2,567
Note payable to Holdings	9,342
Contingent consideration liability for future cash payments to Holdings	3,040
Total consideration transferred	<u>33,539</u>
Less: Fair value of cancelled warrants	(802)
Less: Cancellation of program option liability	(15,000)
Add: Deficit of noncontrolling interest in SDI	1,934
Consideration paid in excess of carrying value of the noncontrolling interest in SDI	<u>\$ 19,671</u>

The fair value of the Dynavax common stock was based on the closing sales price of our common stock on the NASDAQ Capital Market on December 30, 2009, the date the transaction was completed.

The estimated fair values of the warrant consideration were calculated using the Black-Scholes valuation model, and the following weighted average assumptions:

	<u>Warrant Issued</u>	<u>Warrant Cancelled</u>
Number of Shares	2,000,000	2,000,000
Expected term	5.0 years	1.3 years
Expected volatility	150%	150%
Risk-free interest rate	2.61%	0.45%
Dividend yield	0%	0%

[Table of Contents](#)

We estimated the fair value of the non-interest bearing note payable to Holdings using a net present value model using a discount rate of 17%. Imputed interest will be recorded as interest expense over the term of the loan. The principal amount of \$15 million is due on December 31, 2012 and is payable in cash, our common stock or a combination thereof at our discretion. If we elect to pay the note solely in shares of our common stock, the number of shares issued will be determined by our stock price at the date of payment with a 15% premium for the portion repaid in shares.

We estimated the fair value of the contingent consideration liability using a discounted cash flow model. The discounted cash flow model was derived from management's assumptions regarding the timing, amounts, and probability of potential upfront and milestone payments for the development and/or commercialization of the hepatitis C program based on transactions for similar stage programs by other companies. These cash flows were discounted at an 18% rate.

Changes in the fair value of the acquisition-related contingent consideration liability subsequent to the December 30, 2009 acquisition date will be recognized in other income and expense on our consolidated statement of operations in the period of the change. Certain events including, but not limited to the timing and terms of a strategic partnership, and the commercial success of the programs could have a material impact on the fair value of the contingent liability, and as a result, our results of operations.

9. Financing Agreements

On August 17, 2009 the Company entered into an equity distribution agreement (the "Agreement") with Wedbush Morgan Securities, Inc. ("Wedbush") pursuant to which we may offer and sell shares of our common stock having an aggregate offering price of up to \$15 million from time to time through Wedbush as our sales agent or to Wedbush as a principal. During the quarter ended September 30, 2009, we sold 1,281,100 shares of common stock under the Agreement with Wedbush as our sales agent for aggregate net proceeds of \$2.3 million after deducting commissions paid to Wedbush and offering expenses. As of December 31, 2009, we could offer and sell from time to time through Wedbush up to an additional \$12.2 million in aggregate offering price of our common stock under the Agreement.

On August 26, 2008, Dynavax and Deerfield Management, a healthcare investment fund, and its affiliates ("Deerfield") entered into a Settlement Agreement and Mutual General Release (the "Settlement Agreement") under which the parties agreed to terminate the Loan Agreement dated July 18, 2007 (the "Loan Agreement") and also to provide for an amendment of the warrants previously issued to Deerfield pursuant to the Loan Agreement. The Settlement Agreement terminated any further obligations under the Loan Agreement.

Under the Loan Agreement, Deerfield agreed to advance to Dynavax loans that could be drawn down over a three-year period in the aggregate principal amount of up to \$30 million, subject to achievement of specific milestones in relation to the development of certain products in Dynavax's allergy franchise. Repayment of a portion of the loans to Deerfield was contingent upon the positive outcome of studies related to TOLAMBA™, Dynavax's product candidate for the treatment of ragweed allergy. If the TOLAMBA program was discontinued, Dynavax would have had no obligation to repay Deerfield up to \$9 million of the funds earmarked for that program; any other remaining outstanding principal was slated to be due in July 2010. Deerfield received an annual 5.9% cash commitment fee as well as milestone-driven payments in the form of warrants issued or issuable at an exercise premium of 20% over the volume weighted average price in the 15-day period prior to achievement of certain milestones.

Under the Loan Agreement, through August 26, 2008 (the date of termination), we had received \$7.5 million in cash from Deerfield, which was recorded as a long-term liability in our consolidated balance sheet. Additionally, we paid and recognized as interest expense \$1.7 million of commitment fees and we issued to Deerfield warrants to purchase up to 3,550,000 shares of our common stock. The warrants were valued on the

[Table of Contents](#)

issuance date using the Black-Scholes valuation model. The original warrants issued and their related assumptions under the Black-Scholes option valuation model are as follows (in thousands, except for Black-Scholes Assumptions):

Warrant Issuance Date	Shares Issued	Black-Scholes Assumptions			Exercise Price per Share	Assigned Value using Black-Scholes
		Risk-Free Interest Rate	Expected Life (in years)	Volatility		
July 18, 2007	1,250	4.9%	5.5	0.7	\$ 5.13	\$ 3,350
October 18, 2007	1,300	4.2%	5.5	0.7	\$ 5.75	3,700
December 27, 2007	1,000	3.6%	5.5	0.7	\$ 5.65	2,746
Total	<u>3,550</u>					<u>\$ 9,796</u>

At the date of each issuance, the warrant valuation was recorded as a deferred transaction cost in other assets and an increase in additional paid in capital. The deferred transaction cost was amortized on a straight-line basis and recognized as interest expense through the termination of the Loan Agreement. We amortized zero and \$9.0 million of deferred transaction cost in interest expense for the years ended December 31, 2009 and 2008, respectively.

Under the Settlement Agreement, \$5.0 million of funds received for the TOLAMBA program were forgiven, resulting in loan forgiveness in the statement of operations and a reduction in long-term liabilities as of and for the fiscal year ended December 31, 2008. All commitment fees paid to date, which totaled \$1.7 million, were applied to the loan, resulting in a reduction in interest expense and long-term liabilities as of and for the fiscal year ended December 31, 2008. We paid the remaining loan balance of \$0.8 million in cash to Deerfield. In addition, the warrants previously issued to Deerfield were amended as follows:

Warrant Issuance Date	Shares Issued (in thousands)	Expiration Date	Exercise Price per Share
July 18, 2007	1,250	2/26/2014	\$ 5.13
October 18, 2007	1,300	2/26/2014	\$ 1.68
December 27, 2007	300	2/26/2014	\$ 5.65
December 27, 2007 ⁽¹⁾	700	2/26/2014	\$ 1.68
Total	<u>3,550</u>		

- (1) Pursuant to the Settlement Agreement, the warrants to purchase an aggregate of 700,000 shares of our common stock issued on December 27, 2007 were amended on August 26, 2008 to provide for a termination date of February 26, 2014 at the existing exercise price of \$5.65 and were further amended on August 26, 2009 to provide for a new exercise price of \$1.68, which is equal to the VWAP over the 15 trading days prior to August 26, 2009.

The amendments to the warrants resulted in a re-measurement of the fair value based on the amended terms and current period assumptions and were accounted for as modifications to equity awards under the provisions of Topic 718, *Compensation-Stock Compensation*. We recorded interest expense and an increase of additional paid in capital of \$0.1 million and \$0.9 million for the years ended December 31, 2009 and 2008, respectively due to these modifications.

10. Commitments and Contingencies

We lease our facilities in Berkeley, California, or the Berkeley Lease, and Düsseldorf, Germany, or the Düsseldorf Lease, under operating leases that expire in September 2014 and March 2023, respectively. The

[Table of Contents](#)

Berkeley Lease can be terminated at no cost to us in February 2011 but otherwise extends automatically until September 2014. The Berkeley Lease provides for periods of escalating rent. The total cash payments over the life of the lease were divided by the total number of months in the lease period and the average rent is charged to expense each month during the lease period. In addition, our Berkeley Lease provided a tenant improvement allowance of \$0.4 million, which is considered a lease incentive and accordingly, has been included in accrued liabilities and other long-term liabilities in the consolidated balance sheets as of December 31, 2009 and December 31, 2008. The Berkeley Lease incentive is amortized as an offset to rent expense over the estimated initial lease term, through September 2014. Total net rent expense related to our operating leases for the years ended December 31, 2009, 2008 and 2007, was \$2.5 million, \$2.5 million and \$2.1 million, respectively. Deferred rent was \$0.9 million as of December 31, 2009.

We have entered into a sublease agreement under the Berkeley Lease for a certain portion of the leased space with remaining scheduled payments to us totaling \$40 thousand until August 2010. The sublease rental income is offset against rent expense.

Future minimum payments under the non-cancelable portion of our operating leases at December 31, 2009, excluding payments from the sublease agreement, are as follows (in thousands):

Year ending December 31,	
2010	\$ 2,629
2011	2,686
2012	2,745
2013	2,790
2014	2,039
Thereafter	5,105
Total	<u>\$ 17,994</u>

During the fourth quarter of 2004, we established a letter of credit with Silicon Valley Bank as security for our Berkeley Lease in the amount of \$0.4 million. The letter of credit remained outstanding as of December 31, 2009 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheets as of December 31, 2009 and December 31, 2008. Under the terms of the Berkeley Lease, if the total amount of our cash, cash equivalents and marketable securities falls below \$20.0 million for a period of more than 30 consecutive days during the lease term, the amount of the required security deposit will increase to \$1.1 million, until such time as our projected cash and cash equivalents will exceed \$20.0 million for the remainder of the lease term, or until our actual cash and cash equivalents remains above \$20.0 million for a period of 12 consecutive months.

We established a letter of credit with Deutsche Bank as security for our Düsseldorf Lease in the amount of \$0.3 million. The letter of credit remained outstanding as of December 31, 2009 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheet as of December 31, 2009.

In addition to the non-cancelable commitments included above, we have entered into contractual arrangements that obligate us to make payments to the contractual counterparties upon the occurrence of future events. In the normal course of operations, we have entered into license and other agreements and intend to continue to seek additional rights relating to compounds or technologies in connection with our discovery, manufacturing and development programs. Under the terms of the agreements, we may be required to pay future up-front fees, milestones and royalties on net sales of products originating from the licensed technologies. We consider these potential obligations to be contingent and have summarized all significant arrangements below.

We rely on research institutions, contract research organizations, clinical investigators and clinical material manufacturers. As of December 31, 2009, under the terms of our agreements, we are obligated to make future

payments as services are provided of approximately \$15.5 million through 2013. These agreements are terminable by us upon written notice. We are generally only liable for actual effort expended by the organizations at any point in time during the contract, subject to certain termination fees and penalties.

Under the terms of our exclusive license agreements with the Regents of the University of California, as amended, for certain technology and related patent rights and materials, we pay annual license or maintenance fees and will be required to pay milestones and royalties on net sales of products originating from the licensed technologies. Under the terms of our license agreements, we could be expected to pay approximately \$0.3 million in 2010 related to such fees and milestone payments to the Regents.

11. Collaborative Research, Development, and License Agreements

GlaxoSmithKline

In December 2008, we entered into a worldwide strategic alliance with GlaxoSmithKline (“GSK”) to discover, develop, and commercialize toll-like receptor (“TLR”) inhibitors for diseases such as lupus, psoriasis, and rheumatoid arthritis. We received an initial payment of \$10 million and agreed to conduct research and early clinical development in up to four programs and are eligible to receive future potential development and commercialization milestones. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK would carry out further development and commercialization of these products. We are eligible to receive tiered, up to double-digit royalties on sales and have retained an option to co-develop and co-promote one product. Revenue from the initial payment is deferred and is being recognized over the expected period of performance which is estimated to be seven years. For the years ended December 31, 2009 and 2008, we recognized revenue of \$1.4 million and \$60 thousand, respectively, related to the initial payment.

AstraZeneca

In September 2006, we entered into a three-year research collaboration and license agreement with AstraZeneca for the discovery and development of TLR9 agonist-based therapies for the treatment of asthma and chronic obstructive pulmonary disease. Such agreement was extended through July 2010. The collaboration is using our proprietary second-generation TLR9 agonist immunostimulatory sequences or ISS. AstraZeneca has the right to sublicense its rights upon with our prior consent. We have the option to co-promote in the United States products arising from the collaboration. We received an upfront payment of \$10 million, and are eligible to receive research funding, preclinical milestone payments, and potential future development milestones. Upon commercialization, we are also eligible to receive royalties based on product sales.

In September 2008, we received a \$4.5 million milestone payment from AstraZeneca for the nomination of a candidate drug. Revenue from milestones received during the development plan is deferred and recognized ratably over estimated performance period of the collaboration agreement. For the years ended December 31, 2009 and 2008, we recognized revenue of \$1.7 million and \$2.0 million, respectively, related to the milestone for the nomination of a candidate drug. Collaboration revenue resulting from the performance of research services amounted to \$3.4 million and \$3.2 million for the years ended December 31, 2009, and 2008, respectively. As of December 31, 2009, we recorded deferred revenue of \$11 million associated with the milestone for the nomination of a candidate drug, upfront fee and amounts billed in advance for research services per the contract terms.

National Institutes of Health and Other Funding

In September 2008, we were awarded a five-year \$17 million contract to develop our ISS technology using TLR9 agonists as vaccine adjuvants. The contract was awarded by the NIH’s National Institute of Allergy and

[Table of Contents](#)

Infectious Diseases (NIAID) to develop novel vaccine adjuvant candidates that signal through receptors of the innate immune system. The contract supports adjuvant development for anthrax as well as other disease models. NIAID is funding 100% of the total \$17 million cost of Dynavax's program under Contract No. HHSN272200800038C. For the years ended December 31, 2009 and 2008, we recognized revenue of approximately \$1.6 million and \$0.2 million, respectively.

In July 2008, we were awarded a two-year \$1.8 million grant from the NIH to develop a therapy for systemic lupus erythematosus (SLE), an autoimmune disease. Revenue associated with this grant is recognized as the related expenses are incurred. For the years ended December 31, 2009 and 2008, we recognized revenue of approximately \$0.9 million and \$0.4 million respectively.

In 2004, we were awarded \$0.5 million from the Alliance for Lupus Research to fund research and development of new treatment approaches for lupus. We recognized revenue associated with the lupus grant of approximately \$0.1 million for the year ended December 31, 2007 and 2006.

In 2003, we were awarded government grants totaling \$8.3 million to fund research and development. Certain of these grants have been extended through the second quarter of 2009. In August 2007, we were awarded a two-year \$3.3 million grant to continue development of a novel universal influenza vaccine for controlling seasonal and emerging pandemic flu strains. Revenue associated with these grants is recognized as the related expenses are incurred. For years ended December 31, 2009, 2008 and 2007, we recognized revenue of approximately \$3.5 million, \$3.0 million and \$3.0 million, respectively.

Merck & Co., Inc.

In October 2007, we entered into a global license and development collaboration agreement and a related manufacturing agreement with Merck to jointly develop HEPLISAV, a novel investigational hepatitis B vaccine. Under the terms of the agreement, Merck received worldwide exclusive rights to HEPLISAV, and agreed to fund future vaccine development and be responsible for commercialization. We received a non-refundable upfront payment of \$31.5 million. Revenue from the initial payment was deferred and recognized ratably over the estimated performance period of the collaboration agreement.

On December 18, 2008, Merck provided notice of its termination of the collaboration. As a result of the termination, all development, manufacturing and commercialization rights to HEPLISAV reverted to Dynavax. Merck is obligated to make certain mutually agreed-upon payments to Dynavax for the 180-day wind down period following Merck's written notice of termination. As a result of Merck's termination, we accelerated the applicable performance period over which we ratably recognize revenue from the upfront fee through the effective date of the termination, which is June 2009. For the years ended December 31, 2009 and 2008, we recognized revenue of \$28.5 million and \$5 million, respectively, related to the upfront fee. Collaboration revenue resulting from the performance of research and development services are recognized as related research and development costs are incurred. Cost reimbursement revenue under this collaboration agreement totaled \$0.3 million and \$20.2 million for the years ended December 31, 2009 and 2008, respectively. In the first quarter of 2010, Merck agreed to make a \$4.0 million payment to us in satisfaction of its obligations for the wind down period following Merck's written notice of termination.

12. Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss attributable to Dynavax by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss attributable to Dynavax by the weighted-average number of common shares outstanding during the period and dilutive potential common shares using the treasury-stock method. For purposes of this calculation, common stock subject to repurchase by us, preferred stock, options and warrants are considered to be dilutive potential common shares and are only included in the calculation of diluted net loss per share when their effect is dilutive.

	Years Ended December 31,		
	2009	2008	2007
Historical (in thousands, except per share amounts):			
Numerator:			
Net loss attributable to Dynavax	\$ (30,565)	\$ (20,829)	\$ (59,971)
Denominator for basic and diluted net loss per share attributable to Dynavax common stockholders :			
Weighted-average common shares outstanding	40,350	39,819	39,746
Basic and diluted net loss per share attributable to Dynavax common stockholders	\$ (0.76)	\$ (0.52)	\$ (1.51)
Historical outstanding securities not included in diluted net loss per share calculation (in thousands):			
Options to purchase common stock	5,561	5,173	4,282
Warrants	5,550	5,550	5,550
	<u>11,111</u>	<u>10,723</u>	<u>9,832</u>

13. Stockholders' Equity

Stock Plans

As of December 31, 2009, we had three stock-based compensation plans: the 1997 Equity Incentive Plan; the 2004 Stock Incentive Plan, which includes the 2004 Non-Employee Director Option Program; and the 2004 Employee Stock Purchase Plan.

In January 1997, we adopted the 1997 Equity Incentive Plan (the "1997 Plan"). The 1997 Plan provides for the granting of stock options to employees and non-employees of the Company. Options granted under the 1997 Plan may be either incentive stock options ("ISOs") or nonqualified stock options ("NSOs"). ISOs may be granted to employees, including directors who are also considered employees. NSOs may be granted to employees and non-employees. Options under the 1997 Plan may be granted for periods of up to ten years and at prices no less than 85% of the estimated fair value of the shares on the date of grant as determined by the Board of Directors, provided, however, that (i) the exercise price of an ISO shall not be less than 100% of the estimated fair value of the shares on the date of grant, and (ii) the exercise price of an ISO granted to a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant. The options are exercisable immediately and generally vest over a four-year period (generally 25% after one year and in monthly ratable increments thereafter) for stock options issued to employees, directors and scientific advisors, and quarterly vesting over a four-year period or immediate vesting for stock options issued all other non-employees. All unvested shares issued under the 1997 Plan are subject to repurchase rights by the Company under such conditions as agreed to by the Company and the optionee. The 1997 Plan expired in the first quarter of 2007. Upon expiration of the 1997 Plan, 273,188 shares previously available for grant expired. Any outstanding options under the 1997 Plan that are cancelled in future periods will automatically expire and will no longer be available for grant.

[Table of Contents](#)

In January 2004, the Board of Directors and stockholders adopted the 2004 Stock Incentive Plan (the “2004 Plan”) which became effective on February 11, 2004. Subsequently, we discontinued granting stock options under the 1997 Plan. The exercise price of all incentive stock options granted under the 2004 Plan is at least equal to 100% of the fair market value of the common stock on the date of grant. If, however, incentive stock options are granted to an employee who owns stock possessing more than 10% of the voting power of all classes of the Company’s stock or the stock of any parent or subsidiary of the Company, the exercise price of any incentive stock option granted must equal at least 110% of the fair market value on the grant date and the maximum term of these incentive stock options must not exceed five years. The maximum of an incentive stock option granted to any other participant must not exceed ten years. The 2004 Stock Incentive Plan authorizes the issuance of various forms of stock-based awards including stock options, restricted stock, restricted stock units, and other equity awards to employees, consultants and members of the board of directors.

As of December 31, 2009, 5,500,000 shares have been reserved and approved for issuance under the Plan, subject to adjustment for a stock split, any future stock dividend or other similar change in our common stock or capital structure.

Activity under our stock plans is set forth below:

	<u>Options and Awards Available for Grant</u>	<u>Number of Options Outstanding</u>	<u>Weighted-Average Price Per Share</u>
Balance at December 31, 2008	660,653	4,822,976	\$ 5.04
Options authorized	400,000	—	—
Options granted	(1,398,350)	1,398,350	\$ 0.96
Restricted stock awards and units (Awards) granted	—	—	—
Options exercised	—	—	—
1997 Plan options exercised	—	(2,666)	\$ 1.50
Options cancelled:			
Options forfeited (unvested)	438,194	(438,194)	\$ 3.50
Options expired (vested)	498,412	(498,412)	\$ 6.56
1997 Plan options expired (vested)	—	(5,999)	\$ 6.56
Awards cancelled (unvested)	60,000	—	\$ —
Balance at December 31, 2009	<u>658,909</u>	<u>5,276,055</u>	\$ 3.94

During the fiscal year ended December 31, 2007, we granted a restricted stock award (RSA) for 5,000 shares with a grant date fair value of \$4.54 and vested 100% on the third anniversary of this vest commencement date. During the fiscal year ended December 31, 2009, this option vested in full and we released the 5,000 shares. The total intrinsic value of the RSA released during the years ended December 31, 2009 was \$9 thousand dollars. The Company did not have any RSAs released during the years ended December 31, 2008 and 2007.

In October 2008, the Company granted restricted stock units (RSUs) for a total of 435,000 shares with a grant date fair value of \$1.31 per share. Such RSUs will vest 100% on the third anniversary of the vest commencement date. Prior to this grant in October 2008, the Company had no RSUs outstanding. There were 60,000 and 90,000 RSU shares forfeited during the fiscal year ended December 31, 2009 and 2008, respectively. There were 285,000 unvested RSU shares as of December 31, 2009. There were no vested RSU shares delivered during the years ended December 31, 2009 and 2008.

Employee Stock Purchase Plan

In January 2004, the Board of Directors and stockholders adopted the 2004 Employee Stock Purchase Plan (the “Purchase Plan”). The Purchase Plan provides for the purchase of common stock by eligible employees and

[Table of Contents](#)

became effective on February 11, 2004. The purchase price per share is the lesser of (i) 85% of the fair market value of the common stock on the commencement of the offer period (generally, the fifteenth day in February or August) or (ii) 85% of the fair market value of the common stock on the exercise date, which is the last day of a purchase period (generally, the fourteenth day in February or August).

As of December 31, 2009, 496,000 shares were reserved and approved for issuance under the Purchase Plan, subject to adjustment for a stock split, or any future stock dividend or other similar change in our common stock or capital structure. To date, employees acquired 330,107 shares of our common stock under the Purchase Plan. At December 31, 2009, 165,893 shares of our common stock remained available for future purchases.

Preferred Stock Rights

On November 4, 2008, the Board of Directors of the Company declared a dividend of one preferred share purchase right (a "Right") for each outstanding share of Common Stock, par value \$0.001 per share (the "Common Shares"), of the Company. The dividend was payable on November 17, 2008 (the "Record Date") to the stockholders of record on that date. Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value \$0.001 per share (the "Preferred Shares"), at a price of \$6.00 per one one-hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. Upon the acquisition of, or announcement of the intent to acquire, 20 percent or more of the Company's outstanding Common Shares by a person, entity or group of affiliated or associated persons ("Acquiring Person"), each holder of a Right, other than Rights held by the Acquiring Person, will have the right to purchase that number of Common Shares having a market value of two times the exercise price of the Right. If the Company is acquired in a merger or other business combination transaction or 50 percent or more its assets or earning power are sold to an Acquiring Person, each holder of a Right will thereafter have the right to purchase, at the then current exercise price of the Right, that number of shares of common stock of the acquiring company which at the time of the such transaction will have a market value of two times the exercise price of the Right. The Rights plan is intended to maximize the value of the Company in the event of an unsolicited attempt to take over the Company in a manner or on terms not approved by the Company's Board of Directors. The Rights will expire on November 17, 2018, unless the Rights are earlier redeemed or exchanged by the Company.

Employment Inducement Stock Award Plan

To induce qualified individuals to join Dynavax, the Company's Board of Directors has adopted a 2010 Employment Inducement Award Plan (the "Inducement Plan"). This Inducement Plan provides for the issuance of up to 1,500,000 shares of Dynavax Common Stock to new employees of Dynavax and became effective on January 8, 2010. Stockholder approval of the Inducement Plan is not required under Nasdaq Marketplace Rule 5635(c)(4).

Stock-Based Compensation

Under our stock-based compensation plans, option awards generally vest over a 4-year period contingent upon continuous service and expire 10 years from the date of grant (or earlier upon termination of continuous service). The fair value of each option is estimated on the date of grant using the Black-Scholes option valuation model and the following weighted-average assumptions:

	Employee Stock Options			Employee Stock Purchase Plan		
	2009	2008	2007	2009	2008	2007
Weighted-average fair value	\$0.55	\$2.29	\$3.53	\$0.88	\$0.93	\$1.96
Risk-free interest rate	1.7%	2.7%	4.7%	0.7%	2.4%	4.6%
Expected life (in years)	4.0	4.4	4.5	1.1	1.3	1.2
Volatility	1.6	0.8	0.8	1.6	0.8	0.7

[Table of Contents](#)

Expected volatility is based on historical volatility of our stock and comparable peer data. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level employees, who hold a majority of the options outstanding, and non-executive level employees were grouped and considered separately for valuation purposes. In 2009, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

The estimated fair value of restricted stock units awards is calculated based on the market price of Dynavax's common stock on the date of grant, reduced by the present value of dividends expected to be paid on Dynavax's common stock prior to vesting of the restricted stock unit. The Company's estimate assumes no dividends will be paid prior to the vesting of the restricted stock unit.

We recognized the following amounts of stock-based compensation expense (in thousands):

	Years Ended December 31,		
	2009	2008	2007
Employees and directors stock-based compensation expense	\$ 3,014	\$ 3,183	\$ 3,462
Non-employees stock-based compensation expense	21	22	69
Total	\$ 3,035	\$ 3,205	\$ 3,531

	Years Ended December 31,		
	2009	2008	2007
Research and development	\$ 1,139	\$ 1,403	\$ 1,134
General and administrative	1,896	1,802	2,397
Total	\$ 3,035	\$ 3,205	\$ 3,531

The fair value of the options is amortized to expense on a straight-line basis over the vesting periods of the options. Compensation expense recognized for the year ended December 31, 2009 was based on awards ultimately expected to vest and reflects estimated forfeitures at an annual rate of 15% for both the executive level and non-executive level employee groups. As of December 31, 2009, the total unrecognized compensation cost related to non-vested options granted amounted to \$3.3 million, which is expected to be recognized over the options' remaining weighted-average vesting period of 1.3 years. The Company did not issue any restricted stock units or awards during the year ended December 31, 2009. The weighted average purchase price of restricted stock units issued was zero during the year ended December 31, 2009.

Total options exercised during the years ended December 31, 2009, 2008 and 2007 were 2,666, 1,833 and 5,666, respectively. The total intrinsic value of the options exercised during the years ended December 31, 2009, 2008 and 2007 was approximately \$1 thousand, \$6 thousand and \$6 thousand, respectively. Total restricted stock awards released during the year ended December 31, 2009 was 5,000. No income tax benefits have been realized by us in 2009, 2008 and 2007, as we reported a net loss in each year.

The following table summarizes outstanding options that are net of expected forfeitures (vested and expected to vest) and options exercisable under our stock option plans as of December 31, 2009:

	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (In thousands)
Outstanding options (vested and expected to vest)	4,858,937	\$ 4.05	6.4	\$ 718
Options exercisable	2,848,434	\$ 4.78	5.6	\$ 1

[Table of Contents](#)

14. Employee Benefit Plan

We maintained a 401(k) Plan (the “401(k) Plan”), which qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating employees may defer a portion of their pretax earnings. We may, at our discretion, contribute for the benefit of eligible employees. To date, we have not contributed to the 401(k) Plan.

15. Income Taxes

Loss including noncontrolling interest in SDI before provision for income taxes on a worldwide basis consists of the following (in thousands):

	Years Ended December 31,		
	2009	2008	2007
U.S.	\$(11,369)	\$(19,265)	\$(58,521)
Non U.S.	475	(1,564)	(1,450)
Total	\$(10,894)	\$(20,829)	\$(59,971)

The U.S. loss including noncontrolling interest in SDI before provision for income taxes for the year ended December 31, 2009 does not include \$19.7 million of consideration paid in excess of carrying value of the noncontrolling interest in SDI. No income tax expense was recorded for the years ended December 31, 2009, 2008 and 2007 due to net operating losses in all jurisdictions. The difference between the income tax benefit and the amount computed by applying the federal statutory income tax rate to loss before income taxes is as follows (in thousands):

	December 31,		
	2009	2008	2007
Income tax benefit at federal statutory rate	\$(3,722)	\$(7,082)	\$(20,390)
State tax	(1,727)	(1,601)	(2,600)
Tax credits	(1,473)	(672)	(2,594)
Deferred compensation charges	439	503	495
Change in valuation allowance	6,873	13,792	20,680
Change in foreign tax rates	427	—	1,966
Change in NOL	(1,439)	(4,810)	2,356
Limitation of NOLs	628	—	—
Other	(6)	(130)	87
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Deferred tax assets and liabilities as of December 31, 2009 and 2008 consist of the following (in thousands):

	December 31,	
	2009	2008
Deferred tax assets:		
Net operating loss carry forwards	\$ 68,641	\$ 64,967
Research tax credit carry forwards	13,005	10,517
Accruals and reserves	4,653	3,483
Capitalized research costs	14,208	8,108
Deferred Revenue	7,373	14,788
Other	2,914	2,431
	<u>110,794</u>	<u>104,294</u>
Less valuation allowance	(110,305)	(103,431)
Total deferred tax assets	<u>489</u>	<u>863</u>
Deferred tax liabilities:		
Acquired intangible assets.	(489)	(863)
Total deferred tax liabilities	<u>(489)</u>	<u>(863)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

[Table of Contents](#)

ASC 740 requires that the tax benefit of net operating losses, temporary differences and credit carryforwards be recorded as an asset to the extent that management assesses that realization is “more likely than not.” Realization of the future tax benefits is dependent on the Company’s ability to generate sufficient taxable income within the carryforward period. Because of the Company’s recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance. The valuation allowance increased by \$6.9 million, \$13.8 million and \$20.7 million during the years ended December 31, 2009, 2008 and 2007, respectively. The amount of the valuation allowance for deferred tax assets associated with excess tax deduction from stock based compensation arrangement that is allocated to contributed capital if the future tax benefits are subsequently recognized is \$0.4 million.

A provision has not been made at December 31, 2009, for U.S. or additional foreign withholding taxes on undistributed earnings of the foreign subsidiary because it is the present intention of management to reinvest the undistributed earnings indefinitely in foreign operations.

As of December 31, 2009, we had federal net operating loss carryforwards of approximately \$165.8 million, which will expire in the years 2016 through 2029 and federal research and development tax credits of approximately \$7.7 million, which expire in the years 2018 through 2029.

As of December 31, 2009, we had net operating loss carryforwards for California state income tax purposes of approximately \$122.8 million, which expire in the years 2012 through 2029, and California state research and development tax credits of approximately \$8.1 million which do not expire.

As of December 31, 2009, we had net operating loss carryforwards for foreign income tax purposes of approximately \$17.7 million, which do not expire.

The Tax Reform Act of 1986 limits the annual use of net operating loss and tax credit carryforwards in certain situations where changes occur in stock ownership of a company. In the event the Company has a change in ownership, as defined, the annual utilization of such carryforwards could be limited. Any additional equity issuances could trigger a limitation on our ability to use our net operating losses and tax credits in the future under Sections 382 and 383 of the Internal Revenue Code as enacted by the Tax Reform Act of 1986. As of December 31, 2009, based on the acquisition of the outstanding equity of SDI, there is an annual limitation on the historical net operating losses of SDI and we have adjusted net operating losses accordingly.

16. Selected Quarterly Financial Data (Unaudited; in thousands, except per share amounts)

	Year Ended December 31, 2009				Year Ended December 31, 2008			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenues	\$ 19,344	\$ 15,884	\$ 2,901	\$ 2,189	\$ 6,314	\$ 9,978	\$ 8,857	\$ 11,945
Net income (loss) attributable to Dynavax	\$ 5,101	\$ 4,110	\$ (9,506)	\$ (30,270)	\$ (12,429)	\$ (6,079)	\$ (5,420)	\$ 3,099
Basic net income (loss) per share attributable to Dynavax common stockholders	\$ 0.13	\$ 0.10	\$ (0.24)	\$ (0.73)	\$ (0.31)	\$ (0.15)	\$ (0.14)	\$ 0.08
Weighted-average shares used in computing basic net income (loss) per share	39,889	39,923	40,153	41,420	39,785	39,806	39,831	39,854
Diluted net income (loss) per share attributable to Dynavax common stockholders	\$ 0.13	\$ 0.10	\$ (0.24)	\$ (0.73)	\$ (0.31)	\$ (0.15)	\$ (0.14)	\$ 0.08
Weighted-average shares used in computing diluted net income (loss) per share	39,889	40,064	40,153	41,420	39,785	39,806	39,831	39,854

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES**(a) Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Principal Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can only provide reasonable, not absolute, assurance of achieving the desired control objectives.

Based on their evaluation as of the end of the period covered by this report, our management, with the participation of our Chief Executive Officer and our Principal Financial Officer, concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms.

(b) Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management, with the participation of our Chief Executive Officer and Principal Financial Officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2009. The Company’s independent registered public accountants, Ernst & Young LLP, audited the consolidated financial statements included in this Annual Report on Form 10-K and have issued an attestation report on the Company’s internal control over financial reporting. The report on the audit of internal control over financial reporting appears below.

Report of Independent Registered Public Accounting Firm

To The Board of Directors and Stockholders
Dynavax Technologies Corporation

We have audited Dynavax Technologies Corporation's internal control over financial reporting as of December 31, 2009, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Dynavax Technologies Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Dynavax Technologies Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009 based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2009 consolidated financial statements of Dynavax Technologies Corporation and our report dated March 15, 2010 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Francisco, California
March 15, 2010

(c) Changes in Internal Control Over Financial Reporting

There has been no change in our internal controls over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

[Table of Contents](#)

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this Item is incorporated by reference to the sections entitled “Proposal One—Elections of Directors,” “Executive Compensation,” and “Section 16(a) Beneficial Ownership Reporting Compliance” in our Definitive Proxy Statement in connection with the 2010 Annual Meeting of Stockholders (the “Proxy Statement”), which will be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2009.

We have adopted the Dynavax Code of Business Conduct and Ethics, a code of ethics that applies to our employees, including our Chief Executive Officer, Principal Financial Officer and to our non-employee directors. We will provide a written copy of the Dynavax Code of Business Conduct and Ethics to anyone without charge, upon request written to Dynavax, Attention: Jennifer Lew, 2929 Seventh Street, Suite 100, Berkeley, CA 94710-2753, (510) 848-5100.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this Item is incorporated by reference to the section entitled “Executive Compensation” in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management is incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement. Information regarding our stockholder approved and non-approved equity compensation plans are incorporated by reference to the section entitled “Equity Compensation Plans” in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this Item is incorporated by reference to the sections entitled “Certain Relationships and Related Transactions” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this Item is incorporated by reference to the section entitled “Audit Fees” in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report:

1. Financial Statements

Report of Independent Registered Public Accounting Firm
Consolidated Balance Sheets
Consolidated Statements of Operations
Consolidated Statements of Stockholders’ Equity
Consolidated Statements of Cash Flows
Notes to Consolidated Financial Statements

[Table of Contents](#)

2. Financial Statement Schedules

None, as all required disclosures have been made in the Consolidated Financial Statements and notes thereto or are not applicable.

(b) Exhibits

<u>Exhibit Number</u>	<u>Document</u>
3.1 ⁽¹⁾	Sixth Amended and Restated Certificate of Incorporation
3.2 ⁽¹⁾	Amended and Restated Bylaws
3.3 ⁽²⁾	Form of Certificate of Designation of Series A Junior Participating Preferred Stock
3.4 ⁽¹²⁾	Certificate of Amendment of Amended and Restated Certificate of Incorporation
4.1 ⁽³⁾	Registration Rights Agreement
4.2 ⁽³⁾	Form of Warrant
4.3 ⁽⁴⁾	Form of Specimen Common Stock Certificate
4.4 ⁽²⁾	Rights Agreement dated as of November 5, 2008, by and between the Company and Mellon Investor Services LLC
4.5 ⁽²⁾	Form of Rights Certificate
4.6 ⁽⁶⁾	Form of Restricted Stock Unit Award Agreement.
4.7	Form of Amended Warrant
10.32 ^{(5)†}	License Agreement, dated June 26, 2007, between Coley Pharmaceuticals Group, Inc. and Dynavax Technologies Corporation
10.37 ⁽⁶⁾	Amended Management Continuity Agreement, dated as of October 3, 2008, between Dynavax Technologies Corporation and Dino Dina
10.38 ⁽⁶⁾	Form of Amended Management Continuity Agreement between Dynavax Technologies Corporation and each of its executive officers
10.39 ^{(6)†}	Research and Development Collaboration and License Agreement, dated December 15, 2008, between Glaxo Group Limited and Dynavax Technologies Corporation
10.40 ⁽⁷⁾	Amendment No. 2 to the Agreement dated September 1, 2006 by and between the Company and AstraZeneca AB (“AZ”) (the “Agreement”) dated February 3, 2009 (the “Amendment”)
10.41 ⁽⁸⁾	Amended Management Continuity Agreement, dated as of April 22, 2009, between Dynavax Technologies Corporation and Zbigniew Janowicz
10.42 ⁽⁸⁾	Amendment No. 4, dated June 1, 2009, to the Exclusive License Agreement, dated October 2, 1998, between Dynavax Technologies Corporation and the Regents of the University of California.
10.43 ⁽⁹⁾	Equity Distribution Agreement, dated August 17, 2009, between Dynavax Technologies Corporation and Wedbush Morgan Securities, Inc.
10.44 ⁽¹⁰⁾	Amendment to Equity Distribution Agreement, dated September 10, 2009, between Dynavax Technologies Corporation and Wedbush Morgan Securities, Inc.
10.45 ⁽¹¹⁾	Management Service Contract, dated as of January 1, 2005, between Rhein Biotech GmbH and Zbigniew Janowicz
10.46 ⁽¹¹⁾	Amendment, dated February 5, 2008, to Management Service Contract between Dynavax Technologies Corporation and Zbigniew Janowicz

Table of Contents

<u>Exhibit Number</u>	<u>Document</u>
10.47	Amended Purchase Option Agreement, dated November 9, 2009, between Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc.
10.48	Warrant Purchase Agreement, dated as of November 9, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
10.49	Amended Registration Rights Agreement, dated as of November 9, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
10.50	Standstill and Corporate Governance Agreement, dated as of December 30, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
21.1	List of Subsidiaries
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(1)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Amendment No. 4 to Registration Statement on Form S-1/A, as filed with the SEC on February 5, 2004 (Commission File No. 000-50577).
(2)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on November 6, 2008.
(3)	Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-145836) on Form S-3 filed on August 31, 2007.
(4)	Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-109965) on Form S-1 filed on January 16, 2004.
(5)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, as filed with the SEC.
(6)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Annual Report on Form 10-K for the year ended December 31, 2008, as filed with the SEC.
(7)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-K for the quarter ended March 31, 2009, as filed with the SEC.
(8)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, as filed with the SEC.
(9)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on August 17, 2009.
(10)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, as filed with the SEC.
(11)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on February 25, 2010.
(12)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on January 4, 2010.
†	We have been granted confidential treatment with respect to certain portions of this agreement. Omitted portions have been filed separately with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto due authorized, in the City of Berkeley, State of California.

DYNAVAX TECHNOLOGIES CORPORATION

By: /S/ DINO DINA, M.D.
Dino Dina, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 16, 2010

By: /S/ JENNIFER LEW
Jennifer Lew
Vice President, Finance
(Principal Accounting and Financial Officer)

Date: March 16, 2010

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/S/ DINO DINA, M.D.</u> Dino Dina, M.D.	President and Chief Executive Officer <i>(Principal Executive Officer)</i>	March 16, 2010
<u>/S/ JENNIFER LEW</u> Jennifer Lew	Vice President, Finance <i>(Principal Accounting and Financial Officer)</i>	March 16, 2010
<u>/S/ ARNOLD ORONSKY, PH.D.</u> Arnold Oronsky, Ph.D.	Chairman of the Board	March 16, 2010
<u>/S/ NANCY L. BUC</u> Nancy L. Buc	Director	March 16, 2010
<u>/S/ DENNIS CARSON, M.D.</u> Dennis Carson, M.D.	Director	March 16, 2010
<u>/S/ FRANCIS R. CANO, PH.D.</u> Francis R. Cano, Ph.D.	Director	March 16, 2010
<u>/S/ DENISE M. GILBERT, PH.D.</u> Denise M. Gilbert, Ph.D.	Director	March 16, 2010
<u>/S/ MARK KESSEL</u> Mark Kessel	Director	March 16, 2010
<u>/S/ DAVID LAWRENCE, M.D.</u> David M. Lawrence, M.D.	Director	March 16, 2010
<u>/S/ PEGGY V. PHILLIPS</u> Peggy V. Phillips	Director	March 16, 2010
<u>/S/ STANLEY A. PLOTKIN, M.D.</u> Stanley A. Plotkin, M.D.	Director	March 16, 2010

EXHIBIT INDEX

Exhibit Number	Document
3.1 ⁽¹⁾	Sixth Amended and Restated Certificate of Incorporation
3.2 ⁽¹⁾	Amended and Restated Bylaws
3.3 ⁽²⁾	Form of Certificate of Designation of Series A Junior Participating Preferred Stock
3.4 ⁽¹²⁾	Certificate of Amendment of Amended and Restated Certificate of Incorporation
4.1 ⁽³⁾	Registration Rights Agreement
4.2 ⁽³⁾	Form of Warrant
4.3 ⁽⁴⁾	Form of Specimen Common Stock Certificate
4.4 ⁽²⁾	Rights Agreement dated as of November 5, 2008, by and between the Company and Mellon Investor Services LLC
4.5 ⁽²⁾	Form of Rights Certificate
4.6 ⁽⁶⁾	Form of Restricted Stock Unit Award Agreement.
4.7	Form of Amended Warrant
10.32 ^{(5)†}	License Agreement, dated June 26, 2007, between Coley Pharmaceuticals Group, Inc. and Dynavax Technologies Corporation
10.37 ⁽⁶⁾	Amended Management Continuity Agreement, dated as of October 3, 2008, between Dynavax Technologies Corporation and Dino Dina
10.38 ⁽⁶⁾	Form of Amended Management Continuity Agreement between Dynavax Technologies Corporation and each of its executive officers
10.39 ^{(6)†}	Research and Development Collaboration and License Agreement, dated December 15, 2008, between Glaxo Group Limited and Dynavax Technologies Corporation
10.40 ⁽⁷⁾	Amendment No. 2 to the Agreement dated September 1, 2006 by and between the Company and AstraZeneca AB (“AZ”) (the “Agreement”) dated February 3, 2009 (the “Amendment”)
10.41 ⁽⁸⁾	Amended Management Continuity Agreement, dated as of April 22, 2009, between Dynavax Technologies Corporation and Zbigniew Janowicz
10.42 ⁽⁸⁾	Amendment No. 4, dated June 1, 2009, to the Exclusive License Agreement, dated October 2, 1998, between Dynavax Technologies Corporation and the Regents of the University of California.
10.43 ⁽⁹⁾	Equity Distribution Agreement, dated August 17, 2009, between Dynavax Technologies Corporation and Wedbush Morgan Securities, Inc.
10.44 ⁽¹⁰⁾	Amendment to Equity Distribution Agreement, dated September 10, 2009, between Dynavax Technologies Corporation and Wedbush Morgan Securities, Inc.
10.45 ⁽¹¹⁾	Management Service Contract, dated as of January 1, 2005, between Rhein Biotech GmbH and Zbigniew Janowicz
10.46 ⁽¹¹⁾	Amendment, dated February 5, 2008, to Management Service Contract between Dynavax Technologies Corporation and Zbigniew Janowicz
10.47	Amended Purchase Option Agreement, dated November 9, 2009, between Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc.

Table of Contents

<u>Exhibit Number</u>	<u>Document</u>
10.48	Warrant Purchase Agreement, dated as of November 9, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
10.49	Amended Registration Rights Agreement, dated as of November 9, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
10.50	Standstill and Corporate Governance Agreement, dated as of December 30, 2009, between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC.
21.1	List of Subsidiaries
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(1)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Amendment No. 4 to Registration Statement on Form S-1/A, as filed with the SEC on February 5, 2004 (Commission File No. 000-50577).
(2)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on November 6, 2008.
(3)	Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-145836) on Form S-3 filed on August 31, 2007.
(4)	Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-109965) on Form S-1 filed on January 16, 2004.
(5)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, as filed with the SEC.
(6)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Annual Report on Form 10-K for the year ended December 31, 2008, as filed with the SEC.
(7)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-K for the quarter ended March 31, 2009, as filed with the SEC.
(8)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, as filed with the SEC.
(9)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on August 17, 2009.
(10)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, as filed with the SEC.
(11)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on February 25, 2010.
(12)	Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on January 4, 2010.
†	We have been granted confidential treatment with respect to certain portions of this agreement. Omitted portions have been filed separately with the Securities and Exchange Commission.

FORM OF WARRANT

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN THE SUBJECT OF REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN (OR WILL BE, WITH RESPECT TO THE SECURITIES ISSUABLE UPON EXERCISE HEREOF) ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.

THE WARRANT EVIDENCED BY THIS CERTIFICATE IS SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN THE WARRANT PURCHASE AGREEMENT, DATED AS OF NOVEMBER 9, 2009, COPIES OF WHICH ARE ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF THIS WARRANT WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH.

DYNAVAX TECHNOLOGIES CORPORATION

WARRANT TO PURCHASE COMMON STOCK

No. CW-__

[____, __], 2009

Void After [____, __], 2014

THIS CERTIFIES THAT, for value received, **SYMPHONY DYNAMO HOLDINGS LLC**, a Delaware limited liability company, with its principal office at 7361 Calhoun Place, Suite 325, Rockville, MD 20855, or its assigns (the "Holder"), is entitled to subscribe for and purchase at the Exercise Price (defined below) from **DYNAVAX TECHNOLOGIES CORPORATION**, a Delaware corporation, with its principal office at 2929 Seventh Street, Suite 100, Berkeley, CA 94710-2753 (the "Company") Two Million (2,000,000) shares of Common Stock, par value \$0.001 per share, of the Company (the "Common Stock"), subject to adjustment as provided herein.

This Warrant is being issued pursuant to the terms of the Warrant Purchase Agreement, dated November 9, 2009, between the Company and the Holder (the "Warrant Purchase Agreement"). Capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the Warrant Purchase Agreement.

1. DEFINITIONS. Capitalized terms used but not defined herein are used as defined in the Warrant Purchase Agreement. As used herein, the following terms shall have the following respective meanings:

(a) “Common Stock” shall mean shares of Dynavax Technologies Corporation Common Stock, par value \$0.001.

(b) “Exercise Period” shall mean the period commencing on [____], 20[___] and ending on [____], 20[___], except as otherwise provided below.

(c) “Exercise Price” shall mean \$1.94 per share, subject to adjustment pursuant to Section 4 below.

(d) “Exercise Shares” shall mean the outstanding and unexercised shares of Common Stock issuable upon exercise of this Warrant from time to time, subject to adjustment pursuant to the terms herein, including but not limited to adjustment pursuant to Sections 4, 6 and 7 below.

(e) “Purchase Option” shall have the meaning set forth in the Warrant Purchase Agreement.

2. EXERCISE OF WARRANT.

2.1 Generally. The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period, by delivery of the following to the Company at its address set forth above (or at such other address as it may designate pursuant to Section 12 hereof):

(a) an executed Notice of Exercise in the form attached hereto;

(b) payment of the Exercise Price of the shares thereby subscribed for by means of any of the following: (i) wire transfer; (ii) cashier’s check drawn on a U.S. bank made out to the Company; or (iii) a cashless exercise pursuant to Section 2.2; and

(c) this Warrant.

Upon the exercise of the rights represented by this Warrant, a certificate or certificates for the Exercise Shares so purchased, registered in the name of the Holder or persons affiliated with the Holder, if the Holder so designates, shall be issued and delivered to the Holder as soon as practicable, but in no event later than thirty (30) days, after the date of exercise pursuant to this Section 2.1. The Company shall, upon request of the Holder, if available and if allowed under applicable securities laws, use commercially reasonable efforts to deliver Exercise Shares electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions, or if requested by Holder, certificates evidencing the Exercise Shares. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the Exercise Shares, deliver to Holder a new Warrant evidencing the rights of Holder to purchase the unexercised Exercise Shares remaining under this Warrant, which new Warrant shall in all other respects be identical to this Warrant.

The person in whose name any Exercise Shares are to be issued upon exercise of this Warrant shall be deemed to have become the holder of record of such shares on the date on which the Notice of Exercise, this Warrant and payment of the Exercise Price and all taxes required to be paid by the Holder, if any, were made,

irrespective of the date of delivery of any certificate or certificates evidencing the Exercise Shares, except that, if the date of such surrender and payment is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of the Exercise Shares at the close of business on the next business day on which the stock transfer books are open.

2.2 Cashless Exercise. The Holder may exercise the Warrant pursuant to Section 2.1(b)(iii) and receive shares equal to the value (as determined below) of this Warrant (or the portion thereof being exercised) by delivery and notice of cashless exercise in accordance with Section 2.1, in which event the Company shall issue to the Holder a number of shares of Common Stock computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where X = the number of shares of Common Stock to be issued to the Holder

Y = the number of shares of Common Stock purchasable under the Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being exercised (at the date of such calculation)

A = the fair market value of one share of Common Stock (at the date of such calculation)

B = Exercise Price (as adjusted to the date of such calculation)

For purposes of the above calculation, the fair market value of one share of Common Stock shall equal the average closing price of the Common Stock, as reported by the NASDAQ National Market, or other national exchange that is then the primary exchange on which the Common Stock is listed, for the thirty (30) trading days immediately preceding the second trading day prior to the date on which the Holder delivers to the Company the Warrant and an executed Notice of Exercise in the form attached hereto. If the Common Stock is not quoted on the NASDAQ National Market, or listed on another national exchange, the fair market value of one share of Common Stock shall be determined by the Company's Board of Directors in good faith.

2.3 Legend.

(a) All certificates evidencing the shares to be issued to the Holder may bear the following legends:

“THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. SUCH SHARES MAY NOT BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.”

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN THE WARRANT PURCHASE AGREEMENT, DATED AS OF NOVEMBER 9, 2009 COPIES OF WHICH ARE ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF THESE SHARES WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH.”

(b) If the certificates representing shares include either or both of the legends set forth in Section 2.3(a) hereof, the Company shall, upon a request from a Holder, or subsequent transferee of a Holder, as soon as practicable but in no event more than thirty (30) days after receiving such request, remove or cause to be removed (i) if the shares cease to be restricted securities, the securities law portion of the legend and/or (ii) in the event of a sale of the shares subject to issuance following the transfer of the shares in compliance with the transfer restrictions, the transfer restriction portion of the legend, from certificates representing the shares delivered by a Holder (or a subsequent transferee).

2.4 Charges, Taxes and Expenses. Issuance of the Exercise Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of any electronic or paper certificate, all of which taxes and expenses shall be paid by the Company, and such certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event Exercise Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder; and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

3. COVENANTS OF THE COMPANY.

3.1 No Impairment. Except and to the extent as waived or consented to by the Holder, the Company shall at all times in good faith assist in the carrying out of all the provisions of this Warrant and in the taking of all such action as may be necessary or appropriate in order to protect the exercise rights of the Holder against impairment.

3.2 Notices of Record Date. If at any time:

(a) the Company shall take a record of the holders of Common Stock for the purpose of entitling them to receive a dividend or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right (other than with respect to any equity or equity equivalent security issued pursuant to a rights plan adopted by the Company's Board of Directors);

(b) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company; or

(c) there shall be a voluntary or involuntary dissolution, liquidation or

winding up of the Company;

then, in any one or more of such cases, the Company shall give to Holder at least ten (10) days' prior written notice of the record date for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, recapitalization, consolidation, merger, sale, transfer, disposition, dissolution, liquidation or winding up of the Company. Any notice provided hereunder shall specify the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and the then current estimated date for the closing of the transaction contemplated by any proposed reorganization, reclassification, recapitalization, consolidation, merger, sale, transfer, disposition, dissolution, liquidation or winding up of the Company.

4. ADJUSTMENT OF EXERCISE PRICE.

4.1 Changes in Common Stock. In the event of changes in the outstanding Common Stock by reason of stock dividends, split-ups, recapitalizations, reclassifications, combinations or exchanges of shares, separations, reorganizations, liquidations or the like, the number and class of shares available under this Warrant in the aggregate and the Exercise Price shall be correspondingly adjusted to give the Holder of this Warrant, on exercise for the same aggregate Exercise Price, the total number, class and kind of shares as the Holder would have owned had the Warrant been exercised prior to the event and had the Holder continued to hold such shares until after the event requiring adjustment. The form of this Warrant need not be changed because of any adjustment in the number of Exercise Shares subject to this Warrant pursuant to this Section 4.1.

5. FRACTIONAL SHARES. No fractional shares shall be issued upon the exercise of this Warrant, including as a consequence of any adjustment pursuant hereto. If the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the fair market value of an Exercise Share (determined as provided in Section 2.2 hereof) by such fraction.

6. CORPORATE TRANSACTIONS. In the event that the Company enters into a merger or acquisition in which the surviving or "resulting" parent entity ("Surviving Entity") is other than the Company, then the Holder shall surrender the Warrant for a new warrant exercisable in return for shares or common stock of the Surviving Entity (as defined in the Warrant Purchase Agreement) (the "Replacement Warrant"); provided that:

6.1 Mixed Consideration. In accordance with Section 7.08 of the Warrant Purchase Agreement, if the consideration for a merger or acquisition consists of a combination of cash and stock of the Surviving Entity, then the Replacement Warrant issued to Holder shall be solely for common stock of the Surviving Entity at an exchange ratio reflecting the total consideration paid by the Surviving Entity at the time of such change in control as if the total consideration (including cash) for each share of the Common Stock was instead paid only in common stock of the Surviving Entity at the time of such change of control (as illustrated on Exhibit B to the Warrant Purchase Agreement), and the holders of the Replacement Warrants shall have the registration rights for stock issuable upon exercise of the Replacement Warrants as provided under the Registration Rights Agreement; or

6.2 Cash Consideration. In accordance with Section 7.08 of the

Warrant Purchase Agreement, if prior to the end of the Term (as defined in the Warrant Purchase Agreement), a merger or acquisition shall occur and the consideration for such merger or acquisition shall be paid entirely in cash, then the Holder of this Warrant shall then have the option to irrevocably elect within fifteen (15) Business Days of the public announcement of the merger or acquisition by written notice of election to the Company, either (a) to retain the Warrant and the right to exercise the Warrant then outstanding for Exercise Shares in accordance with the terms of this Warrant, which exercise shall occur no later than immediately prior to the closing of such merger or acquisition; or (b) to surrender the Warrant to the Company in consideration of a cash payment for each share of the Common Stock subject to purchase under this Warrant in an amount equal to forty percent (40%) of the per share cash consideration to be received by a holder of one share of the Company's Common Stock to be tendered in the merger or acquisition, provided that the aggregate total cash payments to all holders of outstanding Warrants shall not exceed five million dollars (\$5,000,000) (the "Warrant Surrender Price"). The Warrant Surrender Price shall be paid upon the surrender of the Warrants promptly following the closing of the all cash merger or acquisition. Any failure by the Holder to deliver a written notice of election to the Company pursuant to this Section 6.2 shall be deemed an election of Section 6.2(a) hereunder.

Following a merger or acquisition involving consideration of cash and stock in which the Surviving Entity is other than the Company, reference to Common Stock shall instead be deemed a reference to the common stock of the Surviving Entity. For purposes of Section 6.1, "common stock of the Surviving Entity" shall include stock of such corporation of any class which is not preferred as to dividends or assets over any other class of stock of such corporation and which is not subject to redemption and shall also include any evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for any such stock, either immediately or upon the arrival of a specified date or the occurrence of a specified event and any warrants or other rights to subscribe for or purchase any such stock. The foregoing provisions of this Section 6 shall similarly apply to successive reorganizations, reclassifications, mergers, consolidations or disposition of assets.

7. NOTICE OF ADJUSTMENT. Whenever the number of Exercise Shares or number or kind of securities or other property purchasable upon the exercise of this Warrant or the Exercise Price is adjusted, as herein provided, the Company shall give notice thereof to the Holder at the address of such Holder appearing on the books of the Company, which notice shall state the number of Exercise Shares (and other securities or property) purchasable upon the exercise of this Warrant and the Exercise Price of such Exercise Shares (and other securities or property) after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

8. ADDITIONAL ADJUSTMENTS. This Warrant is subject to the provisions of Section 2.05 of the Warrant Purchase Agreement.

9. ORDERLY SALE. This Warrant and the Exercise Shares are subject to the provisions of Sections 6.04 and 6.05 of the Warrant Purchase Agreement.

10. NO STOCKHOLDER RIGHTS. This Warrant does not entitle the Holder to any voting rights or other rights as a stockholder of the Company prior to the exercise hereof. Upon the exercise of this Warrant in accordance with Section 2, the Exercise Shares so purchased shall be and be deemed to be issued to such Holder as the record owner of such

shares as of the close of business on the date of such exercise.

11. TRANSFER OF WARRANT. Subject to applicable laws, the restriction on transfer set forth on the first page of this Warrant and the provisions of Article VI of the Warrant Purchase Agreement, this Warrant and all rights hereunder are transferable by the Holder, in person or by duly authorized attorney, upon delivery of this Warrant, the Assignment Form attached hereto and funds sufficient to pay any transfer taxes payable upon the making of such transfer, to any transferee designated by Holder. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. A Warrant, if properly assigned, may be exercised by a new holder for the purchase of Exercise Shares without having a new Warrant issued. The Company may require, as a condition of allowing a transfer (i) that the Holder or transferee of this Warrant, as the case may be, furnish to the Company a written opinion of counsel (which opinion shall be in form, substance and scope customary for opinions of counsel in comparable transactions) to the effect that such transfer may be made without registration under the Securities Act and under applicable state securities or blue sky laws, (ii) that the holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company, (iii) that the transferee be an “accredited investor” as defined in Rule 501(a) promulgated under the Securities Act and (iv) the transferee agree in writing to be bound by the terms of this Warrant and the Warrant Purchase Agreement as if an original signatory thereto.

12. LOST, STOLEN, MUTILATED OR DESTROYED WARRANT. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as the Warrant so lost, stolen, mutilated or destroyed.

13. NOTICES, ETC. Any notice, request, demand, waiver, consent, approval or other communication that is required or permitted to be given hereto shall be in writing and shall be deemed given only if delivered to the applicable party personally or sent to the party by facsimile transmission (promptly followed by a hard-copy delivered in accordance with this Section 12), by next business day delivery by a nationally recognized courier service, or by registered or certified mail (return receipt requested), with postage and registration or certification fees thereon prepaid, addressed to the party at its address set forth in the Warrant Purchase Agreement, or at such other address as the Company or Holder may designate by ten (10) days advance written notice to the other party hereto.

14. ACCEPTANCE. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

15. GOVERNING LAW. This Warrant and all rights, obligations and liabilities hereunder shall be governed by the laws of the State of New York.

16. SATURDAYS, SUNDAYS, HOLIDAYS, ETC. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday, Sunday or a legal holiday, then such action may be taken or such right may be

exercised on the next succeeding day not a Saturday, Sunday or legal holiday.

17. AMENDMENT. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

18. SUCCESSORS AND ASSIGNS. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors of the Company and the successors and permitted assigns of Holder.

19. REGISTRATION RIGHTS. The holder of this Warrant and of the Exercise Shares shall be entitled to the registration rights and other applicable rights with respect to the Exercise Shares as and to the extent set forth in the Warrant Purchase Agreement and the Registration Rights Agreement.

20. HEADINGS. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its duly authorized officer as of [DATE OF ISSUE].

DYNAVAX TECHNOLOGIES CORPORATION

By: _____

Title: _____

NOTICE OF EXERCISE

TO: DYNVAX TECHNOLOGIES CORPORATION

ATTN: CHIEF FINANCIAL OFFICER

(1) The undersigned hereby elects to purchase _____ shares of Common Stock of DYNVAX TECHNOLOGIES CORPORATION (the “Company”) pursuant to the terms of the attached Warrant dated [DATE OF ISSUE], as follows:

_____ shares pursuant to the terms of the cashless exercise provisions set forth in Section 2.2, and shall tender payment of all applicable transfer taxes, if any.

(2) Please issue said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

(Name)

(Address)

(iii) (3) The undersigned represents that:

(A) It is an “accredited investor” within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended (the “Securities Act”).

(B) It has relied completely on the advice of, or has consulted with or has had the opportunity to consult with, its own personal tax, investment, legal or other advisors and has not relied on the Company or any of its affiliates for advice.

(C) It has been advised and understands that the offer and sale of the attached Warrant and the shares of Common Stock issued upon exercise of the Warrant (the “Warrant Shares”) have not been registered under the Securities Act. It is able to bear the economic risk of such investment for an indefinite period and to afford a complete loss thereof.

(D) It is acquiring the Warrant Shares solely for its own account for investment purposes as a principal and not with a view to the resale of all or any part thereof. It agrees that the Warrant Shares may not be resold (1) without registration thereof under the Securities Act (unless an exemption from such registration is available), or (2) in violation of any law. It acknowledges that the Company is not required to register the

Warrant Shares under the Securities Act. It is not and will not be an underwriter within the meaning of Section 2(11) of the Securities Act with respect to the Warrant Shares.

(E) No person or entity acting on behalf of, or under the authority of, the undersigned is or will be entitled to any broker's, finder's or similar fees or commission payable by the Company or any of its affiliates.

(Date)

(Signature)

(Print Name)

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____

(Please Print)

Dated: _____, 20__

Holder's
Signature: _____

Holder's
Address: _____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

**AMENDED AND RESTATED
PURCHASE OPTION AGREEMENT**

by and among

DYNAVAX TECHNOLOGIES CORPORATION,

SYMPHONY DYNAMO HOLDINGS LLC

and

SYMPHONY DYNAMO, INC.

Dated as of November 9, 2009

Amended and Restated Purchase Option Agreement

TABLE OF CONTENTS

	<u>Page</u>
Section 1.	2
Section 2.	2
Section 2A.	5
Section 2B.	5
Section 3.	6
Section 4.	9
Section 5.	12
Section 6.	18
Section 7.	18
Section 8.	19
Section 9.	19
Section 10.	20
Section 11.	22
Section 12.	22
Section 13.	22
Section 14.	23
Section 15.	24
Section 16.	24
Section 17.	24
Section 18.	24
Section 19.	24
Section 20.	24
Section 21.	25
Section 22.	25
Annex A	

Exhibit 1	Form of Purchase Option Exercise Notice
Exhibit 2	Form of Dynavax Promissory Note
Exhibit 3	Form of Standstill and Corporate Governance Letter Agreement
Exhibit 4	Form of Warrant Purchase Agreement

**AMENDED AND RESTATED
PURCHASE OPTION AGREEMENT**

This AMENDED AND RESTATED PURCHASE OPTION AGREEMENT (this "**Agreement**") is entered into as of November 9, 2009 (the "**Closing Date**") by and among DYNAVAX TECHNOLOGIES CORPORATION, a Delaware corporation ("**Dynavax**"), SYMPHONY DYNAMO HOLDINGS LLC, a Delaware limited liability company ("**Holdings**"), and SYMPHONY DYNAMO, INC., a Delaware corporation ("**Symphony Dynamo**"). Capitalized terms used herein and not defined herein shall have the meanings assigned to such terms in Annex A attached hereto.

PRELIMINARY STATEMENT

WHEREAS, Dynavax, Holdings and Symphony Dynamo, entered into that certain Purchase Option Agreement dated as of April 18, 2006 (the "**Original Agreement**"), pursuant to which Holdings granted Dynavax an option to purchase all of the Common Stock of the Symphony Dynamo and any other Equity Securities issued by Symphony Dynamo (together, the "**Symphony Dynamo Equity Securities**") owned, or thereafter acquired, by Holdings on the terms described on the terms described therein;

WHEREAS, institutional investors have invested \$50,000,000 in Holdings (the "**Financing**") in exchange for membership interests in Holdings and for a warrant to purchase up to a total of 2,000,000 shares of Dynavax Common Stock (the "**Warrant**"), which were issued to Holdings, and Holdings contributed the net proceeds of the Financing to Symphony Dynamo;

WHEREAS, the parties to the Original Agreement desire to amend and restate the Original Agreement and accept the rights and covenants hereof in lieu of their rights and covenants under the Original Agreement;

WHEREAS, contemporaneously with the execution of this Agreement, Dynavax has exercised the Purchase Option (as defined below) by delivering the Purchase Option Exercise Notice (as defined below) to Holdings;

WHEREAS, on the Purchase Option Closing Date, Dynavax will issue to Holdings, subject to the satisfaction of certain conditions (including, without limitation, the Stockholder Approval (as defined below) and cancellation of the Warrant), (i) the Dynavax Closing Shares (as defined below), (ii) warrants (the "**Dynavax Closing Warrants**") to purchase 2,000,000 shares of Dynavax Common Stock, to be initially issued to Holdings (the "**Dynavax Closing Warrant Shares**") and the Dynavax Promissory Note (as defined below); and

WHEREAS, Symphony Dynamo and Holdings have determined that it is in each of its best interest to perform and comply with certain agreements and covenants relating to each of its ongoing operations contained in this Agreement.

Amended and Restated Purchase Option Agreement

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto (the "**Parties**") agree as follows:

Section 1. Grant of Purchase Option.

(a) Holdings hereby grants to Dynavax an exclusive option (the "**Purchase Option**") to purchase all, but not less than all, of the outstanding Symphony Dynamo Equity Securities owned or hereafter acquired by Holdings, in accordance with the terms of this Agreement.

(b) Symphony Dynamo hereby covenants and agrees that all Symphony Dynamo Equity Securities issued by Symphony Dynamo at any time prior to the expiration of the Term (including to Holdings on, prior to, or after the date hereof or to any other Person at any time whatsoever, in all cases prior to the expiration of the Term) shall be subject to a purchase option on the same terms as the Purchase Option (except as provided by the immediately following sentence) and all of the other terms and conditions of this Agreement without any additional action on the part of Dynavax or Holdings. Further, to the extent Symphony Dynamo shall issue any Symphony Dynamo Equity Securities (including any issuance in respect of a transfer of Symphony Dynamo Equity Securities by any holder thereof, including Holdings) after the date hereof to any Person (including Holdings) (any issuance of such Symphony Dynamo Equity Securities being subject to the prior written consent of Dynavax as set forth in Sections 5(c) and 7(b) hereof, as applicable), Symphony Dynamo hereby covenants and agrees that it shall cause such Symphony Dynamo Equity Securities to be subject to the Purchase Option without the payment of, or any obligation to pay, any additional consideration in respect of such Symphony Dynamo Equity Securities by Dynavax, Symphony Dynamo or any Symphony Dynamo Subsidiary to the Person(s) acquiring such subsequently issued Symphony Dynamo Equity Securities, the Parties acknowledging and agreeing that the sole consideration payable by Dynavax pursuant to this Agreement for all of the outstanding Symphony Dynamo Equity Securities now or hereinafter owned by any Person shall be the Purchase Price.

(c) Dynavax's right to exercise the Purchase Option granted hereby is subject to the following conditions:

- (i) The Purchase Option may only be exercised for the purchase of all, and not less than all, of Holdings' Symphony Dynamo Equity Securities;
- (ii) The Purchase Option may only be exercised a single time; and
- (iii) The Purchase Option may be exercised only on the date hereof.

Section 2. Exercise of Purchase Option.

(a) Exercise Notice. Dynavax may exercise the Purchase Option only by delivery of a notice in the form attached hereto as Exhibit 1 (the "**Purchase Option Exercise Notice**") on the date hereof. The Purchase Option Exercise Notice shall be delivered to Holdings and Symphony Dynamo and shall be irrevocable once delivered. The date on which the Purchase Option Exercise Notice is first delivered to Holdings and Symphony Dynamo is referred to as the "**Purchase Option Exercise Date**." The Purchase Option Exercise Notice shall contain an estimated date for the settlement of the Purchase Option (the "Purchase Option Closing"), which date shall be estimated in accordance with this Section 2(a). Such notice and election shall be irrevocable once given and made. If, during the period following delivery of the Purchase Option Exercise Notice, the amount of cash and cash equivalents held by Symphony Dynamo is an amount less than or equal to \$1,000,000 then Symphony Dynamo shall cease payment of any amounts owed to Dynavax in respect of its activities pursuant to the Amended and Restated Research and Development Agreement, but shall continue to pay amounts owed to all other Persons. The date of the Purchase Option Closing (the "**Purchase Option Closing Date**") shall be the date that is the latest of:

- (i) five (5) Business Days following the date that Dynavax receives the necessary Government Approvals related to its HSR Filings; provided, however, that Dynavax and Holdings shall make all necessary HSR Filings within five (5) Business Days following the Purchase Option Exercise Date and shall diligently pursue the related regulatory process; and

(ii) five (5) Business Days following the date that Dynavax receives the necessary stockholder approvals for purposes of NASDAQ Marketplace Rule 5635 in connection with the issuance of Dynavax Closing Shares (as defined below) and the Dynavax Closing Warrant Shares (the “**Stockholder Approval**”);

(b) Purchase Price

(i) Subject to the post-closing adjustment pursuant to Section 2B and the following sentence, as consideration for the sale to Dynavax by Holdings of its Symphony Dynamo Equity Securities (and for the Symphony Dynamo Equity Securities of any other Person), on the Purchase Option Closing Date, Dynavax shall issue to Holdings an aggregate of (A) 13,000,000 shares of Dynavax Common Stock (the “**Dynavax Closing Shares**”) and (B) the Dynavax Closing Warrants. If, after the date hereof and prior to the Purchase Option Closing Date, (x) the number of outstanding shares of Dynavax Common Stock has been increased, decreased, changed into or exchanged for a different number or kind of shares or securities as a result of a reorganization, recapitalization, stock dividend, stock split, reverse stock split or other similar change in capitalization, an appropriate and proportionate adjustment shall be made to the number of Dynavax Closing Shares to be issued at the Purchase Option Closing Date, or (y) there has been a Specified Company Issuance (as defined below), the consideration to be paid by Dynavax at the Purchase Option Closing Date may be adjusted in accordance with Section 2A.

(ii) As further consideration for the sale to Dynavax by Holdings of its Symphony Dynamo Equity Securities (and for the Symphony Dynamo Equity Securities of any other Person), if Dynavax enters into any agreement or arrangement with any third party with respect to the development and/or commercialization of a Cancer Product or a Hepatitis C Product (each a “**Symphony Dynamo Product Agreement**”), Dynavax shall be obligated to pay to Holdings, within 10 Business Days of Dynavax’s receipt thereof, an amount equal to 50% of the first \$50,000,000 of any upfront, pre-commercialization milestone or similar payments received by Dynavax under any such Symphony Dynamo Product Agreements.

For the avoidance of doubt, payments from a third party to Dynavax for reimbursement for research and development, equity or debt issued as part of the collaboration at fair market value, commercial milestones or royalties shall not be considered payments received by Dynavax under Symphony Dynamo Product Agreements for purposes of this Section 2(b).

(iii) As further consideration for the sale to Dynavax by Holdings of its Symphony Dynamo Equity Securities (and for the Symphony Dynamo Equity Securities of any other Person), on the Purchase Option Closing Date, Dynavax shall deliver a duly executed promissory note in the principal amount of \$15,000,000, substantially in the form attached hereto as Exhibit 2 (the “**Dynavax Promissory Note**”).

(iv) The Dynavax Closing Shares, the Dynavax Closing Warrants, the payments to be made to Holdings set forth in Section 2(b)(ii) and the Dynavax Promissory Note shall constitute the “**Purchase Price**”.

(c) [Reserved.]

(d) Surrender of Symphony Dynamo Equity Securities. Subject to the terms and conditions of this Agreement, on or prior to the Purchase Option Closing Date, Holdings shall surrender to Dynavax its certificates representing its Symphony Dynamo Equity Securities, and shall convey good title to such Symphony Dynamo Equity Securities, free from any Encumbrances and from any and all restrictions that any sale, assignment or other transfer of such Symphony Dynamo Equity Securities be consented to or approved by any Person. On or prior to the Purchase Option Closing Date, Holdings shall remove all directors serving on the Symphony Dynamo Board, other than the Dynavax Director (as defined in Section 4(b)(iv) hereof) from the Symphony Dynamo Board as of the Purchase Option Closing Date.

(e) Valuation of Dynavax Stock. The value per share of the Dynavax Closing Shares as of the date hereof has been determined by the Parties to equal \$1.57.

(f) Standstill and Corporate Governance Letter Agreement. Subject to the terms and conditions of this Agreement, on the Purchase Option Closing Date, Holdings and Dynavax shall enter into a standstill and corporate governance letter agreement substantially in the form attached hereto as Exhibit 3 (the “**Standstill and Corporate Governance Letter Agreement**”).

(g) Warrant Purchase Agreement. Subject to the terms and conditions of this Agreement, on the Purchase Option Closing Date, Holdings and Dynavax shall enter into a warrant purchase agreement substantially in the form attached hereto as Exhibit 4 (the “**Warrant Purchase Agreement**”).

(h) Share Certificates. Any stock certificate(s) issued by Dynavax for Dynavax Common Stock pursuant to this Section 2 may contain a legend (the “**33 Act Legend**”) substantially as follows:

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. SUCH SHARES MAY NOT BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.

This legend shall be removed by Dynavax, subject to, and in accordance with, the terms of Section 3(b)(iii) hereof.

(i) Government Approvals. On or prior to the Purchase Option Closing Date, each of Dynavax, Symphony Dynamo and Holdings shall have taken all necessary action to cause all required Governmental Approvals with respect to such Party (including, if deemed necessary and without limitation, the preparing and filing of the pre-merger notification and report forms required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (“**HSR Filings**”)) in connection with the transactions contemplated by this Agreement to be in effect; provided, however, that with respect to Government Approvals required by a Governmental Authority other than the United States federal government and its various branches and agencies, the Parties’ obligations under this Section 2(i) shall be limited to causing to be in effect only those Government Approvals, the failure of which to be in effect would, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on any of the Parties. Each of Symphony Dynamo and Dynavax shall pay its own costs associated with taking such action. Symphony Dynamo shall pay any costs of Holdings associated with obtaining Government Approvals required in connection with the exercise of the Purchase Option. All other costs and expenses of Holdings shall be paid by Holdings pursuant to Section 8 hereof, including any costs arising from any error in Holdings’ initial valuation of its investment in Symphony Dynamo.

(j) Transfer of Title. Transfer of title to Dynavax of all of the Symphony Dynamo Equity Securities shall be deemed to occur automatically on the Purchase Option Closing Date, subject to the issuance by Dynavax on such date of the portion of the Purchase Price comprised of the Dynavax Closing Shares and the Dynavax Closing Warrants or Alternate Closing Securities (as defined below), as applicable, and the Dynavax Promissory Note, and its performance of its other obligations herein required to be performed, and under the Registration Rights Agreement, as applicable, on or prior to the Purchase Option Closing Date to the reasonable satisfaction of Holdings, and thereafter Symphony Dynamo shall treat Dynavax as the sole holder of all Symphony Dynamo Equity Securities, notwithstanding the failure of Holdings to tender certificates representing such shares to Dynavax in accordance with Section 2(d) hereof.

After the Purchase Option Closing Date, Holdings shall have no rights in connection with such Symphony Dynamo Equity Securities other than the right to receive the Purchase Price; provided, however, that nothing in this Section 2(j) shall affect the survivability of any indemnification provision in this Agreement upon termination of this Agreement.

(k) Consents and Authorizations. On or prior to the Purchase Option Closing Date, Dynavax shall have obtained all consents and authorizations necessary from stockholders and/or its board of directors for the consummation of the exercise and closing of the Purchase Option, as may be required under the organizational documents of Dynavax, any prior stockholders or board resolution, any stock exchange or similar rules or any applicable law (including, without limitation, the Stockholder Approval); provided, however, that with respect to consents or authorizations required by a Governmental Authority other than the United States federal government and its various branches and agencies, the Parties' obligations under this Section 2(k) shall be limited to obtaining only those consents and authorizations, the failure of which to be obtained would, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on any of the Parties.

Section 2A. Purchase Option Closing Date Adjustment.

(a) If at any time or from time to time from and after the date hereof through the Purchase Option Closing Date, Dynavax has issued Additional Dynavax Securities (any such issuance of Additional Dynavax Securities, a "**Specified Dynavax Issuance**"), Holdings may elect (in accordance with the procedures set forth in Section 2B) to be paid the portion of the Purchase Price comprised of the Dynavax Closing Shares and the Dynavax Closing Warrants in the form of the Alternate Securities specified in the Specified Issuance Notice (each as defined below) (such Alternate Securities paid to Holdings at the Purchase Option Closing Date, the "**Alternate Closing Securities**").

Section 2B. Post-Closing Adjustment.

(a) If at any time and from time to time from and after the Purchase Option Closing Date through the date occurring six (6) months after the Purchase Option Closing Date (or if such date is not a Business Day, the first Business Day thereafter) (such date, the "**Final Adjustment Date**"), there is a Specified Dynavax Issuance, as soon as practicable, but in no event later than five (5) Business Days after the delivery to Dynavax of a Holdings Election Notice (as defined below) (such date, the "**Adjusted Securities Payment Date**"), (i) Dynavax shall issue to Holdings such Alternate Securities in the form specified in the Specified Issuance Notice, and (ii) Holdings shall deliver to Dynavax such Dynavax Closing Shares, Dynavax Closing Warrants, Alternate Closing Securities, or other securities of Dynavax issued pursuant to this Agreement, or other consideration transferred to Holdings, other than the Dynavax Promissory Note and the amounts payable pursuant to Section 2(b)(b)(ii), as applicable, such that on the Adjusted Securities Payment Date Holdings shall own Alternate Securities, together with all other securities of Dynavax issued, or other consideration transferred (including the Dynavax Promissory Note and the amounts payable pursuant to Section 2(b)(b)(ii)), to Holdings pursuant to this Agreement, to which Holdings is entitled in consideration of the transfer to Dynavax of the Symphony Collaboration Equity Securities. The foregoing described transactions between Dynavax and Holdings shall be settled on a net basis. For the avoidance of doubt, the parties hereby acknowledge and agree that Holdings may exercise its rights under this Section 2B(a) following each Specified Dynavax Issuance that occurs after the date of this Agreement and on or prior to the Final Adjustment Date.

(b) Not later than five (5) Business Days prior to the consummation of a Specified Dynavax Issuance, Dynavax shall, in accordance with Section 13, deliver to Holdings a notice (a "**Specified Issuance Notice**") setting forth in reasonable detail: (i) a description of the form and terms of the Additional Dynavax Securities to be issued pursuant to the Specified Dynavax Issuance (such Additional Dynavax Securities, the "**Alternate Securities**"); (ii) the price at which the Alternate Securities will be issued pursuant to the Specified Dynavax Issuance; (iii) the estimated date of issuance of such Alternate Securities; and (iv) the amount and form of Alternate Securities that would be issued to an investor participating in the Specified Dynavax Issuance upon payment to Dynavax of an amount equal to

\$20,446,000. If Holdings elects to exercise its rights under Section 2B(a) with respect to a Specified Dynavax Issuance, Holdings, in accordance with Section 13, shall deliver to Dynavax a notice of such election not later than one (1) Business Day prior to the consummation of such Specified Dynavax Issuance (the "Holdings Election Notice"). The failure of Holdings to notify Dynavax pursuant to this Section 2B(b) shall be deemed to constitute the waiver by Holdings of its rights under Section 2B(a) with respect to such Specified Dynavax Issuance.

(c) "**Additional Dynavax Securities**" shall mean all shares of Dynavax Common Stock, Options, Convertible Securities, notes, bonds, or any other securities issued by Dynavax, or cash or other consideration paid or delivered by or on behalf of Dynavax, other than the following (collectively, "**Exempted Securities**"):

(i) rights, options or warrants to subscribe for, purchase or otherwise acquire Dynavax Common Stock ("**Options**"), or shares of restricted stock or stock appreciation rights, issued to employees or directors of, or consultants or advisors to, Dynavax or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the board of directors of Dynavax;

(ii)(1) shares of Dynavax Common Stock actually issued upon the exercise of Options or (2) shares of Dynavax Common Stock actually issued upon the conversion or exchange of any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Dynavax Common Stock, but excluding Options ("**Convertible Securities**"), in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(iii) shares of Dynavax Common Stock, Options or Convertible Securities issued by reason of a dividend on the outstanding Dynavax Common Stock, stock split of the outstanding Dynavax Common Stock, split-up of the outstanding Dynavax Common Stock or other distribution on shares of Dynavax Common Stock; or

(iv) shares of Dynavax Common Stock sold and issued pursuant to that certain Equity Distribution Agreement dated August 17, 2009, by and between Dynavax and Wedbush Morgan Securities, Inc. (the "**ATM Securities**").

Section 3. Dynavax Representations, Warranties and Covenants. As of the date hereof, Dynavax hereby represents and warrants, and, except to the extent that any of the following representations and warranties is limited to the date of this Agreement or otherwise limited, on the Purchase Option Closing Date and each Adjusted Securities Payment Date, shall be deemed to have represented and warranted, to Holdings and Symphony Dynamo that:

(i) Organization. Dynavax is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware.

(ii) Authority and Validity. Dynavax has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement, the Dynavax Promissory Note, the Warrant Purchase Agreement, and the Standstill and Corporate Governance Letter Agreement (the "**Ancillary Agreements**"), and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance by Dynavax of this Agreement and the Ancillary Agreements and the consummation of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary action required on the part of Dynavax, and no other proceedings on the part of Dynavax, other than the Stockholder Approval, which will be obtained prior to the Purchase Option Closing Date, are necessary to authorize this Agreement or the Ancillary Agreements or for Dynavax to perform its obligations hereunder or thereunder. This Agreement and the Ancillary Agreements constitute the lawful, valid and legally binding obligations of Dynavax, enforceable in accordance with their terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and general equitable principles regardless of whether such enforceability is considered in a proceeding at law or in equity.

(iii) No Violation or Conflict. The execution, delivery and performance of this Agreement and the Ancillary Agreements and the transactions contemplated hereby and thereby do not (A) violate, conflict with or result in the breach of any provision of the Organizational Documents of Dynavax, (B) conflict with or violate any law or Governmental Order applicable to Dynavax or any of its assets, properties or businesses, or (C) conflict with, result in any breach of, constitute a default (or event that with the giving of notice or lapse of time, or both, would become a default) under, require any consent under, or give to others any rights of termination, amendment, acceleration, suspension, revocation or cancellation of, or result in the creation of any Encumbrance on any of the assets or properties of Dynavax, pursuant to, any note, bond, mortgage or indenture, contract, agreement, lease, sublease, license, permit, franchise or other instrument or arrangement to which Dynavax is a party except, in the case of clauses (B) and (C), to the extent that such conflicts, breaches, defaults or other matters would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(iv) Governmental Consents and Approvals. Other than any HSR Filings which, if such HSR Filings are required pursuant to Section 2(a)(ii) hereof, will be obtained on or prior to the Purchase Option Closing Date, the execution, delivery and performance of this Agreement and the Ancillary Agreements by Dynavax do not, and the consummation of the transactions contemplated hereby and thereby do not and will not, require any Governmental Approval which has not already been obtained, effected or provided, except with respect to which the failure to so obtain, effect or provide would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(v) Litigation. There are no actions by or against Dynavax pending before any Governmental Authority or, to the knowledge of Dynavax, threatened to be brought by or before any Governmental Authority, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax. There are no pending or, to the knowledge of Dynavax, threatened actions, to which Dynavax is a party (or is threatened to be named as a party) to set aside, restrain, enjoin or prevent the execution, delivery or performance of this Agreement, the Ancillary Agreements or the Operative Documents or the consummation of the transactions contemplated hereby or thereby by any party hereto or thereto. Dynavax is not subject to any Governmental Order (nor, to the knowledge of Dynavax, is there any such Governmental Order threatened to be imposed by any Governmental Authority) that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(b) Dynavax hereby covenants and agrees with Holdings as follows:

(i) Immediately prior to the Purchase Option Closing Date, Dynavax shall have sufficient authorized but unissued, freely transferable and nonassessable shares of Dynavax Common Stock or Alternate Closing Securities, as applicable, available to satisfy its obligation to deliver the Dynavax Closing Shares or Alternate Closing Securities, as applicable, the Dynavax Closing Warrant Shares and the shares of Dynavax Common Stock issuable pursuant to the Dynavax Promissory Note (the "**Dynavax Promissory Note Shares**"). Immediately prior to each Adjusted Securities Payment Date, Dynavax shall have sufficient authorized but unissued, freely transferable and nonassessable Alternate Securities available to satisfy its obligation to deliver such Alternate Securities as required pursuant to Section 2B(a). Dynavax shall deliver to Holdings on or prior to the Purchase Option Closing Date a legal opinion of Cooley Godward Kronish LLP (or such other counsel as Dynavax and Holdings shall mutually agree), which opinion shall be, in form and substance, reasonably acceptable to Holdings. If Alternate Securities are to be issued pursuant to Section 2B(a), Dynavax shall deliver to Holdings on or before each Adjusted Securities Payment date a legal opinion of Cooley Godward Kronish LLP (or such other counsel as Dynavax and Holdings shall mutually agree), which opinion shall be, in form and substance, reasonably acceptable to Holdings.

(ii) Dynavax, on the Purchase Option Closing Date, shall convey good and marketable title to the Dynavax Closing Shares or Alternate Closing Securities, as applicable, free from any Encumbrances and any and all other restrictions that any issuance, sale, assignment or other transfer of Dynavax Closing Shares or Alternate Closing Securities, as applicable, be consented to or approved by any Person. Dynavax, on each Adjusted Securities Payment Date, shall convey good and marketable title to the Alternate Securities issued pursuant to Section 2B(a), free from any Encumbrances and any and all other restrictions requiring that any issuance, sale, assignment or other transfer of such Alternate Securities be consented to or approved by any Person.

(iii) If the share certificates representing the Dynavax Closing Shares or Alternate Closing Securities, as applicable, and any Alternate Securities issued pursuant to Section 2B(a), include the 33 Act Legend (as set forth in Section 2(f) hereof), Dynavax shall, within two (2) Business Days of receiving a request from Holdings or any “*Investor*” (as defined in the Registration Rights Agreement), remove or cause to be removed the 33 Act Legend from such share certificates as Holdings or such Investor shall designate, so long as (x) the Dynavax Closing Shares or Alternate Closing Securities or such Alternate Securities, as applicable, represented by such share certificates has been transferred to a third party in compliance with the registration requirements of the Securities Act or an available exemption therefrom, and (y) Dynavax receives a certification from Holdings, such Investor or a securities broker designated by Holdings or such Investor to the effect that the sale of such Dynavax Closing Shares or Alternate Closing Securities or such Alternate Securities, as applicable, was made under a Registration Statement and accompanied by the delivery of a current prospectus.

(iv) Upon the termination of this Agreement pursuant to Section 9 hereof, or as soon thereafter as is practical, Dynavax shall (A) in accordance with Sections 2.7 and 2.8 of the Novated and Restated Technology License Agreement, deliver to Symphony Dynamo all regulatory submissions, clinical master files, development plans, consultant inputs, manufacturing reports and, to the extent requested by Symphony, other materials, documents, files and other information relating to the Programs and necessary to enable Symphony Dynamo to continue the development of the Programs (or, where necessary, copies thereof), and (B) in accordance with and pursuant to Section 2.12 of the Novated and Restated Technology License Agreement, negotiate in good faith, and on commercially reasonable terms and conditions, a supply agreement relating to materials, including compounds and Products, required by Symphony Dynamo or its partners or transferees for the continued development (including clinical development), manufacture and commercialization of Products.

(v) [Reserved].

(vi) Prior to each Adjusted Securities Payment Date, Dynavax shall take all such actions (at Dynavax’s sole cost and expense) as are necessary to permit Dynavax to issue the Alternate Securities to Holdings in accordance with Section 2B(a).

(vii) Dynavax shall take all such actions (at Dynavax’s sole cost and expense) as are necessary or advisable to cause (A) the issuance of any Alternate Securities by Dynavax to Holdings or (B) the transfer of any securities of Dynavax by Holdings to Dynavax, in each case pursuant to Section 2B(a), to be exempted from Section 16(b) of the Exchange Act, provided that Holdings shall notify Dynavax promptly of any transactions by it involving Dynavax Common Stock that could implicate Section 16(b) of the Exchange Act.

(viii) Dynavax agrees to use its commercially reasonable efforts to obtain the Stockholder Approval. In connection with the foregoing, Dynavax shall call and hold a meeting of its stockholders to seek Stockholder Approval prior to the date that is six (6) months from the date hereof, and file with the SEC a proxy statement and shall use its commercially reasonable efforts to solicit proxies in favor of the Stockholder Approval, and shall use its commercially reasonable efforts to respond to any comments of the SEC or its staff and to cause a definitive proxy

statement related to such stockholders' meeting to be mailed to Dynavax's stockholders. The Dynavax Board shall recommend Stockholder Approval and such recommendation shall be included in each proxy statement filed with the SEC and disseminated to the Dynavax stockholders in connection with such stockholder meeting (such recommendations, the "**Dynavax Board Recommendation**"). Dynavax shall notify Holdings promptly of the receipt of any comments from the SEC or its staff and of any request by the SEC or its staff for amendments or supplements to such proxy statement or for additional information and will supply Holdings with copies of all correspondence between Dynavax or any of its representatives, on the one hand, and the SEC or its staff, on the other hand, with respect to such proxy statement. If at any time prior to such stockholders' meeting there shall occur any event that is required to be set forth in an amendment or supplement to the proxy statement, Dynavax shall as promptly as practicable prepare and mail to its stockholders such an amendment or supplement. Each of Holdings and Dynavax agrees promptly to correct any information provided by it or on its behalf for use in the proxy statement if and to the extent that such information shall have become false or misleading in any material respect, and Dynavax shall as promptly as practicable prepare and mail to its stockholders an amendment or supplement to correct such information to the extent required by applicable laws and regulations. Dynavax shall provide Holdings with drafts of each such proxy statement, or amendment or supplement thereto, and consult with Holdings regarding the same, in each case, prior to filing or mailing the same. Without limiting the generality of the foregoing, Dynavax's obligations pursuant to the first two sentences of this Section 3(b)(viii) shall not be affected by the withdrawal or modification by the Dynavax Board or any committee thereof of the Dynavax Board Recommendation. In the event that Stockholder Approval is not obtained at the first meeting of stockholders at which Stockholder Approval is sought, at the written request of Holdings, Dynavax shall call and convene no more than one subsequent meeting of stockholders for the purpose of obtaining Stockholder Approval (and the Dynavax Board will unanimously recommend Stockholder Approval), which meeting may not be unreasonably delayed by Dynavax, and all covenants between the parties set forth in this Section 2(b)(viii) shall apply equally with respect to such subsequent meeting of stockholders. Unless otherwise required by applicable law, Dynavax shall not call or convene a meeting of its stockholders prior to the meeting of stockholders at which Stockholder Approval is sought.

(ix) Prior to the Purchase Option Closing Date, the Dynavax Board shall have adopted resolutions, reasonably satisfactory to Holdings, approving the issuance of the Dynavax Closing Shares, the Dynavax Closing Warrants and the Dynavax Closing Warrant Shares or the Alternate Closing Securities, as applicable, and the Dynavax Promissory Note Shares to Holdings for purposes of Section 203(a)(1) of the Delaware General Corporation Law (the "**DGCL**"), such that the restrictions on "business combinations" set forth in Section 203 of the DGCL shall not apply to Dynavax and Holdings as a result of such issuances.

(x) Prior to the Purchase Option Closing, Dynavax shall take all such actions as are necessary or advisable to cause Symphony Dynamo to declare and pay the Pre-Closing Holdings Dividend (as defined below).

Section 4. Holdings Representations, Warranties and Covenants.

(a) As of the date hereof, Holdings hereby represents and warrants, and, except to the extent that any of the following representations and warranties is limited to the date of this Agreement or otherwise limited, on the Purchase Option Closing Date and each Adjusted Securities Payment Date, shall be deemed to have represented and warranted, to Dynavax and Symphony Dynamo that:

(i) Organization. Holdings is a limited liability company, duly formed, validly existing and in good standing under the laws of the State of Delaware.

(ii) Authority and Validity. Holdings has all requisite limited liability company power and authority to execute, deliver and perform its obligations under this Agreement and the

Ancillary Agreements to which it is a party and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance by Holdings of this Agreement and the Ancillary Agreements to which it is a party and the consummation of the transactions contemplated hereby and thereby have been duly and validly authorized by all necessary action required on the part of Holdings, and no other proceedings on the part of Holdings are necessary to authorize this Agreement or the Ancillary Agreements to which it is a party or for Holdings to perform its obligations hereunder or thereunder. This Agreement and the Ancillary Agreements to which it is a party constitute the lawful, valid and legally binding obligations of Holdings, enforceable in accordance with their terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and general equitable principles regardless of whether such enforceability is considered in a proceeding at law or in equity.

(iii) No Violation or Conflict. The execution, delivery and performance of this Agreement and the Ancillary Agreements to which it is a party and the transactions contemplated hereby and thereby do not (A) violate, conflict with or result in the breach of any provision of the Organizational Documents of Holdings, (B) as of the date of this Agreement, conflict with or violate any law or Governmental Order applicable to Holdings or any of its assets, properties or businesses, or (C) as of the date of this Agreement, conflict with, result in any breach of, constitute a default (or event that with the giving of notice or lapse of time, or both, would become a default) under, require any consent under, or give to others any rights of termination, amendment, acceleration, suspension, revocation or cancellation of, or result in the creation of any Encumbrance on any of the assets or properties of Holdings, pursuant to, any note, bond, mortgage or indenture, contract, agreement, lease, sublease, license, permit, franchise or other instrument or arrangement to which Holdings is a party except, in the case of clauses (B) and (C), to the extent that such conflicts, breaches, defaults or other matters would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(iv) Governmental Consents and Approvals. The execution, delivery and performance of this Agreement and the Ancillary Agreements to which it is a party by Holdings do not, and the consummation of the transactions contemplated hereby and thereby do not and will not, require any Governmental Approval which has not already been obtained, effected or provided, except with respect to which the failure to so obtain, effect or provide would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(v) Litigation. As of the date of this Agreement, there are no actions by or against Holdings pending before any Governmental Authority or, to the knowledge of Holdings, threatened to be brought by or before any Governmental Authority, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings. There are no pending or, to the knowledge of Holdings, threatened actions to which Holdings is a party (or is threatened to be named as a party) to set aside, restrain, enjoin or prevent the execution, delivery or performance of this Agreement and the Ancillary Agreements to which it is a party or the Operative Documents or the consummation of the transactions contemplated hereby or thereby by any party hereto or thereto. As of the date of this Agreement, Holdings is not subject to any Governmental Order (nor, to the knowledge of Holdings, is there any such Governmental Order threatened to be imposed by any Governmental Authority) that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(vi) Stock Ownership. All of Symphony Dynamo's issued and outstanding Symphony Dynamo Equity Securities are owned beneficially and of record by Holdings, free and clear of any and all encumbrances.

(vii) Interim Operations. Holdings was formed solely for the purpose of engaging in the transactions contemplated by the Operative Documents, has engaged in no other business activities and has conducted its operations only as contemplated by the Operative Documents.

(viii) Accredited Investor.

(A) Holdings is and will remain at all relevant times an Accredited Investor.

(B) Holdings has relied completely on the advice of, or has consulted with or has had the opportunity to consult with, its own personal tax, investment, legal or other advisors and has not relied on Dynavax or any of its Affiliates for advice related to any offer and sale of the Dynavax Closing Shares, and, if issued, the Alternate Securities, in connection with the Purchase Option. Holdings has reviewed the Investment Overview and is aware of the risks disclosed therein. Holdings acknowledges that it has had a reasonable opportunity to conduct its own due diligence with respect to the Products, the Programs, Symphony Dynamo, Dynavax and the transactions contemplated by the Operative Documents.

(C) Holdings is able to bear the economic risk of such investment for an indefinite period and to afford a complete loss thereof.

(D) Holdings agrees that the Dynavax Closing Shares and, if issued, the Alternate Securities may not be resold (1) without registration thereof under the Securities Act (unless an exemption from such registration is available), or (2) in violation of any law.

(E) No person or entity acting on behalf of, or under the authority of, Holdings is or will be entitled to any broker's, finder's, or similar fees or commission payable by Dynavax or any of its Affiliates.

(b) Holdings hereby covenants and agrees with Dynavax as follows:

(i) [Reserved.]

(ii) Encumbrance. Holdings will not, and will not permit any of its Subsidiaries to, create, assume or suffer to exist any Encumbrance on any of its Symphony Dynamo Equity Securities except with the prior written consent of Dynavax.

(iii) Transfer and Amendment. Commencing upon the date hereof and ending upon the earlier to occur of (x) the Purchase Option Closing Date, and the termination of this Agreement pursuant to Section 9 (such period, the "**Term**"), the manager of Holdings shall not (A) transfer, or permit the transfer of, any Membership Interest without the prior written consent of Dynavax or (B) amend, or permit the amendment of, any provisions relating to the transfer of Membership Interests, as set forth in Section 7.02 of the Holdings LLC Agreement, to the extent such amendment would adversely affect Dynavax's right of consent set forth in Sections 7.02(b)(i) and 7.02(c) of the Holdings LLC Agreement.

(iv) Symphony Dynamo Directors. During the Term, Holdings agrees to vote all of its Symphony Dynamo Equity Securities (or to exercise its right with respect to such Symphony Dynamo Equity Securities to consent to action in writing without a meeting) in favor of, as applicable, the election, removal and replacement of one director of the Symphony Dynamo Board, and any successor thereto, designated by Dynavax (the "**Dynavax Director**") as directed by Dynavax. In furtherance and not in limitation of the foregoing, Holdings hereby grants to Dynavax an irrevocable proxy, with respect to all Symphony Dynamo Equity Securities now owned or hereafter acquired by Holdings, to vote such Symphony Dynamo Equity Securities or to exercise the right to consent to action in writing without a meeting with respect to such Symphony Dynamo Equity Securities, such irrevocable proxy to be exercised solely for the limited purpose of electing, removing and replacing the Dynavax Director in the event of the failure or refusal of

Holdings to elect, remove or replace such Dynavax Director, as directed by Dynavax. Additionally, Holdings agrees, during the Term, to the selection of two (2) independent directors (of the four (4) directors of Symphony Dynamo not chosen by Holdings at the direction of Dynavax), and any successors thereto. Such independent directors shall be selected by mutual agreement of Dynavax and Holdings.

(v) Symphony Dynamo Board. During the Term, Holdings shall not vote any of its Symphony Dynamo Equity Securities (or exercise its rights with respect to such Symphony Dynamo Equity Securities by written consent without a meeting) to increase the size of the Symphony Dynamo Board to more than five (5) members without the prior written consent of Dynavax.

(vi) Symphony Dynamo Charter. During the Term, Holdings shall not approve or permit any amendment to Article IV, Paragraphs (1) and (3); Article VI; Article VII; Article X; Article XI or Article XIII of the Symphony Dynamo Charter without the prior written consent of Dynavax.

Section 5. Symphony Dynamo Representations, Warranties and Covenants.

(a) As of the date hereof, Symphony Dynamo hereby represents and warrants, and, except to the extent that any of the following representations and warranties is limited to the date of this Agreement or otherwise limited, on the Purchase Option Closing Date, shall be deemed to have represented and warranted, to Dynavax and Holdings that:

(i) Organization. Symphony Dynamo is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware.

(ii) Authority and Validity. Symphony Dynamo has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The execution, delivery and performance by Symphony Dynamo of this Agreement and the consummation of the transactions contemplated hereby have been duly and validly authorized by all necessary action required on the part of Symphony Dynamo, and no other proceedings on the part of Symphony Dynamo are necessary to authorize this Agreement or for Symphony Dynamo to perform its obligations under this Agreement. This Agreement constitutes the lawful, valid and legally binding obligation of Symphony Dynamo, enforceable in accordance with its terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and general equitable principles regardless of whether such enforceability is considered in a proceeding at law or in equity.

(iii) No Violation or Conflict. The execution, delivery and performance of this Agreement and the transactions contemplated hereby do not (A) violate, conflict with or result in the breach of any provision of the Organizational Documents of Symphony Dynamo, (B) conflict with or violate any law or Governmental Order applicable to Symphony Dynamo or any of its assets, properties or businesses, or (C) conflict with, result in any breach of, constitute a default (or event that with the giving of notice or lapse of time, or both, would become a default) under, require any consent under, or give to others any rights of termination, amendment, acceleration, suspension, revocation or cancellation of, or result in the creation of any Encumbrance on any of the assets or properties of Symphony Dynamo, pursuant to, any note, bond, mortgage or indenture, contract, agreement, lease, sublease, license, permit, franchise or other instrument or arrangement to which Symphony Dynamo is a party except, in the case of clauses (B) and (C), to the extent that such conflicts, breaches, defaults or other matters would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Symphony Dynamo.

(iv) Governmental Consents and Approvals. The execution, delivery and performance of this Agreement by Symphony Dynamo do not, and the consummation of the transactions contemplated hereby do not and will not, require any Governmental Approval which has not already been obtained, effected or provided, except with respect to which the failure to so obtain, effect or provide would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Symphony Dynamo.

(v) Litigation. There are no actions by or against Symphony Dynamo pending before any Governmental Authority or, to the knowledge of Symphony Dynamo, threatened to be brought by or before any Governmental Authority that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Symphony Dynamo. There are no pending or, to the knowledge of Symphony Dynamo, threatened actions to which Symphony Dynamo is a party (or is threatened to be named as a party) to set aside, restrain, enjoin or prevent the execution, delivery or performance of this Agreement or the Operative Documents or the consummation of the transactions contemplated hereby or thereby by any party hereto or thereto. Symphony Dynamo is not subject to any Governmental Order (nor, to the knowledge of Symphony Dynamo, is there any such Governmental Order threatened to be imposed by any Governmental Authority) that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Symphony Dynamo.

(vi) Capitalization. Holdings is the beneficial and record owner of all issued and outstanding Symphony Dynamo Equity Securities. No shares of Symphony Dynamo capital stock are held in treasury by Symphony Dynamo or any Symphony Dynamo Subsidiary. All of the issued and outstanding Symphony Dynamo Equity Securities (A) have been duly authorized and validly issued and are fully paid and nonassessable, (B) were issued in compliance with all applicable state and federal securities laws, and (C) were not issued in violation of any preemptive rights or rights of first refusal. No preemptive rights or rights of first refusal exist with respect to any Symphony Dynamo Equity Securities and no such rights will arise by virtue of or in connection with the transactions contemplated hereby (other than for the Purchase Option). Other than the Purchase Option, there are no outstanding options, warrants, call rights, commitments or agreements of any character to acquire any Symphony Dynamo Equity Securities. There are no outstanding stock appreciation, phantom stock, profit participation or other similar rights with respect to Symphony Dynamo. Symphony Dynamo is not obligated to redeem or otherwise acquire any of its outstanding Symphony Dynamo Equity Securities.

(vii) Interim Operations. Symphony Dynamo was formed solely for the purpose of engaging in the transactions contemplated by the Operative Documents, has engaged in no other business activities and has conducted its operations only as contemplated by the Operative Documents.

(viii) Investment Company. Symphony Dynamo is not, and after giving effect to the transactions contemplated by the Operative Documents will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(b) Symphony Dynamo covenants and agrees that:

(i) Symphony Dynamo will comply with all laws, ordinances or governmental rules or regulations to which it is subject and will obtain and maintain in effect all licenses, certificates, permits, franchises and other Governmental Approvals necessary to the ownership of its properties or to the conduct of its business, in each case to the extent necessary to ensure that non-compliance with such laws, ordinances or governmental rules or regulations or failures to obtain or maintain in effect such licenses, certificates, permits, franchises and other Governmental Approvals would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Symphony Dynamo.

(ii) Symphony Dynamo will file (or cause to be filed) all material tax returns required to be filed by it and pay all taxes shown to be due and payable on such returns and all other taxes imposed on it or its assets to the extent such taxes have become due and payable and before they have become delinquent and shall pay all claims for which sums have become due and payable that have or might become attached to the assets of Symphony Dynamo; provided, that Symphony Dynamo need not file any such tax returns or pay any such tax or claims if (A) the amount, applicability or validity thereof is contested by Symphony Dynamo on a timely basis in good faith and in appropriate proceedings, and Symphony Dynamo has established adequate reserves therefor in accordance with GAAP on the books of Symphony Dynamo or (B) the failure to file such tax returns or the nonpayment of such taxes and assessments, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect on Symphony Dynamo.

(iii) Symphony Dynamo will at all times preserve and keep in full force and effect its corporate existence.

(iv) Symphony Dynamo will keep complete, proper and separate books of record and account, including a record of all costs and expenses incurred, all charges made, all credits made and received, and all income derived in connection with the operation of the business of Symphony Dynamo, all in accordance with GAAP, in each case to the extent necessary to enable Symphony Dynamo to comply with the periodic reporting requirements of this Agreement.

(v) Symphony Dynamo will perform and observe in all material respects all of the terms and provisions of each Operative Document to be performed or observed by it, maintain each such Operative Document to which it is a party, promptly enforce in all material respects each such Operative Document in accordance with its terms, take all such action to such end as may be from time to time reasonably requested by Holdings or Dynavax and make to each other party to each such Operative Document such demands and requests for information and reports or for action as Symphony Dynamo is entitled to make under such Operative Document.

(vi) Symphony Dynamo shall permit the representatives of Holdings (including Holdings' members and their respective representatives), each Symphony Fund and Dynavax, at each of their own expense and upon reasonable prior notice to Symphony Dynamo, to visit the principal executive office of Symphony Dynamo, to discuss the affairs, finances and accounts of Symphony Dynamo with Symphony Dynamo's officers and (with the consent of Symphony Dynamo, which consent will not be unreasonably withheld) the Symphony Dynamo Auditors (as defined in Section 5(d)(iii) hereof), all at such reasonable times and as often as may be reasonably requested in writing.

(vii) Symphony Dynamo shall permit each Symphony Fund, at its own expense and upon reasonable prior notice to Symphony Dynamo, to inspect and copy Symphony Dynamo's books and records and inspect Symphony Dynamo's properties at reasonable times.

(viii) Symphony Dynamo shall allow Dynavax or its designated representatives to have reasonable visitation and inspection rights with regard to the Programs and materials, documents and other information relating thereto.

(ix) Symphony Dynamo shall permit each Symphony Fund to consult with and advise the management of Symphony Dynamo on matters relating to the research and development of the Programs in order to develop the Product.

(x) On the Purchase Option Closing Date, or as soon thereafter as is practical, Symphony Dynamo shall deliver to Dynavax all materials, documents, files and other information relating to the Programs (or, where necessary, copies thereof).

(xi) During the Term, Dynavax shall have the right to consent to any increase in the size of the Symphony Dynamo Board to more than five (5) directors.

(xii) During the Term, Dynavax shall have the right to designate, remove and replace one (1) director of the Symphony Dynamo Board and consent to the selection of the two (2) independent directors (of the four (4) directors of Symphony Dynamo not chosen by Holdings at the direction of Dynavax), in each case including any successors thereto and in accordance with the terms of Section 4(b)(iv).

(xiii) Symphony Dynamo shall indemnify the directors and officers of Symphony Dynamo against liability incurred by reason of the fact that such Person is or was a director or officer of Symphony Dynamo, as permitted by Article VII of the Symphony Dynamo Charter and Section 9.01 of the Symphony Dynamo By-laws, as set forth in, and on the terms of, the Indemnification Agreement and the RRD Services Agreement, respectively.

(xiv) During the Term, Symphony Dynamo shall comply with, and cause any Persons acting for it to comply with, the terms of the Investment Policy with respect to the investment of any funds held by it.

(xv) From and after the Purchase Option Closing Date, Symphony Dynamo shall not make any further payments to RRD, and immediately prior to the Purchase Option Closing, Symphony Dynamo shall declare and pay as a dividend to Holdings an amount in cash equal to \$500,000, minus the sum of (A) any and all outstanding amounts pursuant to the RRD Services Agreement through the Purchase Option Closing Date, plus (B) all costs and expenses incurred by Symphony Dynamo that are associated with the consummation of the Purchase Option (including tax preparation and filings but excluding a final audit), plus (C) all amounts paid by Symphony Dynamo for the purchase of a tail insurance policy for Symphony Dynamo (the calculated total, the "Pre-Closing Holdings Dividend").

(c) Symphony Dynamo covenants and agrees that, until the expiration of the Term, it shall not, and shall cause its Subsidiaries (if any) not to, without Dynavax's prior written consent (such consent, in the case of clause (x) below, not to be unreasonably withheld):

(i) issue any Symphony Dynamo Equity Securities or any Equity Securities of any Subsidiary thereof (other than any issuances of Equity Securities by Symphony Dynamo made in accordance with Section 1(b) hereof to Holdings so long as Symphony Dynamo is a wholly owned subsidiary of Holdings, or by a Subsidiary of Symphony Dynamo to Symphony Dynamo or to another wholly owned Subsidiary of Symphony Dynamo); provided, however, that in any event any such Symphony Dynamo Equity Securities or Equity Securities of such Subsidiary shall be issued subject to the Purchase Option;

(ii) redeem, repurchase or otherwise acquire, directly or indirectly, any Symphony Dynamo Equity Securities or the Equity Securities of any Subsidiary of Symphony Dynamo;

(iii) create, incur, assume or permit to exist any Debt other than any Debt incurred pursuant to the Operative Documents and the Development Budget (including payables incurred in the ordinary course of business) ("**Excepted Debt**"); provided, however, that the aggregate outstanding principal amount of all such Excepted Debt for borrowed money shall not exceed \$1,000,000 at any time;

(iv) declare or pay dividends or other distributions on any Symphony Dynamo Equity Securities other than any dividend declared from the proceeds of a sale or license of a discontinued Program to a third party, in respect of which Symphony Dynamo shall be entitled to pay (subject to the existence of lawfully available funds) a dividend equal to the net amount (such net amount calculated as the gross proceeds received less amounts required to be paid in respect of any and all corporate taxes owed by Symphony Dynamo as a result of the receipt of such gross amounts) of such amounts received from such third party;

(v) enter into any transaction of merger or consolidation, or liquidate, wind up or dissolve itself, or convey, transfer, license, lease or otherwise dispose of all, or a material portion of, its properties, assets or business;

(vi) other than in respect of the Programs, engage in the development of products for any other company or engage or participate in the development of products or engage in any other material line of business;

(vii) other than entering into, and performing its obligations under, the Operative Documents and participating in the Programs, engage in any action that negates or is inconsistent with any rights of Dynavax set forth herein;

(viii) other than as contemplated by the RRD Services Agreement and Section 6.2 of the Amended and Restated Research and Development Agreement, hire, retain or contract for the services of, any employees until the termination of such agreements;

(ix) incur any financial commitments in respect of the development of the Programs other than those set forth in the Development Plan and the Development Budget, or those approved by the Development Committee and, if so required by the terms of Paragraph 11 of the Development Committee Charter, the Symphony Dynamo Board in accordance with the Operative Documents;

(x) other than any transaction contemplated by the Operative Documents, enter into or engage in any Conflict Transactions without the prior approval of a majority of the Disinterested Directors of the Symphony Dynamo Board; or

(xi) waive, alter, modify, amend or supplement in any manner whatsoever any material terms and conditions of the RRD Services Agreement, the Funding Agreement, the Subscription Agreement, or Articles 4 and 6 of the Amended and Restated Research and Development Agreement, except in compliance with the terms of the Operative Documents.

(d) Symphony Dynamo covenants and agrees to deliver, cause to be delivered, and provide access thereto, to each other Party, each Symphony Fund, and such Auditors as Dynavax may designate, so long as such Auditors shall be subject to confidentiality requirements at least as stringent as the Confidentiality Agreement:

(i) upon request, copies of the then current Development Plan for each quarter, on or before March 31, June 30, September 30, and December 31 of each year;

(ii) upon request, copies of the then current Development Budget for each quarter, including a report setting forth in reasonable detail the projected expenditures by Symphony Dynamo pursuant to the Development Budget, on or before March 31, June 30, September 30, and December 31 of each year;

(iii) prior to the close of each fiscal year, Symphony Dynamo shall cause the Manager to seek to obtain from the Symphony Dynamo Auditors the Client Schedules to be provided to Dynavax's Auditors in connection with the Symphony Dynamo Auditors' audit of Symphony Dynamo. Within ten (10) Business Days after the close of each fiscal year, Symphony Dynamo (or the Manager acting on its behalf) will provide Dynavax's Auditors with the requested Client Schedules. If the Symphony Dynamo Auditors deliver the Client Schedules after the end of the fiscal year, Symphony Dynamo (or the Manager acting on its behalf) will provide the completed Client Schedules to Dynavax's Auditors within ten (10) Business Days of such receipt;

(iv) prior to the close of each fiscal year, Dynavax' Vice President of Finance, the Symphony Dynamo Auditors, Dynavax's Auditors and Symphony Dynamo (or the Manager acting on its behalf) shall agree to a completion schedule that will include (A) the provision by Symphony Dynamo to Dynavax of the financial information reasonably necessary for Dynavax to consolidate and audit the financial results of Symphony Dynamo and (B) the following financial statements, including the related notes thereto, audited and certified by the Symphony Dynamo Auditors: one (1) a balance sheet of Symphony Dynamo as of the close of such fiscal year, two (2) a statement of net income for such fiscal year, and three (3) a statement of cash flows for such fiscal year. Such audited annual financial statements shall set forth in comparative form the figures for the previous fiscal year, all in reasonable detail, prepared in accordance with GAAP, and Symphony Dynamo (or the Manager acting on its behalf) shall, to the extent that Symphony Dynamo (or the Manager acting on its behalf), using commercially reasonable means, can procure such an opinion, be accompanied by an opinion thereon of the Symphony Dynamo Auditors to the effect that such financial statements present fairly, in all material respects, the financial position of Symphony Dynamo and its results of operations and cash flows and have been prepared in conformity with GAAP, and that the examination of such accountants in connection with such financial statements has been made in accordance with generally accepted auditing standards, and that such audit provides a reasonable basis for such opinion in the circumstances;

(v) within two (2) Business Days following each calendar month and upon receipt from Dynavax of its monthly invoice to Symphony Dynamo, current accrued monthly vendor expenses and prepaid expenses: (A) the unaudited balance sheet of Symphony Dynamo for the previous calendar month; (B) the unaudited statement of net income for such previous calendar month; (C) the unaudited statement of cash flows for such previous calendar month; (D) the trial balance schedule for such previous calendar month; and (E) related account reconciliations for such previous calendar month;

(vi) any other documents, materials or other information, including information and documentation of internal controls and reporting as may be required by applicable law, rule or regulation (including information prepared in support of Symphony Dynamo's efforts pursuant to Section 5(e)) pertaining to Holdings, the Programs or Symphony Dynamo as Dynavax may reasonably request, including preliminary financial information;

(vii) within two (2) Business Days following its receipt thereof from Symphony Dynamo's tax return preparer, a copy of each income tax return to be filed by Symphony Dynamo with any foreign, federal, state or local taxing authority (including all supporting schedules thereto);

(viii) promptly, and in any event within five (5) Business Days of receipt thereof, copies of any notice to Symphony Dynamo from any federal or state Governmental Authority relating to any order, ruling, statute or other law or regulation that would reasonably be expected to have a Material Adverse Effect on Symphony Dynamo;

(ix) promptly upon receipt thereof, notice of all actions, suits, investigations, litigation and proceedings before any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, affecting Symphony Dynamo;

(x) promptly upon receipt thereof, copies of any other notices, requests, reports, financial statements and other information and documents received by Symphony Dynamo under or pursuant to any other Operative Document, including, without limitation, any notices of breach or termination of any subcontracts or licenses entered into or permitted pursuant to the Operative Documents; and

(xi) with reasonable promptness, such other data and information relating to the business, operations, affairs, financial condition, assets or properties of Symphony Dynamo or relating to the ability of Symphony Dynamo to perform its obligations hereunder and under the Operative Documents as from time to time may be reasonably requested by Dynavax and/or Holdings;

provided, that neither Symphony Dynamo, nor the Manager acting on behalf of Symphony Dynamo, shall have any liability to Dynavax for the failure to deliver financial documents or other materials hereunder, if such failure was caused by a failure of Dynavax to provide, in a timely manner, data required to prepare such financial documents or other materials to Symphony Dynavax in a timely manner.

(e) Symphony Dynamo will use commercially reasonable efforts, at its own expense (as set forth in the Management Budget), to cooperate with Dynavax in meeting Dynavax's government compliance, disclosure, and financial reporting obligations, including without limitation under the Sarbanes-Oxley Act of 2002 and any rules and regulations promulgated thereunder, and under FASB Interpretation No. 46. Without limiting the foregoing, Symphony Dynamo further covenants, until the expiration of the Term, that (w) the principal executive officer and the principal financial officer of Symphony Dynamo, or persons performing similar functions, shall provide certifications to Dynavax corresponding to those required with respect to public companies for which a class of securities is registered under the Exchange Act ("**Public Companies**") under Sections 302 and 906 of the Sarbanes-Oxley Act of 2002; (x) Symphony Dynamo shall maintain a system of disclosure controls and internal controls (as defined under the Exchange Act) and conduct quarterly and annual evaluations of the effectiveness of such controls as required under the Exchange Act for Public Companies; (y) Symphony Dynamo shall provide to Dynavax an attestation report of the Symphony Dynamo Auditors with respect to Symphony Dynamo management's assessment of Symphony Dynamo's internal controls as required under the Exchange Act for Public Companies; and (z) Symphony Dynamo will maintain, or cause to have maintained, such sufficient evidentiary support for management's assessment of the effectiveness of Symphony Dynamo's internal controls as required for Public Companies.

(f) Dynavax agrees to provide reasonable assistance and support for the financial operations of Symphony Dynamo as may be reasonably requested by Symphony Dynamo from time to time during the Term; provided that any such services shall be pursuant to a separate agreement specifying the nature and amount of assistance and support to be provided and the reimbursement to Dynavax of costs plus a reasonable profit in the provision of such assistance and support.

Section 6. Notice of Material Event. Each Party agrees that, upon it receiving knowledge of a material event or development with respect to any of the transactions contemplated hereby that, to the knowledge of its executive officers, is not known to the other Parties, such Party shall notify the other Parties in writing within three (3) Business Days of the receipt of such knowledge by any executive officer of such Party; provided, that the failure to provide such notice shall not impair or otherwise be deemed a waiver of any rights any Party may have arising from such material event or development and that notice under this Section 6 shall not in itself constitute notice of any breach of any of the Operative Documents.

Section 7. Assignment Transfers; Legend.

(a) Assignment by Dynavax and Symphony Dynamo. Neither Dynavax nor Symphony Dynamo may assign, delegate, transfer, sell or otherwise dispose of (collectively, "**Transfer**"), in whole or in part, any or all of their rights or obligations hereunder to any Person (a "**Transferee**") without the prior written approval of each of the other Parties; provided, however, that Dynavax, without the prior approval of each of the other Parties, acting in accordance with Article 14 of the Amended and Restated Research and Development Agreement, may make such Transfer to any Person which acquires all or substantially all of Dynavax's assets or business (or assets or business related to the Programs) or which is the surviving or resulting Person in a merger or consolidation with Dynavax; provided, further, that in the event of any Transfer, Dynavax or Symphony Dynamo, as applicable, shall provide written notice to the other Parties of any such Transfer not later than thirty (30) days after such Transfer setting forth the identity and address of the Transferee and summarizing the terms of the Transfer. In no event shall such

assignment alter the definition of “Dynavax Common Stock” except as a result of the surviving or resulting “parent” entity in a merger being other than Dynavax, in which case any reference to Dynavax Common Stock shall be deemed to instead reference the common stock, if any, of the surviving or resulting entity.

(b) Assignment and Transfers by Holdings. Prior to the expiration of the Purchase Option, Holdings may not Transfer, in whole or in part, any or all of its Symphony Dynamo Equity Securities or any or all of its rights or obligations hereunder to any Person (other than Dynavax) without the prior written consent of Dynavax. In addition, any Transfer of Symphony Dynamo Equity Securities by Holdings or any other Person to any Person other than Dynavax shall be conditioned upon, and no effect shall be given to any such Transfer unless such transferee shall agree in writing in form and substance satisfactory to Dynavax to be bound by all of the terms and conditions hereunder, including the Purchase Option, as if such transferee were originally designated as “Holdings” hereunder.

(c) Legend. Any certificates evidencing Symphony Dynamo Equity Securities shall bear a legend in substantially the following form:

THE SECURITIES OF SYMPHONY DYNAMO, INC., EVIDENCED HEREBY ARE SUBJECT TO AN OPTION, HELD BY DYNAVAX, AS DESCRIBED IN AN AMENDED AND RESTATED PURCHASE OPTION AGREEMENT (THE “PURCHASE OPTION AGREEMENT”) DATED AS OF NOVEMBER 9, 2009, BY AND AMONG DYNAVAX TECHNOLOGIES CORPORATION, AND THE OTHER PARTIES THERETO, TO PURCHASE SUCH SECURITIES AT A PURCHASE PRICE DETERMINED PURSUANT TO SECTION 2 OF THE PURCHASE OPTION AGREEMENT, EXERCISABLE BY WRITTEN NOTICE AT ANY TIME DURING THE PERIOD SET FORTH THEREIN. COPIES OF THE PURCHASE OPTION AGREEMENT ARE AVAILABLE AT THE PRINCIPAL PLACE OF BUSINESS OF SYMPHONY DYNAMO, INC. AT 7361 CALHOUN PLACE, SUITE 325, ROCKVILLE, MARYLAND 20855, AND WILL BE FURNISHED TO THE HOLDER HEREOF UPON WRITTEN REQUEST WITHOUT COST.

Section 8. Costs and Expenses: Payments. Except as otherwise specified in Section 2(i) hereof, each Party shall pay its own costs and expenses incurred in connection with the exercise of the Purchase Option; provided, however, that Dynavax shall pay any filing fees incurred in connection with any HSR Filings made pursuant to this Agreement.

Section 9. Expiration: Termination of Agreement.

(a) Termination.

(i) This Agreement shall terminate upon the mutual written consent of all of the Parties.

(ii) Each of Holdings and Symphony Dynamo may terminate this Agreement in the event that Symphony Dynamo terminates the Amended and Restated Research and Development Agreement in accordance with its terms.

(iii) Holdings may terminate this Agreement in the event that the Purchase Option Closing Date Shall not have occurred by the six (6) month anniversary of the date hereof, in which case this agreement shall become null and void *ab initio* and the Original Agreement shall simultaneously be reinstated in its entirety and supersede this Agreement in its entirety.

Section 10. Survival: Indemnification.

(a) Survival of Representations and Warranties; Expiration of Certain Covenants.

(i) The representations and warranties of the Parties contained in this Agreement shall survive for a period of one year from the making of such representations. The liability of the Parties related to their respective representations and warranties hereunder shall not be reduced by any investigation made at any time by or on behalf of Holdings, Symphony Dynamo or Dynavax, as applicable.

(ii) For the avoidance of doubt, the covenants and agreements set forth in ~~Sections Section 4(b), Section 5(b)(i), Section 5(b)(v)-Section 5(b)(ix), Section 5(b)(xi)-Section 5(b)(xiv), Section 5(c), Section 5(d)(i), 5(d)(ii), and Section 5(d)(viii)-Section 5(d)(xi)~~ shall, upon the expiration of the Term, expire and end without any further obligation by Symphony Dynamo or Holdings thereunder.

(iii) For the avoidance of doubt, the covenants and agreements set forth in ~~Section 5(b)(ii)-Section 4(b)(iii), Section 5(b)(x), Section 5(d)(iii)-Section 5(d)(v), Section 5(d)(vii), and Section 5(e)~~ shall, upon the completion of all the reporting, accounting and other obligations set forth therein with respect to the fiscal year in which this Agreement shall terminate, expire and end without any further obligation by Symphony Dynamo or Holdings thereunder.

(b) Indemnification. To the greatest extent permitted by applicable law, Dynavax shall indemnify and hold harmless Holdings and Symphony Dynamo and Holdings shall indemnify and hold harmless Dynavax, and each of their respective Affiliates, officers, directors, employees, agents, partners, members, successors, assigns, representatives of, and each Person, if any (including any officers, directors, employees, agents, partners, members of such Person) who controls Holdings, Symphony Dynamo and Dynavax, as applicable, within the meaning of the Securities Act or the Exchange Act, (each, an “**Indemnified Party**”), from and against any and all actions, causes of action, suits, claims, losses, costs, interest, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnified Party is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys’ fees and disbursements (hereinafter, a “**Loss**”), incurred by any Indemnified Party as a result of, or arising out of, or relating to: (i) in the case of Dynavax being the Indemnifying Party, (A) any breach of any representation or warranty made by Dynavax herein or in any certificate, instrument or document delivered in connection and contemporaneously herewith, or (B) any breach of any covenant, agreement or obligation of Dynavax contained herein or in any certificate, instrument or document delivered hereunder, including, without limitation, actions to enforce the Note, and (ii) in the case of Holdings being the Indemnifying Party, (A) any breach of any representation or warranty made by Holdings or Symphony Dynamo herein or in any certificate, instrument or document delivered in connection and contemporaneously herewith, or (B) any breach of any covenant, agreement or obligation of Holdings or Symphony Dynamo contained herein or in any certificate, instrument or document delivered hereunder. To the extent that the foregoing undertaking by Dynavax or Holdings may be unenforceable for any reason, such Party shall make the maximum contribution to the payment and satisfaction of any Loss that is permissible under applicable law.

(c) Notice of Claims. Any Indemnified Party that proposes to assert a right to be indemnified under this Section 10 shall notify Dynavax or Holdings, as applicable (the “**Indemnifying Party**”), promptly after receipt of notice of commencement of any action, suit or proceeding against such Indemnified Party (an “**Indemnified Proceeding**”) in respect of which a claim is to be made under this Section 10, or the incurrence or realization of any Loss in respect of which a claim is to be made under this Section 10, of the commencement of such Indemnified Proceeding or of such incurrence or realization, enclosing a copy of all relevant documents, including all papers served and claims made, but the omission to so notify the applicable Indemnifying Party promptly of any such Indemnified Proceeding or incurrence or realization shall not relieve (x) such Indemnifying Party from any liability that it may have to such

Indemnified Party under this Section 10 or otherwise, except, as to such Indemnifying Party's liability under this Section 10, to the extent, but only to the extent, that such Indemnifying Party shall have been prejudiced by such omission, or (y) any other indemnitor from liability that it may have to any Indemnified Party under the Operative Documents.

(d) Defense of Proceedings. In case any Indemnified Proceeding shall be brought against any Indemnified Party, it shall notify the applicable Indemnifying Party of the commencement thereof as provided in Section 10(c), and such Indemnifying Party shall be entitled to participate in, and provided such Indemnified Proceeding involves a claim solely for money damages and does not seek an injunction or other equitable relief against the Indemnified Party and is not a criminal or regulatory action, to assume the defense of, such Indemnified Proceeding with counsel reasonably satisfactory to such Indemnified Party. After notice from such Indemnifying Party to such Indemnified Party of such Indemnifying Party's election so to assume the defense thereof and the failure by such Indemnified Party to object to such counsel within ten (10) Business Days following its receipt of such notice, such Indemnifying Party shall not be liable to such Indemnified Party for legal or other expenses related to such Indemnified Proceedings incurred after such notice of election to assume such defense except as provided below and except for the reasonable costs of investigating, monitoring or cooperating in such defense subsequently incurred by such Indemnified Party reasonably necessary in connection with the defense thereof. Such Indemnified Party shall have the right to employ its counsel in any such Indemnified Proceeding, but the reasonable fees and expenses of such counsel shall be at the expense of such Indemnified Party unless:

(i) the employment of counsel by such Indemnified Party at the expense of the applicable Indemnifying Party has been authorized in writing by such Indemnifying Party;

(ii) such Indemnified Party shall have reasonably concluded in its good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between the applicable Indemnifying Party and such Indemnified Party in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes of action available to such Indemnified Party (it being agreed that in any case referred to in this clause (ii) such Indemnifying Party shall not have the right to direct the defense of such Indemnified Proceeding on behalf of the Indemnified Party);

(iii) the applicable Indemnifying Party shall not have employed counsel reasonably acceptable to the Indemnified Party, to assume the defense of such Indemnified Proceeding within a reasonable time after notice of the commencement thereof (provided, however, that this clause (iii) shall not be deemed to constitute a waiver of any conflict of interest that may arise with respect to any such counsel); or

(iv) any counsel employed by the applicable Indemnifying Party shall fail to timely commence or diligently conduct the defense of such Indemnified Proceeding and such failure has materially prejudiced (or, in the reasonable judgment of the Indemnified Party, is in danger of materially prejudicing) the outcome of such Indemnified Proceeding;

in each of which cases the reasonable fees and expenses of counsel for such Indemnified Party shall be at the expense of such Indemnifying Party. Only one counsel shall be retained by all Indemnified Parties with respect to any Indemnified Proceeding, unless counsel for any Indemnified Party reasonably concludes in good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between such Indemnified Party and one or more other Indemnified Parties in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes or action available to such Indemnified Party.

(e) Settlement. Without the prior written consent of such Indemnified Party, such Indemnifying Party shall not settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding, unless such settlement, compromise, consent or related judgment (i) includes an unconditional release of such Indemnified Party from all liability for Losses arising out of such claim, action, investigation, suit or other legal proceeding, (ii) provides for the payment of money damages as the sole relief for the claimant (whether at law or in equity), (iii) involves no finding or admission of any violation of law or the rights of any Person by the Indemnified Party, and (iv) is not in the nature of a criminal or regulatory action. No Indemnified Party shall settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding in respect of which any payment would result hereunder or under the Operative Documents without the prior written consent of the Indemnifying Party, such consent not to be unreasonably conditioned, withheld or delayed.

Section 11. No Petition. Each of Dynavax and Holdings covenants and agrees that, prior to the date which is one year and one day after the Purchase Option Closing Date, it will not institute or join in the institution of any bankruptcy, insolvency, reorganization or similar proceeding against Symphony Dynamo. The provisions of this Section 11 shall survive the termination of this Agreement.

Section 12. Third-Party Beneficiary. Each of the Parties agrees that each Symphony Fund shall be a third-party beneficiary of this Agreement.

Section 13. Notices. Any notice, request, demand, waiver, consent, approval or other communication which is required or permitted to be given to any Party shall be in writing and shall be deemed given only if delivered to the Party personally or sent to the Party by facsimile transmission (promptly followed by a hard-copy delivered in accordance with this Section 13), by next Business Day delivery by a nationally recognized courier service, or by registered or certified mail (return receipt requested), with postage and registration or certification fees thereon prepaid, addressed to the Party at its address set forth below:

Dynavax:

Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attn: Michael S. Ostrach, Esq., Vice President,
Chief Business Officer and General Counsel
Facsimile: (510) 848-1327

with copies to:

Cooley Godward Kronish LLP
Five Palo Alto Square, 4th Floor
3000 El Camino Real
Palo Alto, CA 94306-2155
Attn: Glen Y. Sato, Esq.
Facsimile: (650) 849-7400

Symphony Dynamo:

Symphony Dynamo, Inc.
7361 Calhoun Place, Suite 325
Rockville, MD 20855
Attn: Charles W. Finn, Ph.D.
Facsimile: (301) 762-6154

Holdings:

Symphony Dynamo Holdings LLC
7361 Calhoun Place, Suite 325
Rockville, MD 20855
Attn: Robert L. Smith, Jr.
Facsimile: (301) 762-6154

with copies to:

Symphony Capital Partners, L.P.
875 Third Avenue
3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

Symphony Strategic Partners, LLC
875 Third Avenue
3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

or to such other address as such Party may from time to time specify by notice given in the manner provided herein to each other Party entitled to receive notice hereunder.

Section 14. Governing Law: Consent to Jurisdiction and Service of Process.

(a) This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York; except to the extent that this Agreement pertains to the internal governance of Symphony Dynamo or Holdings, and to such extent this Agreement shall be governed and construed in accordance with the laws of the State of Delaware.

(b) Each of the Parties hereby irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of any New York State court and Delaware State court or federal court of the United States of America sitting in The City of New York, Borough of Manhattan or Wilmington, Delaware, and any appellate court from any jurisdiction thereof, in any action or proceeding arising out of or relating to this Agreement, or for recognition or enforcement of any judgment, and each of the Parties hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in any such New York State court, any such Delaware State court or, to the fullest extent permitted by law, in such federal court. Each of the Parties agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that any Party may otherwise have to bring any action or proceeding relating to this Agreement.

(c) Each of the Parties irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement in any New York State or federal court, or any Delaware State or federal court. Each of the Parties hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court. Each of the parties hereby consents to service of process by mail.

Section 15. WAIVER OF JURY TRIAL. EACH OF THE PARTIES HERETO IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT.

Section 16. Entire Agreement. This Agreement (including any Annexes, Schedules, Exhibits or other attachments hereto) constitutes the entire agreement between the Parties with respect to the matters covered hereby and supersedes all prior agreements and understanding with respect to such matters between the Parties.

Section 17. Amendment: Successors: Counterparts.

(a) The terms of this Agreement shall not be altered, modified, amended, waived or supplemented in any manner whatsoever except by a written instrument signed by each of the Parties.

(b) Except as set forth in Section 12, nothing expressed or implied herein is intended or shall be construed to confer upon or to give to any Person, other than the Parties, any right, remedy or claim under or by reason of this Agreement or of any term, covenant or condition hereof, and all the terms, covenants, conditions, promises and agreements contained herein shall be for the sole and exclusive benefit of the Parties and their successors and permitted assigns.

(c) This Agreement may be executed in one or more counterparts, each of which, when executed, shall be deemed an original but all of which, taken together, shall constitute one and the same Agreement.

Section 18. Specific Performance. The Parties acknowledge that irreparable damage would result if this Agreement were not specifically enforced, and they therefore agree that the rights and obligations of the Parties under this Agreement may be enforced by a decree of specific performance issued by a court of competent jurisdiction. Such a remedy shall, however, not be exclusive, and shall be in addition to any other remedies which any Party may have under this Agreement or otherwise. The Parties further acknowledge and agree that a decree of specific performance may not be an available remedy in all circumstances.

Section 19. Severability. If any term or other provision of this Agreement is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Agreement shall nevertheless remain in full force and effect so long as the economic or legal substance of the transactions contemplated hereby is not affected in a manner materially adverse to either party. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

Section 20. Tax Reporting. The Parties acknowledge and agree that, for all federal and state income tax purposes:

(a)(i) Holdings shall be treated as the owner of all the Equity Securities of Symphony Dynamo prior to the consummation of the Purchase Option; (ii) the Purchase Option shall be treated as an option to acquire all the Equity Securities of Symphony Dynamo; (iii) the Dynavax Closing Warrants shall be treated as option premium payable in respect of the grant and exercise of the Purchase Option; and (iv) Symphony Dynamo shall be treated as the owner of all the Licensed Intellectual Property and shall be entitled to all deductions claimed under Section 174 of the Code in respect of the Licensed Intellectual Property to the extent of the amounts funded by Symphony Dynamo; and

(b) No Party shall take any tax position inconsistent with any position described in Section 20(a) above, except (i) in the event of a “determination” (as defined in Section 1313 of the Code) to the contrary, or (ii) in the event either of the Parties receives an opinion of counsel to the effect that there is no reasonable basis in law for such a position or that a tax return cannot be prepared based on such a position without being subject to substantial understatement penalties; provided, however, that in the case of Dynavax, such counsel shall be reasonably satisfactory to Holdings.

Section 21. Original Agreement.

(a) The Original Agreement is hereby amended and superseded in its entirety and restated herein. Such amendment and restatement is effective upon execution of this Agreement by the Parties. Upon such execution, all provisions of, rights granted and covenants made in the Original Agreement are hereby superseded in their entirety by the provisions hereof and shall have no further force or effect.

(b) Defined terms in the Operative Documents (other than this Agreement) that refer to definitions in this Agreement shall be deemed to refer to the definitions in the Original Agreement, except where the context requires otherwise.

Section 22. Amendment to Annex A.

(a) The definition of “**Purchase Option Agreement**” in Annex A is hereby amended to read, “means the Purchase Option Agreement dated as of the Closing Date, among Dynavax, Holdings and Symphony Dynamo, as the same may be amended, amended and restated, supplemented or otherwise modified from time to time.”

(b) The definition of “**Registration Rights Agreement**” in Annex A is hereby amended to read, “means the Registration Rights Agreement dated as of the Closing Date, among Dynavax, Holdings and Symphony Dynamo, as the same may be amended, amended and restated, supplemented or otherwise modified from time to time.”

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have signed this Agreement as of the day and year first above written.

DYNAVAX TECHNOLOGIES CORPORATION

By: /s/ Dino Dina, M.D.
Name: Dino Dina, M.D.
Title: President & Chief Executive Officer

SYMPHONY DYNAMO HOLDINGS LLC

By: Symphony Capital Partners, L.P.,
its Manager

By: Symphony Capital OF, L.P.,
its general partner

By: Symphony GP, LLC,
its general partner

By: /s/ Mark Kessel
Name: Mark Kessel
Title: Managing Member

SYMPHONY DYNAMO, INC.

By: /s/ Harri V. Taranto
Name: Harri V. Taranto
Title: Chairman of the Board

Signature Page to the Amended and Restated Purchase Option Agreement

CERTAIN DEFINITIONS

“\$” means United States dollars.

“**Accredited Investor**” has the meaning set forth in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended.

“**Act**” means the Delaware Limited Liability Company Act, 6 Del. C. § 18-101 et seq.

“**Ad Hoc Meeting**” has the meaning set forth in Paragraph 6 of Annex B of the Amended and Restated Research and Development Agreement.

“**Additional Funds**” has the meaning set forth in Section 2(b) of the Funding Agreement.

“**Additional Funding Date**” has the meaning set forth in Section 3 of the Funding Agreement.

“**Additional Party**” has the meaning set forth in Section 13 of the Confidentiality Agreement.

“**Additional Regulatory Filings**” means such Governmental Approvals as required to be made under any law applicable to the purchase of the Symphony Dynamo Equity Securities under the Purchase Option Agreement.

“**Adjusted Capital Account Deficit**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Affected Member**” has the meaning set forth in Section 27 of the Investors LLC Agreement.

“**Affiliate**” means, with respect to any Person (i) any Person directly or indirectly controlling, controlled by or under common control with such Person, (ii) any officer, director, general partner, member or trustee of such Person, or (iii) any Person who is an officer, director, general partner, member or trustee of any Person described in clauses (i) or (ii) of this sentence. For purposes of this definition, the terms “controlling,” “controlled by” or “under common control with” shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person or entity, whether through the ownership of voting securities, by contract or otherwise, or the power to elect at least 50% of the directors, managers, general partners, or persons exercising similar authority with respect to such Person or entities.

“**Amended and Restated Research and Development Agreement**” means the Amended and Restated Research and Development Agreement dated as of the Closing Date, among Dynavax, Holdings and Symphony Dynamo.

“**Asset Value**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

Amended and Restated Purchase Option Agreement

“**Auditors**” means an independent certified public accounting firm of recognized national standing.

“**Avecia Agreement**” has the meaning set forth in Schedule 12.1(f) to the Amended and Restated Research and Development Agreement.

“**Bankruptcy Code**” means the United States Bankruptcy Code.

“**Berna**” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“**Business Day**” means any day other than Saturday, Sunday or any other day on which commercial banks in The City of New York or the City of San Francisco are authorized or required by law to remain closed.

“**Cancer Products**” mean any pharmaceutical product comprising a Selected ISS in the absence of any added tumor, cancer or viral antigen, for use in cancer treatment or therapy.

“**Cancer Program**” means the identification, development, manufacture and/or use of any Cancer Products in accordance with the Development Plan.

“**Capital Contributions**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Capitalized Leases**” means all leases that have been or should be, in accordance with GAAP, recorded as capitalized leases.

“**Cash Available for Distribution**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Chair**” has the meaning set forth in Paragraph 4 of Annex B to the Amended and Restated Research and Development Agreement.

“**Change of Control**” means and includes the occurrence of any of the following events, but specifically excludes (i) acquisitions of capital stock directly from Dynavax for cash, whether in a public or private offering, (ii) sales of capital stock by stockholders of Dynavax, and (iii) acquisitions of capital stock by or from any employee benefit plan or related trust:

(a) the merger, reorganization or consolidation of Dynavax into or with another corporation or legal entity in which Dynavax’s stockholders holding the right to vote with respect to matters generally immediately preceding such merger, reorganization or consolidation, own less than fifty percent (50%) of the voting securities of the surviving entity; or

(b) the sale of all or substantially all of Dynavax’s assets or business.

“**Class A Member**” means a holder of a Class A Membership Interest.

“**Class A Membership Interest**” means a Class A Membership Interest in Holdings.

“**Class B Member**” means a holder of a Class B Membership interest.

“**Class B Membership Interest**” means a Class B Membership Interest in Holdings.

“**Class C Member**” means a holder of a Class C Membership Interest.

“**Class C Membership Interest**” means a Class C Membership Interest in Holdings.

“**Closing Certificate for Section 5.1(e)**” means the written certificate, pertaining to the representations made by Dynavax under Section 5.1(e) of the Novated and Restated Technology License Agreement, provided by Dynavax to Symphony Dynamo Holdings LLC and Symphony Dynamo on the Closing Date.

“**Closing Certificate for Section 5.1(f)**” means the written certificate, pertaining to the representations made by Dynavax under Section 5.1(f) of the Novated and Restated Technology License Agreement, provided by Dynavax to Symphony Dynamo Holdings LLC and Symphony Dynamo on the Closing Date.

“**Client Schedules**” has the meaning set forth in Section 5(b)(i) of the RRD Services Agreement.

“**Clinical Budget Component**” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“**Closing Date**” means April 18, 2006.

“**CMC**” means the chemistry, manufacturing and controls documentation as required for filings with Regulatory Authority relating to the manufacturing, production and testing of drug products.

“**Code**” means the Internal Revenue Code of 1986, as amended from time to time.

“**Committed Capital**” means \$50,000,000.00.

“**Common Stock**” means the common stock, par value \$0.01 per share, of Symphony Dynamo.

“**Company Expenses**” has the meaning set forth in Section 5.09 of the Holdings LLC Agreement.

“**Company Property**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Confidential Information**” has the meaning set forth in Section 2 of the Confidentiality Agreement.

“**Confidentiality Agreement**” means the Confidentiality Agreement, dated as of the Closing Date, among Symphony Dynamo, Holdings, Dynavax, each Symphony Fund, SCP, SSP, Investors, Symphony Capital, RRD and Ann M. Arvin, M.D.

“**Conflict Transaction**” has the meaning set forth in Article X of the Symphony Dynamo Charter.

“**Control**” means, with respect to any material, information or intellectual property right, that a Party owns or has a license to such item or right, and has the ability to grant the other Party access, a license or a sublicense (as applicable) in or to such item or right as provided in the Operative Documents without violating the terms of any agreement or other arrangement with any third party.

“**Debt**” of any Person means, without duplication:

- (a) all indebtedness of such Person for borrowed money,
- (b) all obligations of such Person for the deferred purchase price of property or services (other than any portion of any trade payable obligation that shall not have remained unpaid for 91 days or more from the later of (A) the original due date of such portion and (B) the customary payment date in the industry and relevant market for such portion),
- (c) all obligations of such Person evidenced by bonds, notes, debentures or other similar instruments,
- (d) all obligations of such Person created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (whether or not the rights and remedies of the seller or lender under such agreement in an event of default are limited to repossession or sale of such property),
- (e) all Capitalized Leases to which such Person is a party,
- (f) all obligations, contingent or otherwise, of such Person under acceptance, letter of credit or similar facilities,
- (g) all obligations of such Person to purchase, redeem, retire, defease or otherwise acquire for value any Equity Securities of such Person,
- (h) the net amount of all financial obligations of such Person in respect of Hedge Agreements,
- (i) the net amount of all other financial obligations of such Person under any contract or other agreement to which such Person is a party,
- (j) all Debt of other Persons of the type described in clauses (a) through (i) above guaranteed, directly or indirectly, in any manner by such Person, or in effect guaranteed, directly or indirectly, by such Person through an agreement (A) to pay or purchase such Debt or to advance or supply funds for the payment or purchase of such Debt, (B) to purchase, sell or lease (as lessee or lessor) property, or to purchase or sell services, primarily for the purpose of enabling the debtor to make payment of such Debt or to assure the holder of such Debt against loss, (C) to supply funds to or in any other manner invest in the debtor (including any agreement to pay for property or services irrespective of whether such property is received or such services are rendered) or (D) otherwise to assure a creditor against loss, and
- (k) all Debt of the type described in clauses (a) through (i) above secured by (or for which the holder of such Debt has an existing right, contingent or otherwise, to be secured by) any Encumbrance on property (including accounts and contract rights) owned or held or used under lease or license by such Person, even though such Person has not assumed or become liable for payment of such Debt.

“Development Budget” means the budget (comprised of the Management Budget Component and the Clinical Budget Component) for the implementation of the Development Plan (the initial form of which was agreed upon by Dynavax and Symphony Dynamo as of the Closing Date and attached to the Amended and Restated Research and Development Agreement as Annex D thereto), as may be further developed and revised from time to time in accordance with the Development Committee Charter and the Amended and Restated Research and Development Agreement.

“Development Committee” has the meaning set forth in Article 3 of the Amended and Restated Research and Development Agreement.

“Development Committee Charter” has the meaning set forth in Article 3 of the Amended and Restated Research and Development Agreement.

“Development Committee Member” has the meaning set forth in Paragraph I of Annex B to the Amended and Restated Research and Development Agreement.

“Development Plan” means the development plan covering all the Programs (the initial form of which was agreed upon by Dynavax and Symphony Dynamo as of the Closing Date and attached to the Amended and Restated Research and Development Agreement as Annex C thereto), as may be further developed and revised from time to time in accordance with the Development Committee Charter and the Amended and Restated Research and Development Agreement.

“Development Services” has the meaning set forth in Section 1(b) of the RRD Services Agreement.

“Director(s)” has the meaning set forth in the Preliminary Statement of the Indemnification Agreement.

“Disclosing Party” has the meaning set forth in Section 3 of the Confidentiality Agreement.

“Discontinuation Closing Date” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Date” means any date designated by Symphony Dynamo which shall occur on or after the 90th day following the receipt by Dynavax of notice from Symphony Dynamo of Symphony Dynamo’s intent to discontinue a Program in accordance with the terms of the Amended and Restated Research and Development Agreement.

“Discontinuation Option” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Price” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Price Dispute Notice” has the meaning set forth in Section 11.3(b) of the Amended and Restated Research and Development Agreement.

“Discontinued Program” has the meaning set forth in Section 2.11 of the Novated and Restated Technology License Agreement.

“Discontinuation Program Funding” has the meaning set forth in Section 11.3(b) of the Amended and Restated Research and Development Agreement.

“Disinterested Directors” has the meaning set forth in Article X of the Symphony Dynamo Charter.

“Distribution” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Dynavax” means Dynavax Technologies Corporation, a Delaware corporation.

“Dynavax Common Stock” means the common stock, par value \$0.001 per share, of Dynavax.

“Dynavax Common Stock valuation” has the meaning set forth in Section 2(e) of the Purchase Option Agreement.

“Dynavax Obligations” has the meaning set forth in Section 6.1 of the Amended and Restated Research and Development Agreement.

“Dynavax Personnel” has the meaning set forth in Section 8.4 of the Amended and Restated Research and Development Agreement.

“Dynavax Subcontractor” has the meaning set forth in Section 6.2 of the Amended and Restated Research and Development Agreement.

“Early Purchase Option Exercise” has the meaning set forth in Section 1(c)(iv) of the Purchase Option Agreement.

“Effective Registration Date” has the meaning set forth in Section 1(b) of the Registration Rights Agreement

“Encumbrance” means (i) any security interest, pledge, mortgage, lien (statutory or other), charge or option to purchase, lease or otherwise acquire any interest, (ii) any adverse claim, restriction, covenant, title defect, hypothecation, assignment, deposit arrangement, license or other encumbrance of any kind, preference or priority, or (iii) any other security agreement or preferential arrangement of any kind or nature whatsoever (including, without limitation, any conditional sale or other title retention agreement).

“Enhancements” means findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Intellectual Property and/or Regulatory Files, in each case whether or not patentable.

“Equity Securities” means, with respect to any Person, shares of capital stock of (or other ownership or profit interests in) such Person, warrants, options or other rights for the purchase or other

acquisition from such Person of shares of capital stock of (or other ownership or profit interests in) such Person, securities convertible into or exchangeable for shares of capital stock of (or other ownership or profit interests in) such Person or warrants, rights or options for the purchase or other acquisition from such Person of such shares (or such other interests), and other ownership or profit interests in such Person (including, without limitation, partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are authorized or otherwise existing on any date of determination.

“**ERISA**” means the United States Employee Retirement Income Security Act of 1974, as amended.

“**Excepted Debt**” has the meaning set forth in Section 5(c)(iii) of the Purchase Option Agreement.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Excluded ISS**” means (a) any ISS testing positive for stimulation of TLR-9 by Dynavax prior to the Closing Date that is not a Selected ISS, or (b) any ISS made and tested for activity by Dynavax during the Term that (i) is not designed to have significant activity with a target other than TLR-9 (whether or not it also acts through TLR-9) and (ii) is not a Selected ISS.

“**Existing NDA**” has the meaning set forth in Section 2 of the Confidentiality Agreement.

“**External Directors**” has the meaning set forth in the preamble of the Confidentiality Agreement.

“**FDA**” means the United States Food and Drug Administration or its successor agency in the United States.

“**FDA Sponsor**” has the meaning set forth in Section 5.1 of the Amended and Restated Research and Development Agreement.

“**Final Discontinuation Price**” has the meaning set forth in Section 11.3(c) of the Amended and Restated Research and Development Agreement.

“**Financial Audits**” has the meaning set forth in Section 6.6 of the Amended and Restated Research and Development Agreement,

“**Financing**” has the meaning set forth in the Preliminary Statement of the Purchase Option Agreement.

“**Fiscal Year**” has the meaning set forth in each Operative Document in which it appears.

“**Form S-3**” means the Registration Statement on Form S-3 as defined under the Securities Act.

“**FTE**” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“**Funding Agreement**” means the Funding Agreement, dated as of the Closing Date, among Dynavax, SCP and Investors.

“**Funding Notice**” has the meaning set forth in Section 2(b) of the Funding Agreement.

“**GAAP**” means generally accepted accounting principles in effect in the United States of America from time to time.

“**Governmental Approvals**” means authorizations, consents, orders, declarations or approvals of, or filings with, or terminations or expirations of waiting periods imposed by any Governmental Authority.

“**Governmental Authority**” means any United States or non-United States federal, national, supranational, state, provincial, local, or similar government, governmental, regulatory or administrative authority, agency or commission or any court, tribunal, or judicial or arbitral body.

“**Governmental Order**” means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

“**Hedge Agreement**” means any interest rate swap, cap or collar agreement, interest rate future or option contract, currency swap agreement, currency future or option contract or other similar hedging agreement.

“**Hepatitis B Products**” mean any pharmaceutical product comprising a Selected ISS, either alone or in combination with Hepatitis B Surface Antigen (HBsAg), whether conjugated or unconjugated to the applicable ISS, for use in Hepatitis B treatment or therapy.

“**Hepatitis B Program**” means the identification, development, manufacture and/or use of any Hepatitis B Products in Accordance with the Development Plan.

“**Hepatitis C Products**” mean any pharmaceutical product comprising a Selected ISS, either alone or in combination with an added Hepatitis C antigen, whether conjugated or unconjugated to the applicable ISS, for use in Hepatitis C treatment or therapy.

“**Hepatitis C Program**” means the identification, development, manufacture and/or use of any Hepatitis C Products in Accordance with the Development Plan.

“**Holdings**” means Symphony Dynamo Holdings LLC, a Delaware limited liability company.

“**Holdings Claims**” has the meaning set forth in Section 5.01 of the Warrant Purchase Agreement.

“**Holdings LLC Agreement**” means the Amended and Restated Limited Liability Company Agreement of Holdings, dated as of the Closing Date.

“HSR Act Filings” means the premerger notification and report forms required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

“IND” means an Investigational New Drug Application, as described in 21 U.S.C. § 355(i)(1) and 21 C.F.R. § 312 in the regulations promulgated by the United States Food and Drug Administration, or any foreign equivalent thereof.

“Indemnification Agreement” means the Indemnification Agreement among Symphony Dynamo and the Directors named therein, dated as of the Closing Date.

“Indemnified Party” has the meaning set forth in each Operative Document in which it appears.

“Indemnified Proceeding” has the meaning set forth in each Operative Document in which it appears.

“Indemnifying Party” has the meaning set forth in each Operative Document in which it appears.

“Independent Accountant” has the meaning set forth in Section 11.3(c) of the Amended and Restated Research and Development Agreement.

“Initial Development Budget” means the initial development budget prepared by representatives of Symphony Dynamo and Dynavax prior to the Closing Date, and attached to the Amended and Restated Research and Development Agreement as Annex D thereto.

“Initial Development Plan” means the initial development plan prepared by representatives of Symphony Dynamo and Dynavax prior to the Closing Date, and attached to the Amended and Restated Research and Development Agreement as Annex C thereto.

“Initial Funds” has the meaning set forth in Section 2(a) of the Funding Agreement.

“Initial Holdings LLC Agreement” means the Agreement of Limited Liability Company of Holdings, dated January 10, 2006.

“Initial Investors LLC Agreement” means the Agreement of Limited Liability Company of Investors, dated January 10, 2006.

“Initial LLC Member” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Interest Certificate” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Investment Company Act” means the Investment Company Act of 1940, as amended.

“Investment Overview” means the investment overview describing the transactions entered into pursuant to the Operative Documents.

“**Investment Policy**” has the meaning set forth in Section 1(a)(vi) of the RRD Services Agreement.

“**Investors**” means Symphony Dynamo Investors LLC.

“**Investors LLC Agreement**” means the Amended and Restated Agreement of Limited Liability Company of Investors dated as of the Closing Date

“**IRS**” means the U.S. Internal Revenue Service.

“**ISS**” means any synthetic oligonucleotide sequence or chimeric oligonucleotide sequence that modulates an immune response, including, but not limited to, such sequences referred to by Dynavax as immunostimulatory sequences, chimeric immunomodulatory compounds and branched immunomodulatory compounds.

“**Knowledge**” means the actual (and not imputed) knowledge of the executive officers of Dynavax, without the duty of inquiry or investigation.

“**Law**” means any law, statute, treaty, constitution, regulation, rule, ordinance, order or Governmental Approval, or other governmental restriction, requirement or determination, of or by any Governmental Authority.

“**License**” has the meaning set forth in the Preliminary Statement of the Purchase Option Agreement.

“**Licensed Intellectual Property**” means the Licensed Patent Rights, Symphony Dynamo Enhancements, Licensor Enhancements and the Licensed Know-How.

“**Licensed Know-How**” means any and all proprietary technology that is Controlled by Licensor as of the Closing Date and that relates to the Licensed Patent Rights, Regulatory Files, ISSs or the Programs, including without limitation, manufacturing processes or protocols, know-how, writings, documentation, data, technical information, techniques, results of experimentation and testing, diagnostic and prognostic assays, specifications, databases, any and all laboratory, research, pharmacological, toxicological, analytical, quality control pre-clinical and clinical data, and other information and materials, whether or not patentable.

“**Licensed Patent Rights**” means:

- (a) any and all patents, patent applications and invention disclosures Controlled by Licensor as of the Closing Date and relating to ISSs or the Programs, including, but not limited to, the patents and patent applications listed on Annex B to the Novated and Restated Technology License Agreement;
- (b) any and all reissues, continuations, divisionals, continuations-in-part (but only to the extent the subject matter in such continuations-in-part has been disclosed in the patents or patent applications listed on Annex B), reexaminations, renewals, substitutes, extensions or foreign counterparts of the foregoing, whether filed prior to or after the expiration or termination of the Purchase Option; and

(c) any and all patents and patent applications that claim Licensor Enhancements or Symphony Dynamo Enhancements.

“Licensor” means Dynavax.

“Licensor Enhancements” means all findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Patent Rights, Licensed Know-How, Regulatory Files, ISSs, Products or the Programs, in each case, developed by Licensor during the Term in the course of performing Dynavax’s rights and obligations under the Amended and Restated Research & Development Agreement (in each case whether or not patentable), to the extent such items do not otherwise qualify as Symphony Dynamo Enhancements hereunder, regardless of whether such work is funded by Symphony Dynamo or Dynavax.

“Lien” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Liquidating Event” has the meaning set forth in Section 8.01 of the Holdings LLC Agreement.

“LLC Agreements” means the Initial Holdings LLC Agreement, the Holdings LLC Agreement, the Initial Investors LLC Agreement and the Investors LLC Agreement.

“Loss” has the meaning set forth in each Operative Document in which it appears.

“Management Budget Component” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“Management Fee” has the meaning set forth in Section 6(a) of the RRD Services Agreement.

“Manager” means (i) for each LLC Agreement in which it appears, the meaning set forth in such LLC Agreement, and (ii) for each other Operative Document in which it appears, RRD.

“Management Services” has the meaning set forth in Section 1(a) of the RRD Services Agreement.

“Manager Event” has the meaning set forth in Section 3.01(g) of the Holdings LLC Agreement.

“Material Adverse Effect” means, with respect to any Person, a material adverse effect on (i) the business, assets, property or condition (financial or otherwise) of such Person or, (ii) its ability to comply with and satisfy its respective agreements and obligations under the Operative Documents or, (iii) the enforceability of the obligations of such Person of any of the Operative Documents to which it is a party.

“Material Subsidiary” means, at any time, a Subsidiary of Dynavax having assets in an amount equal to at least 5% of the amount of total consolidated assets of Dynavax and its Subsidiaries (determined as of the last day of the most recent reported fiscal quarter of Dynavax) or revenues or net income in an amount equal to at least 5% of the amount of total consolidated revenues or net income of Dynavax and its Subsidiaries for the 12-month period ending on the last day of the most recent reported fiscal quarter of Dynavax.

“Medical Discontinuation Event” means (a) as specified in each Protocol, those data that, if collected in such Protocol, demonstrate that such Protocol should not be continued or (b) a series of adverse events, side effects or other undesirable outcomes that, when collected in a Protocol, would cause a reasonable FDA Sponsor to discontinue such Protocol.

“Membership Interest” means (i) for each LLC Agreement in which it appears, the meaning set forth in such LLC Agreement, and (ii) for each other Operative Document in which it appears, the meaning set forth in the Holdings LLC Agreement.

“NASDAQ” means the National Association of Securities Dealers Automated Quotation System.

“NDA” means a New Drug Application, as defined in the regulations promulgated by the United States Food and Drug Administration, or any foreign equivalent thereof.

“Non-Dynavax Capital Transaction” means any (i) sale or other disposition of all or part of the Symphony Dynamo Shares or all or substantially all of the operating assets of symphony Dynamo, to a Person other than Dynavax or an Affiliate of Dynavax or (ii) distribution in kind of the Symphony Dynamo Shares following the expiration of the Purchase Option.

“Non-Symphony Dynamo ISS” means any ISS that is (i) first made and tested for activity by Dynavax during the Term and (ii) designed to have significant activity with a target other than TLR-9, whether or not it also acts through TLR-9.

“Novated and Restated Technology License Agreement” means the Novated and Restated Technology License Agreement, dated as of the Closing Date, among Dynavax, Symphony Dynamo and Holdings.

“Operative Documents” means, collectively, the Indemnification Agreement, the Holdings LLC Agreement, the Purchase Option Agreement, the Warrant Purchase Agreement, the Registration Rights Agreement, the Subscription Agreement, the Technology License Agreement, the Novated and Restated Technology License Agreement, the RRD Services Agreement, the Research and Development Agreement, the Amended and Restated Research and Development Agreement, the Confidentiality Agreement, the Funding Agreement and each other certificate and agreement executed in connection with any of the foregoing documents.

“Organizational Documents” means any certificates or articles of incorporation or formation, partnership agreements, trust instruments, bylaws or other governing documents.

“Partial Stock Payment” has the meaning set forth in Section 3(a)(iii) of the Purchase Option Agreement.

“Party(ies)” means, for each Operative Document or other agreement in which it appears, the parties to such Operative Document or other agreement, as set forth therein. With respect to any

agreement in which a provision is included therein by reference to a provision in another agreement, the term “Party” shall be read to refer to the parties to the document at hand, not the agreement that is referenced.

“**Payment Terms**” has the meaning set forth in Section 8.2 of the Amended and Restated Research and Development Agreement.

“**Percentage**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Permitted Investments**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Permitted Lien**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Person**” means any individual, partnership (whether general or limited), limited liability company, corporation, trust, estate, association, nominee or other entity.

“**Personnel**” of a Party means such Party, its employees, subcontractors, consultants, representatives and agents.

“**Prime Rate**” means the quoted “Prime Rate” at JPMorgan Chase Bank or, if such bank ceases to exist or is not quoting a base rate, prime rate reference rate or similar rate for United States dollar loans, such other major money center commercial bank in New York City selected by the Manager.

“**Products**” means Cancer Products, Hepatitis B Products and Hepatitis C Products.

“**Profit**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Program Option**” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“**Program Option Closing Date**” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“**Program Option Exercise Date**” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“**Program Option Exercise Notice**” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“**Program Option Period**” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“**Programs**” means Cancer Program, Hepatitis B Program and Hepatitis C Program.

“**Protocol**” means a written protocol that meets the substantive requirements of Section 6 of the ICH Guideline for Good Clinical Practice as adopted by the FDA, effective May 9, 1997 and is included within the Development Plan or later modified or added to the Development Plan pursuant to the Amended and Restated Research and Development Agreement.

“Public Companies” has the meaning set forth in Section 5(e) of the Purchase Option Agreement.

“Purchase Option” has the meaning set forth in Section 1(a) of the Purchase Option Agreement.

“Purchase Option Agreement” means this Purchase Option Agreement dated as of the Closing Date, among Dynavax, Holdings and Symphony Dynamo.

“Purchase Option Closing” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Closing Date” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Commencement Date” has the meaning set forth in Section 1(c)(iii) of the Purchase Option Agreement.

“Purchase Option Exercise Date” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Exercise Notice” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Interim Date” has the meaning set forth in Section 2(b)(i) of the Purchase Option Agreement.

“Purchase Option Period” has the meaning set forth in Section 1(c)(iii) of the Purchase Option Agreement.

“Purchase Price” has the meaning set forth in Section 2(b) of the Purchase Option Agreement.

“Put Option” has the meaning set forth in Section 2A of the Purchase Option Agreement.

“Put Option Exercise Notice” has the meaning set forth in Section 2A of the Purchase Option Agreement.

“QA Audits” has the meaning set forth in Section 6.5 of the Amended and Restated Research and Development Agreement.

“Quarterly Price” has the meaning set forth in Section 2(b)(i) of the Purchase Option Agreement.

“Regents” has the meaning set forth in Section 3.1 of the Novated and Restated Technology License Agreement.

“Regents Agreement” has the meaning set forth in Section 3.1 of the Novated and Restated Technology License Agreement.

“Registration Rights Agreement” means the Registration Rights Agreement dated as of the Closing Date, between Dynavax and Holdings.

“Registration Statement” has the meaning set forth in Section 1(b) of the Registration Rights Agreement.

“Regulatory Authority” means the United States Food and Drug Administration, or any successor agency in the United States, or any health regulatory authority(ies) in any other country that is a counterpart to the FDA and has responsibility for granting registrations or other regulatory approval for the marketing, manufacture, storage, sale or use of drugs in such other country.

“Regulatory Allocation” has the meaning set forth in Section 3.06 of the Holdings LLC Agreement.

“Regulatory Files” means any IND, NDA or any other filings filed with any Regulatory Authority with respect to the Programs.

“Related Oncology Products Agreement” has the meaning set forth in Section 1.1.4 of the Amended and Restated Research and Development Agreement.

“Replacement Warrant(s)” has the meaning set forth in Section 7.08 of the Warrant Purchase Agreement.

“Representative” of any Person means such Person’s shareholders, principals, directors, officers, employees, members, managers and/or partners.

“Research and Development Agreement” means the Research and Development Agreement dated as of the Closing Date, between Dynavax and Holdings.

“Rhein” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“Rhein Sale Agreement” has the meaning set forth in Section 11.2(a) of the Amended and Restated Research and Development Agreement.

“RRD” means RRD International, LLC, a Delaware limited liability company.

“RRD Indemnified Party” has the meaning set forth in Section 10(a) of the RRD Services Agreement.

“RRD Loss” has the meaning set forth in Section 10(a) of the RRD Services Agreement.

“**RRD Parties**” has the meaning set forth in Section 9(e) of the RRD Services Agreement.

“**RRD Personnel**” has the meaning set forth in Section I(a)(ii) of the RRD Services Agreement.

“**RRD Services Agreement**” means the RRD Services Agreement between Symphony Dynamo and RRD, dated as the Closing Date, 2006.

“**Schedule K-1**” has the meaning set forth in Section 9.02(a) of the Holdings LLC Agreement.

“**Scheduled Meeting**” has the meaning set forth in Paragraph 6 of Annex B of the Amended and Restated Research and Development Agreement.

“**Scientific Discontinuation Event**” has the meaning set forth in Section 4.2(c) of the Amended and Restated Research and Development Agreement.

“**SCP**” means Symphony Capital Partners, L.P., a Delaware limited partnership.

“**SD Program Option**” has the meaning set forth in Section 11.2(b) of the Amended and Restated Research and Development Agreement.

“**SD Program Option Exercise Notice**” has the meaning set forth in Section 11.2(b) of the Amended and Restated Research and Development Agreement.

“**SEC**” means the United States Securities and Exchange Commission.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Selected ISS**” means any ISS testing positive for stimulation of TLR-9 selected (i) for inclusion in the Development Plan or (ii) as a backup ISS, in each case pursuant to Paragraph 12 of the Development Committee Charter. Selected ISS may include sequences that subsequent to the Closing Date are shown to act through one or more additional mechanisms in addition to stimulation of TLR-9.

“**Shareholder**” means any Person who owns any Symphony Dynamo Shares.

“**Solvent**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**SSP**” means Symphony Strategic Partners, LLC, a Delaware limited liability company.

“**Stock Payment Date**” has the meaning set forth in Section 2 of the Subscription Agreement.

“**Stock Purchase Price**” has the meaning set forth in Section 2 of the Subscription Agreement.

“**Subcontracting Agreement**” has the meaning set forth in Section 6.2 of the Amended and Restated Research and Development Agreement.

“Subscription Agreement” means the Subscription Agreement between Symphony Dynamo and Holdings, dated as the Closing Date.

“Subsidiary” of any Person means any corporation, partnership, joint venture, limited liability company, trust or estate of which (or in which) more than 50% of (a) the issued and outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether at the time capital stock of any other class or classes of such corporation shall or might have voting power upon the occurrence of any contingency); (b) the interest in the capital or profits of such partnership, joint venture or limited liability company; or (c) the beneficial interest in such trust or estate is at the time directly or indirectly owned or controlled by such Person, by such person and one or more of its other Subsidiaries or by one or more of such Person’s other Subsidiaries.

“Surviving Entity” means the surviving or resulting “parent” legal entity which is surviving entity to Dynavax after giving effect to a Change of Control.

“Symphony Capital” means Symphony Capital LLC, a Delaware limited liability company.

“Symphony Dynamo” means Symphony Dynamo, Inc., a Delaware corporation.

“Symphony Dynamo Auditors” has the meaning set forth in Section 5(b) of the RRD Services Agreement.

“Symphony Dynamo Board” means the board of directors of Symphony Dynamo.

“Symphony Dynamo By-laws” means the By-laws of Symphony Dynamo, as adopted by resolution of the Symphony Dynamo Board on the Closing Date.

“Symphony Dynamo Charter” means the Amended and Restated Certificate of Incorporation of Symphony Dynamo, dated as of the Closing Date.

“Symphony Dynamo Director Event” has the meaning set forth in Section 3.01(h)(i) of the Holdings LLC Agreement.

“Symphony Dynamo Enhancements” means findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Intellectual Property, Regulatory Files, ISSs, Products or the Programs, made by or on behalf of Symphony Dynamo during the Term, in each case whether or not patentable.

“Symphony Dynamo Equity Securities” means the Common Stock and any other stock or shares issued by Symphony Dynamo.

“Symphony Dynamo Loss” has the meaning set forth in Section 10(b) of the RRD Services Agreement.

“Symphony Dynamo Shares” has the meaning set forth in Section 2.02 of the Holdings LLC Agreement.

“**Symphony Fund(s)**” means Symphony Capital Partners, L.P., a Delaware limited partnership, and Symphony Strategic Partners, LLC, a Delaware limited liability company.

“**Tangible Materials**” means any tangible documentation, whether written or electronic, existing as of the Closing Date or during the Term, that is Controlled by the Licensor, embodying the Licensed Intellectual Property, Regulatory Files, Products or the Programs, including, but not limited to, documentation, patent applications and invention disclosures.

“**Tax Amount**” has the meaning set forth in Section 4.02 of the Holdings LLC Agreement.

“**Technology License Agreement**” means the Technology License Agreement, dated as of the Closing Date, between Dynavax and Holdings.

“**Term**” has the meaning set forth in Section 4(b)(iii) of the Purchase Option Agreement, unless otherwise stated in any Operative Document.

“**Territory**” means the world.

“**Third Party IP**” has the meaning set forth in Section 2.11 of the Novated and Restated Technology License Agreement.

“**Third Party Licensor**” means a third party from which Dynavax has received a license or sublicense to Licensed Intellectual Property.

“**Transfer**” has for each Operative Document in which it appears the meaning set forth in such Operative Document.

“**Transferee**” has, for each Operative Document in which it appears, the meaning set forth in such Operative Document.

“**Voluntary Bankruptcy**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Warrant(s)**” means the “Warrant” as defined in Section 2.01 of the Warrant Purchase Agreement, and/or any successor certificates exercisable for Warrant Shares issued by Dynavax.

“**Warrant Closing**” has the meaning set forth in Section 2.03 of the Warrant Purchase Agreement.

“**Warrant Date**” has the meaning set forth in Section 2.02 of the Warrant Purchase Agreement.

“**Warrant Purchase Agreement**” means the Warrant Purchase Agreement, dated as of the Closing Date, between Dynavax and Holdings.

“**Warrant Shares**” has the meaning set forth in Section 2.01 of the Warrant Purchase Agreement.

“**Warrant Surrender Price**” has the meaning set forth in Section 7.08 of the Warrant Purchase Agreement.

FORM OF PURCHASE OPTION EXERCISE NOTICE

_____, 20__

Attention: _____

Ladies and Gentlemen:

Reference is hereby made to that certain Amended and Restated Purchase Option Agreement dated as of November 9, 2009 (the "**Purchase Option Agreement**") by and among Dynavax Technologies Corporation, a Delaware corporation ("**Dynavax**"), Symphony Dynamo Holdings LLC, a Delaware limited liability company, and Symphony Dynamo, Inc., a Delaware corporation. Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned thereto in the Purchase Option Agreement.

Pursuant to Section 2(a) of the Purchase Option Agreement, Dynavax hereby irrevocably notifies you that it hereby exercises the Purchase Option.

Subject to the terms set forth therein, Dynavax hereby affirms the representations and warranties set forth in Section 3(a) of the Purchase Option Agreement, as of the date hereof.

Dynavax estimates that the Purchase Option Closing Date will be _____.

Very truly yours,

DYNAVAX TECHNOLOGIES CORPORATION

By: _____
Name:
Title:

Exhibit 1 to the
Purchase Option Agreement

FORM OF DYNAVAX PROMISSORY NOTE

THIS PROMISSORY NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF, UNLESS IN ACCORDANCE WITH THE FOREGOING SECURITIES LAWS AND WITH THE TERMS HEREOF.

PROMISSORY NOTE

\$15,000,000.00

_____, __, 2009

FOR VALUE RECEIVED, Dynavax Technologies Corporation, a Delaware corporation (“Obligor”), promises to pay to Symphony Dynamo Holdings LLC, a Delaware limited liability company (“Payee”), in lawful money of the United States of America, the principal sum of Fifteen Million Dollars (\$15,000,000.00).

This Promissory Note (this “Note”) has been executed and delivered pursuant to and in accordance with the terms and conditions of that certain Amended and Restated Purchase Option Agreement, dated as of the date hereof, by and among Obligor, Payee and the other parties thereto (the “Agreement”) and is subject to the terms and conditions of the Agreement. Capitalized terms used in this Note without definition shall have the respective meanings set forth in the Agreement.

1. PAYMENTS

1.1 MATURITY DATE

The principal amount of this Note shall be due and payable on December 31, 2012 (the “Maturity Date”).

1.2 INTEREST

The principal amount of this Note shall not bear interest.

1.3 MANNER OF PAYMENT

At the option of Obligor, the principal amount of this Note shall be paid in (i) cash, (ii) Dynavax Common Stock, or (iii) any combination thereof. In the event Obligor elects to pay all or a portion of the outstanding principal amount of this Note using Dynavax Common Stock, in addition to any payment of cash by Obligor to Payee, Obligor shall issue to Payee on the date of such payment the number of shares of Dynavax Common Stock (rounded up to the nearest whole number) equal to (a) (i) an amount equal to the portion of the outstanding principal amount of this Note to be repaid using Dynavax Common Stock, divided by (ii) the average closing price of Dynavax Common Stock, as reported by the NASDAQ Global Market, or other national exchange that is the primary exchange on which Dynavax Common Stock is then listed, for the thirty (30) trading days immediately preceding (but not including) the second trading day prior to the date of such payment multiplied by (b) 1.15.

All Dynavax Common Stock issued to Payee pursuant to the foregoing shall be registered pursuant to a registration statement filed concurrently with the issuance of such Dynavax Common Stock in accordance with that certain Amended and Restated Registration Rights Agreement by and between the Obligor and Payee of even date herewith. In the event that such Dynavax Common Stock is not registered in accordance with the foregoing, Dynavax shall make all payments of principal hereunder in cash.

All payments in cash on this Note shall be made by wire transfer of immediately available funds to an account designated by Payee in writing or in such other manner as may be agreed to by the parties in writing.

1.4 PREPAYMENT

Obligor may, without premium or penalty, at any time and from time to time, prepay in cash all or any portion of the outstanding principal balance due under this Note.

2. DEFAULTS

2.1 EVENTS OF DEFAULT

The occurrence of any one or more of the following events with respect to Obligor shall constitute an event of default hereunder ("Event of Default"):

(a) If Obligor shall fail to pay when due any payment of principal on this Note.

(b) If Obligor shall (i) apply for or consent to the appointment of a receiver, trustee or liquidator for itself or any of its assets or properties, (ii) admit in writing its inability to pay its debts as they mature, (iii) make a general assignment for the benefit of creditors, (iv) be adjudicated as bankrupt or insolvent, (v) file a voluntary petition in bankruptcy, or a petition or an answer seeking reorganization or an arrangement with creditors or to take advantage of any bankruptcy, reorganization, insolvency, readjustment of debt, dissolution or liquidation law or statute, or any answer admitting the material allegations of a petition filed against it in any proceeding under any such law or if action shall be taken by Obligor for the purpose of effecting any of the foregoing, (vi) have commenced against it any case, proceeding or other action of a nature described in (i) through (v) above which remains undismissed for a period of 60 days or (vii) take or be subject to any action similar to those specified in clauses (i) through (vi) in any jurisdiction;

(c) If an order, judgment or decree shall be entered with respect to Obligor or all or a substantial part of the assets of Obligor, appointing a receiver, trustee or liquidator of Obligor, or any similar order, judgment or decree shall be entered or appointment made in any jurisdiction, and such order, judgment or decree or appointment shall continue unstayed and in effect for a period of 60 days.

(d) If (i) Obligor shall consolidate or merge with, or sell, lease or otherwise transfer (in a single transaction or series of related transactions) all or substantially all of its assets to, any other Person or (ii) any Subsidiary of Obligor that has assets representing all or substantially all of the assets of Obligor and its Subsidiaries, taken as a whole, shall consolidate or merge with, or sell, lease or otherwise transfer (in a single transaction or series of related transactions) all or substantially all of its assets to, any other Person (other than Obligor or another Subsidiary thereof).

(e) If Obligor shall dissolve, be liquidated or wound up for any reason.

2.2 NOTICE BY MAKER

Obligor shall notify Payee in writing within five Business Days after the occurrence of any Event of Default in accordance with Section 13 of the Agreement.

2.3 REMEDIES

Upon the occurrence of an Event of Default under clause (a) of Section 2.1, and at any time thereafter during the continuance of such Event of Default, Payee may declare the unpaid principal balance of this Note to be due and payable in whole (or in part, in which case any principal not so declared to be due and payable may thereafter be declared to be due and payable), and thereupon the principal of the Note so declared to be due and payable shall

become due and payable immediately, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by Obligor; and upon the occurrence of an Event of Default under clauses (b), (c), (d) or (e) of Section 2.1, the unpaid principal balance of this Note shall automatically become due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby waived by Obligor. Obligor shall pay all reasonable documented costs and expenses incurred by or on behalf of Payee in connection with Payee's exercise of any or all of its rights and remedies under this Note, including, without limitation, reasonable attorneys' fees.

3. MISCELLANEOUS

3.1 WAIVER

The rights and remedies of Payee under this Note shall be cumulative and not alternative. No waiver by Payee of any right or remedy under this Note shall be effective unless in a writing signed by Payee. Neither the failure nor any delay in exercising any right, power or privilege under this Note will operate as a waiver of such right, power or privilege, and no single or partial exercise of any such right, power or privilege by Payee will preclude any other or further exercise of such right, power or privilege or the exercise of any other right, power or privilege. To the maximum extent permitted by applicable law, (a) no claim or right of Payee arising out of this Note can be discharged by Payee, in whole or in part, by a waiver or renunciation of the claim or right unless in a writing signed by Payee; (b) no waiver that may be given by Payee will be applicable except in the specific instance for which it is given; and (c) no notice to or demand on Obligor will be deemed to be a waiver of any obligation of Obligor or of the right of Payee to take further action without notice or demand as provided in this Note. Obligor hereby waives presentment, demand, protest and notice of dishonor and protest.

3.2 NOTICES

Any notice required or permitted to be given hereunder shall be given in accordance with Section 13 of the Agreement.

3.3 SEVERABILITY

If any provision in this Note is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Note will remain in full force and effect. Any provision of this Note held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

3.4 GOVERNING LAW

This Note shall be governed and construed in accordance with the laws of the State of New York.

3.5 CONSENT TO JURISDICTION

Any claim arising out of or relating to this Note or the transactions contemplated hereby may be instituted in any New York State court, Delaware State court or federal court of the United States of America sitting in the City of New York, borough of Manhattan or Wilmington Delaware, and any appellate court from any jurisdiction thereof, and each party agrees not to assert, by way of motion, as a defense or otherwise, in any such claim, any claim that it is not subject personally to the jurisdiction of such court, that the claim is brought in an inconvenient forum, that the venue of the claim is improper or that this Note or the subject matter hereof may not be enforced in or by such court. Each party further irrevocably submits to the jurisdiction of such court in any such claim. Any and all service of process and any other notice in any such claim shall be effective against any party if given personally or by registered or certified mail, return receipt requested, or by any other means of mail that requires a signed receipt, postage prepaid, mailed to such party as herein provided. Nothing herein contained shall be deemed to affect the right of any party to serve process in any manner permitted by law or to commence legal proceedings or otherwise proceed against any other party in any other jurisdiction.

3.6 WAIVER OF JURY TRIAL

EACH PARTY HERETO IRREVOCABLY WAIVES ALL RIGHTS TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS NOTE.

3.7 PARTIES IN INTEREST

This Note shall not be assigned or transferred by Payee without the express prior written consent of Obligor. Subject to the preceding sentence, this Note will be binding in all respects upon Obligor and inure to the benefit of Payee and its successors and assigns.

3.8 SECTION HEADINGS; CONSTRUCTION

The headings of Sections in this Note are provided for convenience only and will not affect its construction or interpretation. All references to "Section" or "Sections" refer to the corresponding Section or Sections of this Note unless otherwise specified. All words used in this Note will be construed to be of such gender or number as the circumstances require. Unless otherwise expressly provided, the words "hereof" and "hereunder" and similar references refer to this Note in its entirety and not to any specific section or subsection hereof, the words "including" or "includes" do limit the preceding words or terms and the word "or" is used in the inclusive sense.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, Obligor has executed and delivered this Note as of the date first stated above.

DYNAVAX TECHNOLOGIES CORPORATION

By: _____

Name:

Title:

Exhibit 2 to the
Amended and Restated Purchase Option Agreement

FORM OF STANDSTILL AND CORPORATE GOVERNANCE LETTER AGREEMENT

Symphony Dynamo Holdings LLC
7361 Calhoun Place, Suite 325
Rockville, MD 20855

[____, ____], 2009

Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attn: Michael S. Ostrach, Esq., Vice President,
Chief Business Officer and General Counsel

Ladies and Gentlemen:

In connection with the acquisition of shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of Dynavax Technologies Corporation, a Delaware corporation (the "Company"), by Symphony Dynamo Holdings LLC, a Delaware limited liability company (together with its permitted successors, assigns and transferees, the "Purchaser"), pursuant to the terms of that certain Amended and Restated Purchase Option Agreement, dated as of November 9, 2009, among the Company, the Purchaser and Symphony Dynamo, Inc. (the "Amended and Restated Purchase Option Agreement"), the Company and the Purchaser agree as follows:

Section 23. Definitions. For purposes of this letter agreement, the following terms have the respective meanings set forth below:

"Affiliate" shall mean, with respect to any Person, (i) any Person directly or indirectly controlling, controlled by or under common control with such Person, (ii) any officer, director, general partner, member or trustee of such Person, or (iii) any Person who is an officer, director, general partner, member or trustee of any Person described in clauses (i) or (ii) of this sentence. For purposes of this definition, the terms "controlling," "controlled by" or "under common control with" shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person or entity, whether through the ownership of voting securities, by contract or otherwise, or the power to elect at least 50% of the directors, managers, general partners, or persons exercising similar authority with respect to such Person or entities.

"Beneficially Owns" (including the terms "Beneficial Ownership" or "Beneficially Owned") shall mean beneficial ownership within the meaning of Rule 13d-3 under the Exchange Act.

"Board" shall mean the Board of Directors of the Company.

"Exchange Act" shall mean the U.S. Securities Exchange Act of 1934, as amended.

"Person" shall mean any individual, partnership (whether general or limited), limited liability company, corporation, trust, estate, association, nominee or other entity.

Section 24. Standstill. Except for the exercise of the Dynavax Closing Warrants (as defined in the Amended and Restated Purchase Option Agreement), the acquisition of Dynavax Closing Warrant Shares (as defined in the Amended and Restated Purchase Option Agreement), the acquisition of the Dynavax Promissory Note Shares (as defined in the Amended and Restated Purchase Option Agreement) and the acquisition of Alternate Securities (as defined in the Amended and Restated Purchase Option Agreement), if any, for so long as the Purchaser and its Affiliates Beneficially Own more than 10% of the Company's outstanding Common Stock, neither the Purchaser nor any of its Affiliates shall, without the prior written consent of a majority of the independent members of the Board who are not Affiliated with the Purchaser, in any manner, whether directly or indirectly:

Section 24A. make, effect, initiate, cause or participate in (i) any acquisition of Beneficial Ownership of any securities of the Company or any securities of any subsidiary or other Affiliate of the Company, (ii) any acquisition of any assets of the Company or any assets of any subsidiary or other Affiliate of the Company, (iii) any tender offer, exchange offer, merger, business combination, recapitalization, restructuring, liquidation, dissolution or extraordinary transaction involving the Company or any subsidiary or other Affiliate of the Company, or involving any securities or assets of the Company or any securities or assets of any subsidiary or other Affiliate of the Company, or (iv) any "solicitation" of "proxies" (as those terms are used in the proxy rules of the Securities and Exchange Commission ("SEC")) or consents with respect to any securities of the Company;

Section 24B. form, join or participate in a "group" (as defined in the Securities Exchange Act and the rules promulgated thereunder) with respect to the Beneficial Ownership of any securities of the Company;

Section 24C. without limiting any rights of the Purchaser pursuant to Section 6 hereof, act, alone or in concert with others, to seek to control or influence the management, board of directors or policies of the Company;

Section 24D. take any action that might require the Company to make a public announcement regarding any of the types of matters set forth in clause "(a)" of this sentence;

Section 24E. agree or offer to take, or encourage or propose (publicly or otherwise) the taking of, any action prohibited by clause "(a)", "(b)", "(c)" or "(d)" of this sentence;

Section 24F. assist, induce or encourage any other Person to take any action of the type prohibited by clause "(a)", "(b)", "(c)", "(d)" or "(e)" of this sentence;

Section 24G. enter into any discussions, negotiations, arrangement or agreement with any other Person relating to any of the foregoing; or

Section 24H. request or propose that the Company or any of the Company's Affiliates amend, waive or consider the amendment or waiver of any provision set forth in this Section 2.

Section 25. No Effect on Directors. Notwithstanding any of the foregoing, the provisions set forth in Section 2 shall in no way limit the ability of any individual who is serving as a director of the Company to take any actions (or to refrain from taking any actions) in his or her capacity as a director of the Company.

Section 26. Voting Agreement. In the event the Purchaser and its Affiliates Beneficially Own more than 33% of the Company's outstanding Common Stock, any shares of Common Stock entitled to vote for the election of directors Beneficially Owned by the Purchaser and its Affiliates in excess of 33% of the shares of Common Stock then outstanding, with respect to the election or removal of directors only, shall be voted either, solely at the Purchaser's election (a) as recommended by the Board or (b)(i) in an election, in the same proportion with the votes of shares of Common Stock voted in such election (excluding shares with respect to which the votes were withheld, abstained or otherwise not cast) and not Beneficially Owned by the Purchaser (excluding withheld shares and abstentions) or (ii) in a removal vote, in the same proportions as all outstanding shares of Common Stock not Beneficially Owned by the Purchaser (including shares with respect to which the votes were withheld,

abstained or otherwise not cast), whether at an annual or special meeting of stockholders of the Company, by written consent or otherwise. The Purchaser shall retain its right to vote (or to withhold its vote) all of its shares on all other matters.

Section 27. Lock-Up. The Purchaser and its Affiliates shall not, for a period of six (6) months after the date hereof, directly or indirectly, offer, sell, exchange, pledge, hypothecate, encumber, transfer, assign or otherwise dispose of, whether voluntarily, involuntarily or by operation of law, other than to any Affiliate, any of its Dynavax Closing Shares, Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities (as defined in the Amended and Restated Purchase Option Agreement) or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable; provided, however, that nothing contained in this Section 5 shall in any way restrict (a) the ability of the Purchaser to transfer any Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable, to Symphony Dynamo Investors LLC or Symphony Dynamo Holdings LLC and (b) the ability of Symphony Dynamo Investors LLC and Symphony Dynamo Holdings LLC to transfer any Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable, to any of their respective members.

Section 28. Board Composition. For so long as the Purchaser and its Affiliates Beneficially Own more than 10% of the Company's outstanding Common Stock, then, subject to applicable law and the rules and regulations of the SEC and the NASDAQ Stock Market, the Company will nominate and use its commercially reasonable efforts to cause to be elected and cause to remain as directors on the Board (x) one (1) individual designated by the Purchaser (as determined in its sole discretion) and (y) one (1) individual who shall be an independent third party designated by Purchaser and reasonably acceptable to the Company.

Section 29. Representations. Each party represents to the other that: (a) this letter agreement has been duly authorized by all necessary corporate or partnership action, as the case may be; and (b) this letter agreement is a valid and binding agreement of such party, enforceable against it in accordance with its terms.

Section 30. Specific Enforcement; Legal Effect. The parties hereto agree that any breach of this letter agreement would result in irreparable injury to the other party and that money damages would not be an adequate remedy for such breach. Accordingly, without prejudice to the rights and remedies otherwise available under applicable law, either party shall be entitled to specific performance and equitable relief by way of injunction or otherwise if the other party breaches or threatens to breach any of the provisions of this letter agreement. It is further understood and agreed that no failure or delay by either party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power or privilege hereunder. If any term, provision, covenant or restriction in this letter agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this letter agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated, provided that the parties hereto shall negotiate in good faith to attempt to place the parties in the same position as they would have been in had such provision not been held to be invalid, void or unenforceable. This letter agreement contains the entire agreement between the parties hereto concerning the matters addressed herein. No modification of this letter agreement or waiver of the terms and conditions hereof shall be binding upon either party hereto, unless approved in writing by each such party; provided, however, that no waiver or amendment shall be effective as against the Company unless such waiver or amendment is approved in writing by the vote of a majority of the independent members of the Board who are not Affiliated with the Purchaser. This Agreement shall be governed by and construed in accordance with the law of the State of New York.

Section 31. Termination. This agreement shall continue in full force and effect from the date hereof until such time as the Purchaser and its Affiliates Beneficially Own less than 10% of the Company's outstanding Common Stock.

[Remainder of page left blank intentionally]

If you are in agreement with the terms set forth above, please sign this letter agreement in the space provided below and return an executed copy to the undersigned.

Very truly yours,

SYMPHONY DYNAMO HOLDINGS LLC

By: Symphony Capital Partners, L.P.,
its Manager

By: Symphony Capital GP, L.P.,
its General Partner

By: Symphony GP, LLC,
its General Partner

By: _____
Name:
Title:

Confirmed and Agreed:

DYNAVAX TECHNOLOGIES CORPORATION

By: _____
Name:
Title:

Exhibit 3 to the
Amended and Restated Purchase Option Agreement

FORM OF WARRANT PURCHASE AGREEMENT

[See Attached]

Exhibit 4 to the
Amended and Restated Purchase Option Agreement

WARRANT PURCHASE AGREEMENT

between

DYNAVAX TECHNOLOGIES CORPORATION

and

SYMPHONY DYNAMO HOLDINGS, LLC

Dated as of November 9, 2009

Table of Contents

	<u>Page</u>
ARTICLE I DEFINITIONS	1
Section 1.01 Definitions	1
ARTICLE II PURCHASE AND SALE OF WARRANTS	1
Section 2.01 Authorization to Issue Warrants	1
Section 2.02 Purchase and Sale of Warrants	1
Section 2.03 Warrant Date	2
Section 2.04 Warrant Date Adjustment	2
Section 2.05 Post-Warrant Date Adjustment	2
ARTICLE III CONDITIONS OF PURCHASE	3
Section 3.01 Conditions Precedent to Each Party's Obligations	3
Section 3.02 Conditions Precedent to Holdings' Obligations	4
Section 3.03 Conditions Precedent to Dynavax's Obligations	5
ARTICLE IV REPRESENTATIONS, WARRANTIES AND COVENANTS	6
Section 4.01 Representations, Warranties and Covenants of Holdings	6
Section 4.02 Representations, Warranties and Covenants of Dynavax	8
ARTICLE V INDEMNITY	10
Section 5.01 Indemnification	10
Section 5.02 Notice of Claims	10
Section 5.03 Defense of Proceedings	11
Section 5.04 Settlement	12
ARTICLE VI TRANSFER RESTRICTIONS	12
Section 6.01 Transfer Restrictions	12
Section 6.02 Legends	13
Section 6.03 Warrant Legend Removal	13
Section 6.04 Improper Transfer	13
Section 6.05 Limits on Daily Disposition	13
ARTICLE VII MISCELLANEOUS	14
Section 7.01 Notice of Material Event	14
Section 7.02 Notices	14
Section 7.03 Governing Law; Consent to Jurisdiction and Service of Process	15
Section 7.04 Waiver of Jury Trial	15
Section 7.05 Entire Agreement	16
Section 7.06 Amendment and Waivers	16
Section 7.07 Counterparts	16
Section 7.08 Assignment and Successors	16

Annex A	Certain Definitions
Exhibit A	Form of Warrant
Exhibit B	Warrant Conversion Example

WARRANT PURCHASE AGREEMENT

This WARRANT PURCHASE AGREEMENT (this "Agreement") is dated as of November 9, 2009, by and between DYNAVAX TECHNOLOGIES CORPORATION, a Delaware corporation ("Dynavax"), and SYMPHONY DYNAMO HOLDINGS LLC, a Delaware limited liability company (together with its permitted successors, assigns and transferees, "Holdings").

WHEREAS, contemporaneously with the execution of this Agreement, Holdings, Dynavax, and Symphony Dynamo, Inc., a Delaware corporation ("Symphony Dynamo") are entering into an Amended and Restated Purchase Option Agreement (the "Purchase Option Agreement") pursuant to which, among other things, Holdings is granting to Dynavax an option to purchase all of the equity securities of Symphony Dynamo (the "Symphony Dynamo Equity Securities") owned, or hereafter acquired, by Holdings on the terms set forth in the Purchase Option Agreement (the "Purchase Option"); and

WHEREAS, in consideration for Holdings' grant of the Purchase Option to Dynavax, Dynavax desires to issue and sell to Holdings the Warrants described herein on the terms hereof.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto (the "Parties") agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01 Definitions. Capitalized terms used but not defined herein are used as defined in Annex A hereto.

ARTICLE II

PURCHASE AND SALE OF WARRANTS

Section 2.01 Authorization to Issue Warrants. Dynavax has authorized the issuance of a warrant (the "Warrant", and together with any replacement warrants subsequently issued by Dynavax, the "Warrants") representing the right to purchase 2,000,000 shares of Dynavax's common stock (subject to adjustment as set forth herein) ("Dynavax Common Stock"), par value \$0.001 per share, at an exercise price per share of \$1.94 (such shares, the "Warrant Shares"). The Warrants shall have a term of five (5) years and shall be evidenced by certificates issued pursuant to this Agreement in the form set forth in Exhibit A hereto, with such appropriate insertions, omissions, substitutions, and other variations as are required or permitted by this Agreement.

Section 2.02 Purchase and Sale of Warrants. Dynavax hereby agrees to issue to Holdings, and Holdings hereby agrees to acquire from Dynavax, the Warrants on the Purchase Option Closing Date (hereinafter, the "Warrant Date"), subject to Sections 2.04 and 2.05, and subject to the fulfillment of the conditions precedent described in Article III below.

Warrant Purchase Agreement

Section 2.03 Warrant Date. Subject to the terms and conditions of this Agreement, the issuance, sale and purchase of the Warrants contemplated by this Agreement shall take place at a closing on the Warrant Date (the "Warrant Closing") to be held at the offices of Paul, Weiss, Rifkind, Wharton & Garrison LLP, 1285 Avenue of the Americas, New York, New York 10019, at 4:30 P.M., Eastern Time, following the satisfaction or waiver of all other conditions to the obligations of the Parties set forth in Article III hereof, or at such other place or at such other time or such other date as Holdings and Dynavax shall mutually agree upon in writing.

Section 2.04 Warrant Date Adjustment. If at any time or from time to time from and after the date hereof through the Warrant Date, (x) the number of outstanding shares of Dynavax Common Stock has been increased, decreased, changed into or exchanged for a different number or kind of shares or securities as a result of a reorganization, recapitalization, stock dividend, stock split, reverse stock split or other similar change in capitalization, an appropriate and proportionate adjustment shall be made to the number of Warrant Shares issuable upon the exercise of the Warrant or (y) Dynavax has issued Additional Dynavax Securities (any such issuance of Additional Dynavax Securities, a "Specified Dynavax Issuance"), Holdings may elect (in accordance with the procedures set forth in Section 2.05) to receive the Alternate Securities specified in the Specified Issuance Notice (each as defined below) in lieu of the Warrants (such Alternate Securities paid to Holdings at the Warrant Date, the "Alternate Closing Securities").

Section 2.05 Post-Warrant Date Adjustment.

(a) If at any time and from time to time from and after the Warrant Date through the date occurring six (6) months after the Warrant Date (or if such date is not a Business Day, the first Business Day thereafter) (such date, the "Final Adjustment Date"), there is a Specified Dynavax Issuance, as soon as practicable, but in no event later than five (5) Business Days after the delivery to Dynavax of a Holdings Election Notice (as defined below) (such date, the "Adjusted Securities Payment Date"), (i) Dynavax shall issue to Holdings such Alternate Securities in the form specified in the Specified Issuance Notice, and (ii) Holdings shall deliver to Dynavax such Warrants or Alternate Closing Securities issued pursuant to this Agreement, as applicable, such that on the Adjusted Securities Payment Date Holdings shall own Alternate Securities, together with all other securities of Dynavax issued, or other consideration transferred, to Holdings, to which Holdings is entitled in consideration of the transfer to Dynavax of the Symphony Dynamo Equity Securities. The foregoing described transactions between Dynavax and Holdings shall be settled on a net basis. For the avoidance of doubt, the parties hereby acknowledge and agree that Holdings may exercise its rights under this Section 2.05(a) following each Specified Dynavax Issuance that occurs after the date of this Agreement and on or prior to the Final Adjustment Date.

(b) Not later than five (5) Business Days prior to the consummation of a Specified Dynavax Issuance, Dynavax shall, in accordance with Section 7.02, deliver to Holdings a notice (a "Specified Issuance Notice") setting forth in reasonable detail: (i) a description of the form and terms of the Additional Dynavax Securities to be issued pursuant to the Specified Dynavax Issuance (such Additional Dynavax Securities, the "Alternate Securities"); (ii) the price at which the Alternate Securities will be issued pursuant to the Specified Dynavax Issuance; (iii) the estimated date of issuance of such Alternate Securities; and (iv) the amount and form of Alternate Securities that would be issued to an investor participating in the Specified Dynavax Issuance upon payment to Dynavax the Warrants. If Holdings elects to exercise its rights under Section 2.05(a) with respect to a Specified Dynavax Issuance, Holdings, in accordance with Section 7.02, shall deliver to Dynavax a notice of such election not later than one (1) Business Day prior to the consummation of such Specified Dynavax Issuance (the "Holdings Election Notice"). The failure of Holdings to notify Dynavax pursuant to this Section 2.05(b) shall be deemed to constitute the waiver by Holdings of its rights under Section 2.05 with respect to such Specified Dynavax Issuance.

(c) “Additional Dynavax Securities” shall mean all shares of Dynavax Common Stock, Options, Convertible Securities, notes, bonds, or any other securities issued by Dynavax, or cash or other consideration paid or delivered by or on behalf of Dynavax, other than the following (collectively, “Exempted Securities”):

(i) rights, options or warrants to subscribe for, purchase or otherwise acquire Dynavax Common Stock (“Options”), or shares of restricted stock or stock appreciation rights, issued to employees or directors of, or consultants or advisors to, Dynavax or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the board of directors of Dynavax;

(ii) (1) shares of Dynavax Common Stock actually issued upon the exercise of Options or (2) shares of Dynavax Common Stock actually issued upon the conversion or exchange of any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Dynavax Common Stock, but excluding Options (“Convertible Securities”), in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(iii) shares of Dynavax Common Stock, Options or Convertible Securities issued by reason of a dividend on the outstanding Dynavax Common Stock, stock split of the outstanding Dynavax Common Stock, split-up of the outstanding Dynavax Common Stock or other distribution on shares of Dynavax Common Stock; or

(iv) shares of Dynavax Common Stock sold and issued pursuant to that certain Equity Distribution Agreement dated August 17, 2009, by and between Dynavax and Wedbush Morgan Securities, Inc. (the “ATM Securities”).

ARTICLE III

CONDITIONS OF PURCHASE

Section 3.01 Conditions Precedent to Each Party’s Obligations. The respective obligations of Dynavax and Holdings to effect the transactions contemplated hereby shall be subject to the satisfaction of the conditions precedent contained in this Section 3.01 or the waiver thereof in writing by Holdings and Dynavax prior to or on the Warrant Date and each Adjusted Securities Payment Date.

(a) Approvals. All Governmental Approvals imposed by any Governmental Authority in connection with the transactions contemplated by this Agreement and the other Operative Documents required to be in effect prior to or on the Warrant Date or such Adjusted Securities Payment Date, as applicable, shall be in effect, the failure of which to be in effect would, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on either of the Parties.

(b) Litigation. No Governmental Authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any law or Governmental Order (whether temporary, preliminary or permanent) that is in effect and restrains, enjoins or otherwise prohibits the consummation of the transactions contemplated hereby or in the other Operative Documents.

(c) Stockholder Approval. Dynavax shall have received approval by Dynavax’s stockholders of the issuance of the Warrant Shares and any shares of Dynavax Common Stock or Alternate Closing Securities or Alternate Securities, as applicable, issuable in connection with the exercise of the Purchase Option by Dynavax under the Purchase Option Agreement, which such approval shall satisfy the requirements of NASDAQ Marketplace Rule 5635.

Section 3.02 Conditions Precedent to Holdings' Obligations. The obligation of Holdings to effect the transactions contemplated hereby shall be subject to the satisfaction of the further conditions precedent contained in this Section 3.02, or the waiver thereof in writing by Holdings, prior to or on the Warrant Date or such Adjusted Securities Payment Date, as applicable.

(a) Authorization, Execution and Delivery of Documents. This Agreement and each of the other Operative Documents (including all schedules, annexes and exhibits thereto) required to be entered into shall have been duly authorized, executed and delivered by each of the parties thereto (other than Holdings) and shall be in full force and effect.

(b) Issuance of Warrants or Alternate Securities. All actions required by any applicable law, or necessary in the reasonable opinion of Holdings, to issue the Warrants or the Alternate Closing Securities or the Alternate Securities, as applicable, shall have been duly taken by Dynavax (or provisions therefore shall have been made), including, without limitation, the making of all registrations and filings required to be made prior to or on the Warrant Date or such Adjusted Securities Payment Date, as applicable, and all necessary consents shall have been received.

(c) Performance of Obligations by Dynavax; Representations and Warranties. Dynavax shall have performed in all material respects and complied in all material respects with all agreements and conditions contained in this Agreement and the other Operative Documents that are required to be performed or complied with by it prior to or on the Warrant Date or such Adjusted Securities Payment Date, as applicable. Each of Dynavax's representations and warranties set forth in Section 4.02 of this Agreement shall be true and correct in all respects as of the Warrant Date or each Adjusted Securities Payment Date, as applicable, with the same effect as though such representations and warranties were made on and as of the Warrant Date or each Adjusted Securities Payment Date, as applicable (or if stated to have been made as of an earlier date, as of such date).

(d) Opinion of Counsel. Holdings shall have received an opinion letter from Cooley Godward Kronish LLP, counsel for Dynavax, which opinion shall be, in form and substance, reasonably acceptable to Holdings.

(e) Warrant Date Certificate. Holdings shall have received a certificate from Dynavax executed by its Chief Financial Officer or other duly authorized executive officer, dated as of the Warrant Date or such Adjusted Securities Payment Date, as applicable, in form and substance reasonably satisfactory to Holdings, certifying:

(i) (A) that the Operative Documents to which Dynavax is a party have been duly authorized, executed and delivered by Dynavax, and are in full force and effect, and (B) that Dynavax has satisfied all conditions precedent contained in the Operative Documents to which it is a party required to be satisfied by it on or prior to the Warrant Date or such Adjusted Securities Payment Date, as applicable; and

(ii) as to (A) the accuracy and completeness of the contents of Dynavax's charter documents, (B) the resolutions of Dynavax's board of directors, duly authorizing Dynavax's execution, delivery and performance of each Operative Document to which it is or is to be a party and each other document required to be executed and delivered by it in accordance with the provisions hereof or thereof, and (C) the incumbency and signature of Dynavax's representatives authorized to execute and deliver documents on its behalf in connection with the obligations contemplated hereby and by the other Operative Documents.

(f) Further Documents, Certificates, Etc. Holdings shall have received such other documents, certificates or opinions as Holdings may reasonably request in connection with the consummation of the transactions contemplated by this Agreement.

(g) No Events of Default. No breach, default, event of default or other similar event by Dynavax, and no event which with the giving of notice, the passage of time, or both, would constitute any of the foregoing, under any Operative Document or any other material contract or agreement to which Dynavax is a party, shall have occurred and be continuing, and no condition shall exist that constitutes, or with the giving of notice, the passage of time, or both, would constitute such default, event of default or other similar event.

(h) No Violation. The transactions contemplated hereby shall comply with all applicable law and no party (other than Holdings) to such transactions shall be in violation of any such applicable law. Holdings shall not be subject to any penalty or liability pursuant to any violation of applicable law by virtue of the transactions contemplated hereby and by each of the other Operative Documents.

(i) Change in Law. There shall have been no change in any law, rule or regulation or the interpretation thereof (including any law, rule or regulation relating to taxes) that prohibits or prevents the consummation of this Agreement or any of the transactions contemplated hereby (including the sale and purchase of the Warrants) or by the Operative Documents or that results in any material increase in taxes payable by Holdings or Investors.

(j) Other Conditions Precedent. Dynavax shall have satisfied and complied with all applicable conditions precedent set forth in each other Operative Document to which Dynavax is a party required to be satisfied and complied with prior to or on the Warrant Date.

Section 3.03 Conditions Precedent to Dynavax's Obligations. The obligation of Dynavax to effect the transactions contemplated hereby shall be subject to the satisfaction of the further conditions precedent contained in this Section 3.03, or the waiver thereof in writing by Dynavax, prior to or on the Warrant Date and each Adjusted Securities Payment Date.

(a) Prior Warrant Delivery. Holdings shall deliver to Dynavax for cancellation all warrants issued by Dynavax to Holdings or any Affiliate of Holdings under that certain Warrant Purchase Agreement, dated April 18, 2006, between Dynavax and Holdings, or upon the transfer of any warrants so issued.

(b) Authorization, Execution and Delivery of Documents. This Agreement and each of the other Operative Documents (including all schedules and exhibits thereto) required to be entered into shall have been duly authorized, executed and delivered by each of the parties thereto (other than Dynavax) and shall be in full force and effect.

(c) Performance of Obligations by Holdings; Representations and Warranties.

(i) As of the Warrant Date or such Adjusted Securities Payment Date, as applicable, Holdings shall have performed in all material respects and complied in all material respects with all agreements and conditions contained in this Agreement and the other Operative Documents required to be performed or complied with by it prior to or at the Warrant Date or such Adjusted Securities Payment Date, as applicable. Each of Holdings' representations and warranties set forth in Section 4.01 of this Agreement shall be true and correct in all respects as of the Warrant Date or such Adjusted Securities Payment Date, as applicable, as applicable with the same effect as though such representations and warranties were made on and as of the Warrant Date or such Adjusted Securities Payment Date, as applicable (or if stated to have been made as of an earlier date, as of such date).

(ii) No breach, default, event of default or other similar event by Holdings, and no event which with the giving of notice, the passage of time, or both, would constitute any of the foregoing, under any Operative Document or any other material contract or agreement to which Holdings is a party, shall have occurred and be continuing, and no condition shall exist that constitutes, or with the giving of notice, the passage of time, or both, would constitute such default, event of default or other similar event.

(iii) The transactions contemplated hereby shall comply in all material respects with all applicable law, and no party (other than Dynavax) to such transactions shall be in material violation of any such applicable law. Dynavax shall not be subject to any penalty or liability pursuant to any violation of applicable law by virtue of the transactions contemplated hereby and by each of the other Operative Documents, the failure to comply with which would, either individually or in the aggregate, reasonably be expected to have a material adverse effect on the Programs.

(iv) Holdings shall have satisfied and complied with all applicable conditions precedent set forth in each other Operative Document to which Holdings is a party required to be satisfied and complied with prior to or on the Warrant Date.

ARTICLE IV

REPRESENTATIONS, WARRANTIES AND COVENANTS

Section 4.01 Representations, Warranties and Covenants of Holdings.

(a) As of the date hereof, Holdings hereby represents and warrants, and, except to the extent that any of the following representations and warranties is limited to the date of this Agreement or otherwise limited, on the Warrant Date and each Adjusted Securities Payment Date, shall be deemed to have represented and warranted, to Dynavax that:

(i) Organization. Holdings is a limited liability company, duly formed, validly existing and in good standing under the laws of the State of Delaware.

(ii) Authority and Validity. Holdings has all requisite limited liability company power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The execution, delivery and performance by Holdings of this Agreement and the consummation of the transactions contemplated hereby have been duly and validly authorized by all necessary action required on the part of Holdings, and no other proceedings on the part of Holdings are necessary to authorize this Agreement or for Holdings to perform its obligations under this Agreement. This Agreement constitutes the lawful, valid and legally binding obligation of

Holdings, enforceable in accordance with its terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and general equitable principles regardless of whether such enforceability is considered in a proceeding at law or in equity.

(iii) No Violation or Conflict. The execution, delivery and performance of this Agreement and the transactions contemplated hereby do not (A) violate, conflict with or result in the breach of any provision of the Organizational Documents of Holdings, (B) conflict with or violate any law or Governmental Order applicable to Holdings or any of its assets, properties or businesses, or (C) conflict with, result in any breach of, constitute a default (or event that with the giving of notice or lapse of time, or both, would become a default) under, require any consent under, or give to others any rights of termination, amendment, acceleration, suspension, revocation or cancellation of, or result in the creation of any Encumbrance on any of the assets or properties of Holdings, pursuant to, any note, bond, mortgage or indenture, contract, agreement, lease, sublease, license, permit, franchise or other instrument or arrangement to which Holdings is a party except, in the case of clauses (B) and (C), to the extent that such conflicts, breaches, defaults or other matters would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(iv) Governmental Consents and Approvals. Other than any HSR Filings which, if such HSR Filings are required, will be obtained on or prior to the Warrant Date, the execution, delivery and performance of this Agreement by Holdings do not, and the consummation of the transactions contemplated hereby do not and will not, require any Governmental Approval which has not already been obtained, effected or provided, except with respect to which the failure to so obtain, effect or provide would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(v) Litigation. There are no actions by or against Holdings pending before any Governmental Authority or, to the knowledge of Holdings, threatened to be brought by or before any Governmental Authority, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings. There are no pending or, to the knowledge of Holdings, threatened actions to which Holdings is a party (or threatened to be named as a party) to set aside, restrain, enjoin or prevent the execution, delivery or performance of this Agreement or the Operative Documents or the consummation of the transactions contemplated hereby or thereby by any party hereto or thereto. Holdings is not subject to any Governmental Order (nor, to the knowledge of Holdings, is there any such Governmental Order threatened to be imposed by any Governmental Authority) that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Holdings.

(vi) Accredited Investor.

(A) Holdings is and will remain at all relevant times an "Accredited Investor".

(B) Holdings has relied completely on the advice of, or has consulted with or has had the opportunity to consult with, its own personal tax, investment, legal or other advisors and has not relied on Dynavax or any of its Affiliates for advice. Holdings has reviewed the Investment Overview and is aware of the risks disclosed therein. Holdings acknowledges that it has had a reasonable opportunity to conduct its own due diligence with respect to the Products, the Programs, Symphony Dynamo, Dynavax and the transactions contemplated by the Operative Documents.

(C) Holdings has been advised and understands that the offer and sale of the Warrants and the Warrant Shares and, if issued, the Alternate Securities, have not been registered under the Securities Act. Holdings is able to bear the economic risk of such investment for an indefinite period and to afford a complete loss thereof.

(D) Holdings is acquiring the Warrants and the Warrant Shares solely for Holdings' own account for investment purposes as a principal and not with a view to the resale of all or any part thereof; provided, that Holdings may transfer all or part of the interest in the Warrants as set forth in Section 6.01 hereof. Holdings agrees that the Warrants and the Warrant Shares and, if issued, the Alternate Securities, may not be resold (1) without registration thereof under the Securities Act (unless an exemption from such registration is available), or (2) in violation of any law. Holdings is not and will not be an underwriter within the meaning of Section 2(11) of the Securities Act with respect to the Warrants and the Warrant Shares.

(E) No person or entity acting on behalf of, or under the authority of, Holdings is or will be entitled to any broker's, finder's, or similar fees or commission payable by Dynavax or any of its Affiliates.

(F) Holdings acknowledges and agrees to treat the Warrants and, if issued, the Alternate Securities, for federal, state and local income tax purposes as option premium paid in return for the grant, maintenance and exercise of the Purchase Option.

Section 4.02 Representations, Warranties and Covenants of Dynavax.

(a) As of the date hereof, Dynavax hereby represents and warrants, and, except to the extent that any of the following representations and warranties is limited to the date of this Agreement or otherwise limited, on the Warrant Date and each Adjusted Securities Payment Date, shall be deemed to have represented and warranted, to Holdings that:

(i) Organization. Dynavax is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware.

(ii) Authority and Validity. Dynavax has all requisite corporate power and authority to execute, deliver and perform its obligations under this Agreement and to consummate the transactions contemplated hereby. The execution, delivery and performance by Dynavax of this Agreement and the consummation of the transactions contemplated hereby have been duly and validly authorized by all necessary action required on the part of Dynavax, and no other proceedings on the part of Dynavax, other than the Stockholder Approval, are necessary to authorize this Agreement or for Dynavax to perform its obligations under this Agreement. This Agreement constitutes the lawful, valid and legally binding obligation of Dynavax, enforceable in accordance with its terms, except as the same may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally and general equitable principles regardless of whether such enforceability is considered in a proceeding at law or in equity.

(iii) No Violation or Conflict. The execution, delivery and performance of this Agreement and the transactions contemplated hereby do not (A) violate, conflict with or result in the breach of any provision of the Organizational Documents of Dynavax, (B) conflict with or violate any law or Governmental Order applicable to Dynavax or any of its assets, properties or businesses, or (C) conflict with, result in any breach of, constitute a default (or event that with the giving of notice or lapse of time, or both, would become a default) under, require any consent under, or give to others any rights of termination, amendment, acceleration, suspension, revocation or cancellation of, or result in the

creation of any Encumbrance on any of the assets or properties of Dynavax, pursuant to, any note, bond, mortgage or indenture, contract, agreement, lease, sublease, license, permit, franchise or other instrument or arrangement to which Dynavax is a party except, in the case of clauses (B) and (C), to the extent that such conflicts, breaches, defaults or other matters would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(iv) Governmental Consents and Approvals. Other than any HSR Filings which, if such HSR Filings are required, will be obtained on or prior to the Warrant Date, the execution, delivery and performance of this Agreement by Dynavax do not, and the consummation of the transactions contemplated hereby do not and will not, require any Governmental Approval which has not already been obtained, effected or provided, except with respect to which the failure to so obtain, effect or provide would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(v) Litigation. There are no actions by or against Dynavax pending before any Governmental Authority or, to the knowledge of Dynavax, threatened to be brought by or before any Governmental Authority, that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax. There are no pending or, to the knowledge of Dynavax, threatened actions, to which Dynavax is a party (or is threatened to be named as a party) to set aside, restrain, enjoin or prevent the execution, delivery or performance of this Agreement or the Operative Documents or the consummation of the transactions contemplated hereby or thereby by any party hereto or thereto. Dynavax is not subject to any Governmental Order (nor, to the knowledge of Dynavax, is there any such Governmental Order threatened to be imposed by any Governmental Authority) that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Dynavax.

(vi) Private Placement. Assuming the accuracy of Holdings' representations and warranties set forth in Section 4.01, (i) the purchase and sale of the Warrants and, if issued, the Alternate Securities, is exempt from the registration requirements of the Securities Act, and (ii) no other offering of Common Stock by Dynavax (other than the issuance of the Dynavax Closing Shares and, if issued, the Alternate Securities) will be integrated with the offering of the Warrants or the Warrant Shares or Alternate Securities, if applicable. Neither Dynavax nor any Person acting on its behalf has or will offer the Warrants or the Warrant Shares by any form of general solicitation or general advertising and all filings required under Rule 503 of the Securities Act will be made in a timely manner.

(b) Dynavax covenants and agrees with Holdings that, so long as any of the Warrants are outstanding (including as such Warrants may be reissued pursuant to transfer in accordance with Section 6.01 hereof), Dynavax shall take all action necessary to reserve and keep available out of its authorized and unissued Dynavax Common Stock, solely for the purpose of effecting the exercise of the Warrants, 100% of the number of shares of Dynavax Common Stock issuable upon exercise of the Warrants. Upon exercise in accordance with the Warrants, the Dynavax Common Stock delivered thereby will be validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of the Dynavax Common Stock.

(c) Dynavax acknowledges and agrees to treat the Warrants for federal, state and local income tax purposes as option premium paid in return for the grant of the Purchase Option.

ARTICLE V

INDEMNITY

Section 5.01 Indemnification. To the greatest extent permitted by applicable law, Dynavax shall indemnify and hold harmless Holdings, and Holdings shall indemnify and hold harmless Dynavax, and each of their respective Affiliates, officers, directors, employees, agents, partners, members, successors, assigns, representatives of, and each Person, if any (including any officers, directors, employees, agents, partners, members of such Person) who controls, Holdings and Dynavax, as applicable, within the meaning of the Securities Act or the Exchange Act, (each, an “Indemnified Party”), from and against any and all actions, causes of action, suits, claims, losses, costs, interest, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnified Party is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys’ fees and disbursements (hereinafter, a “Loss”), incurred by any Indemnified Party as a result of, or arising out of, or relating to: (i) in the case of Dynavax being the Indemnifying Party, (A) any breach of any representation or warranty made by Dynavax herein or in any certificate, instrument or document delivered in connection and contemporaneously herewith, (B) any breach of any covenant, agreement or obligation of Dynavax contained herein or in any certificate, instrument or document delivered hereunder, or (C) any untrue statement of a material fact about Dynavax contained in the reports filed by Dynavax with the SEC, or the omission therefrom of a material fact about Dynavax required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, to the extent that such reports are attached to the Investment Overview; provided, that the information contained in a later filed report filed prior to the date of this Agreement shall be deemed to update any related information contained in a previously filed report (the items set forth herein in clauses (A), (B) and (C) being hereinafter referred to as the “Holdings Claims”), and (ii) in the case of Holdings being the Indemnifying Party, (x) any breach of any representation or warranty made by Holdings herein or in any certificate, instrument or document delivered in connection and contemporaneously herewith, (y) any breach of any covenant, agreement or obligation of Holdings contained herein or in any certificate, instrument or document delivered hereunder, or (z) any untrue statement or alleged untrue statement of a material fact about Holdings contained in the Investment Overview or the omission or alleged omission therefrom of a material fact about Holdings required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, (the items set forth herein in clauses (x), (y) and (z) being hereinafter referred to as the “Dynavax Claims”). To the extent that the foregoing undertaking by Dynavax or Holdings may be unenforceable for any reason, such Party shall make the maximum contribution to the payment and satisfaction of any Loss that is permissible under applicable law.

Section 5.02 Notice of Claims. Any Indemnified Party that proposes to assert a right to be indemnified under this Article V shall notify Dynavax or Holdings, as applicable (the “Indemnifying Party”), promptly after receipt of notice of commencement of any action, suit or proceeding against such Indemnified Party (an “Indemnified Proceeding”) in respect of which a claim is to be made under this Article V, or the incurrence or realization of any Loss in respect of which a claim is to be made under this Article V, of the commencement of such Indemnified Proceeding or of such incurrence or realization, enclosing a copy of all relevant documents, including all papers served and claims made, but the omission to so notify the applicable Indemnifying Party promptly of any such Indemnified Proceeding or incurrence or realization shall not relieve (x) such Indemnifying Party from any liability that it may have to such

Indemnified Party under this Article V or otherwise, except, as to such Indemnifying Party's liability under this Article V, to the extent, but only to the extent, that such Indemnifying Party shall have been prejudiced by such omission, or (y) any other indemnitor from liability that it may have to any Indemnified Party under the Operative Documents.

Section 5.03 Defense of Proceedings. In case any Indemnified Proceeding shall be brought against any Indemnified Party, it shall notify the applicable Indemnifying Party of the commencement thereof as provided in Section 5.02, and such Indemnifying Party shall be entitled to participate in, and provided such Indemnified Proceeding involves a claim solely for money damages and does not seek an injunction or other equitable relief against the Indemnified Party and is not a criminal or regulatory action, to assume the defense of, such Indemnified Proceeding with counsel reasonably satisfactory to such Indemnified Party. After notice from such Indemnifying Party to such Indemnified Party of such Indemnifying Party's election to so assume the defense thereof and the failure by such Indemnified Party to object to such counsel within ten (10) Business Days following its receipt of such notice, such Indemnifying Party shall not be liable to such Indemnified Party for legal or other expenses related to such Indemnified Proceedings incurred after such notice of election to assume such defense except as provided below and except for the reasonable costs of investigating, monitoring or cooperating in such defense subsequently incurred by such Indemnified Party reasonably necessary in connection with the defense thereof. Such Indemnified Party shall have the right to employ its counsel in any such Indemnified Proceeding, but the reasonable fees and expenses of such counsel shall be at the expense of such Indemnified Party unless:

(i) the employment of counsel by such Indemnified Party at the expense of the applicable Indemnifying Party has been authorized in writing by such Indemnifying Party;

(ii) such Indemnified Party shall have reasonably concluded in its good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between the applicable Indemnifying Party and such Indemnified Party in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes of action available to such Indemnified Party (it being agreed that in any case referred to in this clause (ii) such Indemnifying Party shall not have the right to direct the defense of such Indemnified Proceeding on behalf of the Indemnified Party);

(iii) the applicable Indemnifying Party shall not have employed counsel reasonably acceptable to the Indemnified Party, to assume the defense of such Indemnified Proceeding within a reasonable time after notice of the commencement thereof (provided, however, that this clause (iii) shall not be deemed to constitute a waiver of any conflict of interest that may arise with respect to any such counsel); or

(iv) any counsel employed by the applicable Indemnifying Party shall fail to timely commence or diligently conduct the defense of such Indemnified Proceeding and such failure has materially prejudiced (or, in the reasonable judgment of the Indemnified Party, is in danger of materially prejudicing) the outcome of such Indemnified Proceeding;

in each of which cases the reasonable fees and expenses of counsel for such Indemnified Party shall be at the expense of such Indemnifying Party. Only one counsel shall be retained by all Indemnified Parties with respect to any Indemnified Proceeding, unless counsel for any Indemnified Party reasonably concludes in good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between such Indemnified Party and one or more other Indemnified Parties in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes or action available to such Indemnified Party.

Section 5.04 Settlement. Without the prior written consent of such Indemnified Party, such Indemnifying Party shall not settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding, unless such settlement, compromise, consent or related judgment (i) includes an unconditional release of such Indemnified Party from all liability for Losses arising out of such claim, action, investigation, suit or other legal proceeding, (ii) provides for the payment of money damages as the sole relief for the claimant (whether at law or in equity), (iii) involves no finding or admission of any violation of law or the rights of any Person by the Indemnified Party, and (iv) is not in the nature of a criminal or regulatory action. No Indemnified Party shall settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding in respect of which any payment would result hereunder or under the Operative Documents without the prior written consent of the Indemnifying Party, such consent not to be unreasonably conditioned, withheld or delayed.

ARTICLE VI

TRANSFER RESTRICTIONS

Section 6.01 Transfer Restrictions. Holdings agrees (and agrees to cause all of its members and any subsequent transferees thereof to so agree) that (i) it will not, directly or indirectly, offer, sell, assign, transfer, grant or sell a participation in, pledge or otherwise dispose of the Warrant or Warrant Shares (or solicit any offers to buy or otherwise acquire, or take a pledge of, any Warrant) unless such Warrant or Warrant Shares are registered and/or qualified under the Securities Act and applicable state securities laws, or unless an exemption from the registration or qualification requirements is otherwise available; provided, that Holdings may transfer the Warrant (or part of its interest therein) or Warrant Shares to Investors, RRD and each Symphony Fund, and Investors (but not any other member of Holdings) may further distribute Warrants or Warrant Shares to its respective members; (ii) (A) no transfer of such Warrant, or (B) with respect to a private placement of the Warrant Shares, no transfer of such Warrant Shares shall be effective or recognized unless the transferor and the transferee make the representations and agreements contained herein and furnish to Dynavax such certifications and other information as Dynavax may reasonably request to confirm that any proposed transfer complies with the restrictions set forth herein and any applicable laws; and (iii) (x) Warrants may only be transferred in minimum denominations representing the right to purchase at least 50,000 Warrant Shares, and (y) prior to the registration of Warrant Shares as contemplated in the Registration Rights Agreement, the Warrant Shares may only be transferred in minimum denominations of at least 50,000 Warrant Shares; provided, however, that in the event that any holder of a Warrant or Warrant Shares holds a Warrant representing the right to purchase less than 50,000 Warrant Shares, or holds less than 50,000 Warrant Shares, as the case may be, such holder shall be entitled to exercise all, but not less than all, of the full amount of such Warrant and sell all, but not less than all, such Warrant Shares delivered to it in connection therewith, notwithstanding the fact that the number of such Warrant Shares is less than 50,000; provided, further, that Holdings agrees (and agrees to cause its members and any subsequent transferees thereof to so agree), that with respect to a Warrant, such holder of a Warrant will not sell or otherwise transfer any Warrant, except in private placements to Accredited Investors.

Section 6.02 Legends.

(a) Holdings acknowledges and agrees that Dynavax shall affix to each certificate evidencing outstanding Warrants (and any certificates issued upon the transfer of the Warrants) a legend in substantially the following form (a "Warrant Legend"):

"NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN THE SUBJECT OF REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN (OR WILL BE, WITH RESPECT TO THE SECURITIES ISSUABLE UPON EXERCISE HEREOF) ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.

THE WARRANT EVIDENCED BY THIS CERTIFICATE IS SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN THE WARRANT PURCHASE AGREEMENT, DATED AS OF NOVEMBER 9, 2009, COPIES OF WHICH ARE ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF THIS WARRANT WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH."

Section 6.03 Warrant Legend Removal. If the certificates representing such Warrants, include a Warrant Legend (as set forth in Section 6.02 hereof), Dynavax shall, upon a request from Holdings, or a member or subsequent transferee thereof, within two (2) Business Days after receiving such request, remove or cause to be removed (i) if the Warrants cease to be restricted securities, the securities law portion of the Warrant Legend and/or (ii) in the event of a sale of the Warrants in compliance with the transfer restrictions, the transfer restriction portion of the Warrant Legend, from such certificates representing the Warrants as Holdings, or such member or transferee, shall designate, in accordance with the terms hereof and, if applicable, in accordance with the terms of the applicable Warrant.

Section 6.04 Improper Transfer. Any attempt to sell, assign, transfer, grant or sell a participation in, pledge or otherwise dispose of any Warrants or any Warrant Shares, not in compliance with this Agreement shall be null and void and Dynavax shall give no effect to such attempted sale, assignment, transfer, grant, sale of a participation, pledge or other disposition.

Section 6.05 Limits on Daily Disposition. Holdings and its Affiliates each agree that, in the event that any holder of a Warrant exercises the Warrant and determines to dispose of its Warrant Shares on the market, Holdings (and its Affiliates) or the transferee of Holdings of those Warrant Shares will not sell or otherwise dispose in any single day of Warrant Shares totaling in excess of 35,000 shares in the aggregate (as reported on the NASDAQ national market or such other national exchange representing the primary exchange on which Dynavax Common Stock is listed); provided, however, that Holdings (and its Affiliates) and any transferees may sell or otherwise dispose of their Warrant Shares without regard to the share limitations hereunder in a private placement to accredited investors; and provided further, that any holder of Warrant Shares holding less than 35,000 shares shall not be subject to the restrictions set forth in this Section 6.05. Holdings and its Affiliates shall notify any transferee of a Warrant or Warrant Shares of the terms of this Section 6.05, but shall in no event be responsible for monitoring the disposition of the Warrant Shares by any transferee.

ARTICLE VII

MISCELLANEOUS

Section 7.01 Notice of Material Event. Each Party agrees that, upon it receiving knowledge of a material event or development with respect to any of the transactions contemplated hereby that, to the knowledge of its executive officers, is not known to the other Parties, such Party shall notify the other Parties in writing within three (3) Business Days of the receipt of such knowledge by any executive officer of such Party; provided, that the failure to provide such notice shall not impair or otherwise be deemed a waiver of any rights any Party may have arising from such material event or development, and that notice under this Section 7.01 shall not in itself constitute notice of any breach of any of the Operative Documents.

Section 7.02 Notices. Any notice, request, demand, waiver, consent, approval, or other communication which is required or permitted to be given to any Party hereto shall be in writing and shall be deemed given only if delivered to the Party personally or sent to the Party by facsimile transmission (promptly followed by a hard-copy delivered in accordance with this Section 7.02), by next Business Day delivery by a nationally recognized courier service, or by registered or certified mail (return receipt requested), with postage and registration or certification fees thereon prepaid, addressed to the Party at its address set forth below:

Dynavax:

Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attn: Michael S. Ostrach, Esq., Vice President,
Chief Business Officer and General Counsel
Facsimile: (510) 848-1327

with copies to:

Cooley Godward Kronish LLP
Five Palo Alto Square, 4th Floor
3000 El Camino Real
Palo Alto, CA 94306-2155
Attn: Glen Y. Sato, Esq.
Facsimile: (650) 849-7400

Holdings:

Symphony Dynamo Holdings LLC
7361 Calhoun Place, Suite 325
Rockville, MD 20855
Attn: Robert L. Smith, Jr.
Facsimile: (301) 762-6154

with a copy to:

Symphony Capital Partners, L.P.
875 Third Avenue, 3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

and

Symphony Strategic Partners, LLC
875 Third Avenue, 3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

or to such other address as such Party may from time to time specify by notice given in the manner provided herein to each other Party entitled to receive notice hereunder.

Section 7.03 Governing Law; Consent to Jurisdiction and Service of Process.

(a) This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York; except to the extent that this Agreement pertains to the internal governance of Dynavax, and to such extent this Agreement shall be governed and construed in accordance with the laws of the State of Delaware.

(b) Each of the Parties hereby irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of any New York State court and any Delaware State court or federal court of the United States of America sitting in The City of New York, Borough of Manhattan or Wilmington, Delaware, and any appellate court from any jurisdiction thereof, in any action or proceeding arising out of or relating to this Agreement, or for recognition or enforcement of any judgment, and each of the Parties hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in any such New York State court, any such Delaware State court or, to the fullest extent permitted by law, in such federal court. Each of the Parties agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that any Party may otherwise have to bring any action or proceeding relating to this Agreement.

(c) Each of the Parties irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement in any New York State or federal court, or any Delaware State or federal court. Each of the Parties hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court. Each of the parties hereby consents to service of process by mail.

Section 7.04 Waiver of Jury Trial. EACH OF THE PARTIES HERETO IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT.

Section 7.05 Entire Agreement. This Agreement (including any Annexes, Schedules, Exhibits or other attachments here) constitutes the entire agreement between the Parties with respect to the matters covered hereby and supersedes all prior agreements and understandings with respect to such matters between the Parties.

Section 7.06 Amendment and Waivers. The terms of this Agreement shall not be waived, altered, modified, amended or supplemented in any manner whatsoever except by a written instrument signed by each of the Parties. Any Party may waive, solely with respect to itself, any one or more of its rights hereunder without the consent of any other Party hereto; provided, that no such waiver shall be effective unless set forth in a written instrument executed by the Party hereto against whom such waiver is to be effective.

Section 7.07 Counterparts. This Agreement may be executed in one or more counterparts, each of which, when executed, shall be deemed an original but all of which taken together shall constitute one and the same Agreement.

Section 7.08 Assignment and Successors. Neither Dynavax nor Holdings may assign, delegate, transfer, sell or otherwise dispose of (collectively, "Transfer"), in whole or in part, any or all of its rights or obligations hereunder to any Person (a "Transferee") without the prior written approval of the other Party; provided, however, that Dynavax, without the prior approval of the other Party, acting in accordance with Article 14 of the Amended and Restated Research and Development Agreement, may make such Transfer to any Person which acquires all or substantially all of Dynavax's assets or business (or assets or business related to the Programs) or which is the surviving or resulting Person in a merger or consolidation with Dynavax; provided further, that in the event of any such Transfer, Dynavax or Holdings, as applicable, shall provide written notice to the other Parties of any such Transfer not later than thirty (30) days after such Transfer setting forth the identity and address of the Transferee and summarizing the terms of the Transfer. In the event that the surviving or resulting "parent" entity (the "Surviving Entity") in a merger or acquisition involving Dynavax is an entity other than Dynavax, then Holdings or any subsequent holder of a Warrant shall either exercise such Warrant or surrender such Warrant in exchange for a new Warrant exercisable for shares of the common stock of the Surviving Entity (the "Replacement Warrant"); provided, that:

(i) If the terms of such merger or acquisition shall provide for consideration that consists of a combination of cash and stock of the Surviving Entity, then any Replacement Warrant issued to the holders of the Warrants shall be solely for stock of the Surviving Entity, at an exchange ratio reflecting the total consideration paid by the Surviving Entity at the time of such change in control as if the total consideration (including cash) for each share of Dynavax Common Stock was instead paid only in stock of the Surviving Entity at the time of such change of control (as illustrated on Exhibit B hereto), and the holders of the Replacement Warrants shall have the registration rights for stock issuable upon exercise of the Replacement Warrants as provided under the Registration Rights Agreement; and

(ii) If prior to the end of the Term, such a merger or acquisition shall occur and the consideration for such merger or acquisition shall be paid entirely in cash, then any holder of any outstanding Warrant shall then have the option to elect within fifteen (15) Business Days of receiving notice of the public announcement of the merger or acquisition by written notice of election to Dynavax, either (1) to retain such Warrant and the right to exercise such Warrant for shares of Dynavax Common Stock in accordance with the terms of such Warrant and this Agreement, which exercise shall occur no later than immediately prior to the closing of such merger or acquisition; or (2) to surrender such

outstanding Warrant to Dynavax in consideration of a cash payment for each share of Dynavax Common Stock subject to purchase under such Warrant in an amount equal to forty percent (40%) of the per share cash consideration to be received by a holder of one share of Dynavax Common Stock to be tendered in the merger or acquisition; provided that the aggregate total cash payments to all holders of the Warrants shall not exceed five million dollars (\$5,000,000) (the “Warrant Surrender Price”). The Warrant Surrender Price shall be paid upon the surrender of the Warrants promptly following the closing of the all cash merger or acquisition. Any failure by the Holder to deliver a written notice of election to Dynavax pursuant to this Section 7.08(ii) shall be deemed an election of clause (1) of this Section 7.08(ii).

Following a merger or acquisition involving the payment of non-cash consideration in which Dynavax is not the Surviving Entity, any reference to “Dynavax Common Stock” shall be deemed instead to refer to the common stock of the Surviving Entity. For purposes of this Section 7.08 “common stock of the Surviving Entity” shall include stock of such corporation of any class which is not preferred as to dividends or assets over any other class of stock of such corporation, and which is not subject to redemption and shall also include any evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for any such stock, either immediately or upon the arrival of a specified date or the occurrence of a specified event and any warrants or other rights to subscribe for or purchase any such stock. The foregoing provisions of this Section 7.08 shall similarly apply to successive mergers, acquisitions, consolidations or disposition of assets.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective officers or other representatives thereunto duly authorized, as of the date first above written.

DYNAVAX TECHNOLOGIES CORPORATION

By: /s/ Michael S. Ostrach

Name: Michael S. Ostrach

Title: Vice President

SYMPHONY DYNAMO HOLDINGS LLC

By: Symphony Capital Partners, L.P.,
its Manager

By: Symphony Capital GP, L.P.,
its General Partner

By: Symphony GP, LLC,
its General Partner

By: /s/ Mark Kessel

Name: Mark Kessel

Title: Managing Member

Signature Page to the Warrant Purchase Agreement

CERTAIN DEFINITIONS

“\$” means United States dollars.

“**Accredited Investor**” has the meaning set forth in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended.

“**Act**” means the Delaware Limited Liability Company Act, 6 Del. C. § 18-101 et seq.

“**Ad Hoc Meeting**” has the meaning set forth in Paragraph 6 of Annex B of the Amended and Restated Research and Development Agreement.

“**Additional Funds**” has the meaning set forth in Section 2(b) of the Funding Agreement.

“**Additional Funding Date**” has the meaning set forth in Section 3 of the Funding Agreement.

“**Additional Party**” has the meaning set forth in Section 13 of the Confidentiality Agreement.

“**Additional Regulatory Filings**” means such Governmental Approvals as required to be made under any law applicable to the purchase of the Symphony Dynamo Equity Securities under the Purchase Option Agreement.

“**Adjusted Capital Account Deficit**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Affected Member**” has the meaning set forth in Section 27 of the Investors LLC Agreement.

“**Affiliate**” means, with respect to any Person (i) any Person directly or indirectly controlling, controlled by or under common control with such Person, (ii) any officer, director, general partner, member or trustee of such Person, or (iii) any Person who is an officer, director, general partner, member or trustee of any Person described in clauses (i) or (ii) of this sentence. For purposes of this definition, the terms “controlling,” “controlled by” or “under common control with” shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person or entity, whether through the ownership of voting securities, by contract or otherwise, or the power to elect at least 50% of the directors, managers, general partners, or persons exercising similar authority with respect to such Person or entities.

“**Amended and Restated Research and Development Agreement**” means the Amended and Restated Research and Development Agreement dated as of the Closing Date, among Dynavax, Holdings and Symphony Dynamo.

“**Asset Value**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Auditors**” means an independent certified public accounting firm of recognized national standing.

“**Avecia Agreement**” has the meaning set forth in Schedule 12.1(f) to the Amended and Restated Research and Development Agreement.

“**Bankruptcy Code**” means the United States Bankruptcy Code.

“**Berna**” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“**Business Day**” means any day other than Saturday, Sunday or any other day on which commercial banks in The City of New York or the City of San Francisco are authorized or required by law to remain closed.

“**Cancer Products**” mean any pharmaceutical product comprising a Selected ISS in the absence of any added tumor, cancer or viral antigen, for use in cancer treatment or therapy.

“**Cancer Program**” means the identification, development, manufacture and/or use of any Cancer Products in accordance with the Development Plan.

“**Capital Contributions**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Capitalized Leases**” means all leases that have been or should be, in accordance with GAAP, recorded as capitalized leases.

“**Cash Available for Distribution**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Chair**” has the meaning set forth in Paragraph 4 of Annex B to the Amended and Restated Research and Development Agreement.

“**Change of Control**” means and includes the occurrence of any of the following events, but specifically excludes (i) acquisitions of capital stock directly from Dynavax for cash, whether in a public or private offering, (ii) sales of capital stock by stockholders of Dynavax, and (iii) acquisitions of capital stock by or from any employee benefit plan or related trust:

(a) the merger, reorganization or consolidation of Dynavax into or with another corporation or legal entity in which Dynavax’s stockholders holding the right to vote with respect to matters generally immediately preceding such merger, reorganization or consolidation, own less than fifty percent (50%) of the voting securities of the surviving entity; or

(b) the sale of all or substantially all of Dynavax’s assets or business.

“**Class A Member**” means a holder of a Class A Membership Interest.

“**Class A Membership Interest**” means a Class A Membership Interest in Holdings.

“**Class B Member**” means a holder of a Class B Membership interest.

“**Class B Membership Interest**” means a Class B Membership Interest in Holdings.

“**Class C Member**” means a holder of a Class C Membership Interest.

“**Class C Membership Interest**” means a Class C Membership Interest in Holdings.

“**Closing Certificate for Section 5.1(e)**” means the written certificate, pertaining to the representations made by Dynavax under Section 5.1(e) of the Novated and Restated Technology License Agreement, provided by Dynavax to Symphony Dynamo Holdings LLC and Symphony Dynamo on the Closing Date.

“**Closing Certificate for Section 5.1(f)**” means the written certificate, pertaining to the representations made by Dynavax under Section 5.1(f) of the Novated and Restated Technology License Agreement, provided by Dynavax to Symphony Dynamo Holdings LLC and Symphony Dynamo on the Closing Date.

“**Client Schedules**” has the meaning set forth in Section 5(b)(i) of the RRD Services Agreement.

“**Clinical Budget Component**” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“**Closing Date**” means April 18, 2006.

“**CMC**” means the chemistry, manufacturing and controls documentation as required for filings with Regulatory Authority relating to the manufacturing, production and testing of drug products.

“**Code**” means the Internal Revenue Code of 1986, as amended from time to time.

“**Committed Capital**” means \$50,000,000.00.

“**Common Stock**” means the common stock, par value \$0.01 per share, of Symphony Dynamo.

“**Company Expenses**” has the meaning set forth in Section 5.09 of the Holdings LLC Agreement.

“**Company Property**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Confidential Information**” has the meaning set forth in Section 2 of the Confidentiality Agreement.

“**Confidentiality Agreement**” means the Confidentiality Agreement, dated as of the Closing Date, among Symphony Dynamo, Holdings, Dynavax, each Symphony Fund, SCP, SSP, Investors, Symphony Capital, RRD and Ann M. Arvin, M.D.

“**Conflict Transaction**” has the meaning set forth in Article X of the Symphony Dynamo Charter.

“**Control**” means, with respect to any material, information or intellectual property right, that a Party owns or has a license to such item or right, and has the ability to grant the other Party access, a license or a sublicense (as applicable) in or to such item or right as provided in the Operative Documents without violating the terms of any agreement or other arrangement with any third party.

“**Debt**” of any Person means, without duplication:

1. all indebtedness of such Person for borrowed money,
2. all obligations of such Person for the deferred purchase price of property or services (other than any portion of any trade payable obligation that shall not have remained unpaid for 91 days or more from the later of (A) the original due date of such portion and (B) the customary payment date in the industry and relevant market for such portion),
3. all obligations of such Person evidenced by bonds, notes, debentures or other similar instruments,
4. all obligations of such Person created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (whether or not the rights and remedies of the seller or lender under such agreement in an event of default are limited to repossession or sale of such property),
5. all Capitalized Leases to which such Person is a party,
6. all obligations, contingent or otherwise, of such Person under acceptance, letter of credit or similar facilities,
7. all obligations of such Person to purchase, redeem, retire, defease or otherwise acquire for value any Equity Securities of such Person,
8. the net amount of all financial obligations of such Person in respect of Hedge Agreements,
9. the net amount of all other financial obligations of such Person under any contract or other agreement to which such Person is a party,
10. all Debt of other Persons of the type described in clauses (a) through (i) above guaranteed, directly or indirectly, in any manner by such Person, or in effect guaranteed, directly or indirectly, by such Person through an agreement (A) to pay or purchase such Debt or to advance or supply funds for the payment or purchase of such Debt, (B) to purchase, sell or lease (as lessee or lessor) property, or to purchase or sell services, primarily for the purpose of enabling the debtor to make payment of such Debt or to assure the holder of such Debt against loss, (C) to supply funds to or in any other manner invest in the debtor (including any agreement to pay for property or services irrespective of whether such property is received or such services are rendered) or (D) otherwise to assure a creditor against loss, and
11. all Debt of the type described in clauses (a) through (i) above secured by (or for which the holder of such Debt has an existing right, contingent or otherwise, to be secured by) any Encumbrance on property (including accounts and contract rights) owned or held or used under lease or license by such Person, even though such Person has not assumed or become liable for payment of such Debt.

“Development Budget” means the budget (comprised of the Management Budget Component and the Clinical Budget Component) for the implementation of the Development Plan (the initial form of which was agreed upon by Dynavax and Symphony Dynamo as of the Closing Date and attached to the Amended and Restated Research and Development Agreement as Annex D thereto), as may be further developed and revised from time to time in accordance with the Development Committee Charter and the Amended and Restated Research and Development Agreement.

“Development Committee” has the meaning set forth in Article 3 of the Amended and Restated Research and Development Agreement.

“Development Committee Charter” has the meaning set forth in Article 3 of the Amended and Restated Research and Development Agreement.

“Development Committee Member” has the meaning set forth in Paragraph I of Annex B to the Amended and Restated Research and Development Agreement.

“Development Plan” means the development plan covering all the Programs (the initial form of which was agreed upon by Dynavax and Symphony Dynamo as of the Closing Date and attached to the Amended and Restated Research and Development Agreement as Annex C thereto), as may be further developed and revised from time to time in accordance with the Development Committee Charter and the Amended and Restated Research and Development Agreement.

“Development Services” has the meaning set forth in Section 1(b) of the RRD Services Agreement.

“Director(s)” has the meaning set forth in the Preliminary Statement of the Indemnification Agreement.

“Disclosing Party” has the meaning set forth in Section 3 of the Confidentiality Agreement.

“Discontinuation Closing Date” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Date” means any date designated by Symphony Dynamo which shall occur on or after the 90th day following the receipt by Dynavax of notice from Symphony Dynamo of Symphony Dynamo’s intent to discontinue a Program in accordance with the terms of the Amended and Restated Research and Development Agreement.

“Discontinuation Option” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Price” has the meaning set forth in Section 11.3 of the Amended and Restated Research and Development Agreement.

“Discontinuation Price Dispute Notice” has the meaning set forth in Section 11.3(b) of the Amended and Restated Research and Development Agreement.

“Discontinued Program” has the meaning set forth in Section 2.11 of the Novated and Restated Technology License Agreement.

“Discontinuation Program Funding” has the meaning set forth in Section 11.3(b) of the Amended and Restated Research and Development Agreement.

“Disinterested Directors” has the meaning set forth in Article X of the Symphony Dynamo Charter.

“Distribution” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Dynavax” means Dynavax Technologies Corporation, a Delaware corporation.

“Dynavax Common Stock” means the common stock, par value \$0.001 per share, of Dynavax.

“Dynavax Common Stock valuation” has the meaning set forth in Section 2(e) of the Purchase Option Agreement.

“Dynavax Obligations” has the meaning set forth in Section 6.1 of the Amended and Restated Research and Development Agreement.

“Dynavax Personnel” has the meaning set forth in Section 8.4 of the Amended and Restated Research and Development Agreement.

“Dynavax Subcontractor” has the meaning set forth in Section 6.2 of the Amended and Restated Research and Development Agreement.

“Early Purchase Option Exercise” has the meaning set forth in Section 1(c)(iv) of the Purchase Option Agreement.

“Effective Registration Date” has the meaning set forth in Section 1(b) of the Registration Rights Agreement.

“Encumbrance” means (i) any security interest, pledge, mortgage, lien (statutory or other), charge or option to purchase, lease or otherwise acquire any interest, (ii) any adverse claim, restriction, covenant, title defect, hypothecation, assignment, deposit arrangement, license or other encumbrance of any kind, preference or priority, or (iii) any other security agreement or preferential arrangement of any kind or nature whatsoever (including, without limitation, any conditional sale or other title retention agreement).

“Enhancements” means findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Intellectual Property and/or Regulatory Files, in each case whether or not patentable.

“Equity Securities” means, with respect to any Person, shares of capital stock of (or other ownership or profit interests in) such Person, warrants, options or other rights for the purchase or other acquisition from such Person of shares of capital stock of (or other ownership or profit interests in) such Person, securities convertible into or exchangeable for shares of capital stock of (or other ownership or profit interests in) such Person or warrants, rights or options for the purchase or other acquisition from such Person of such shares (or such other interests), and other ownership or profit interests in such Person (including, without limitation, partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are authorized or otherwise existing on any date of determination.

“ERISA” means the United States Employee Retirement Income Security Act of 1974, as amended.

“Excepted Debt” has the meaning set forth in Section 5(c)(iii) of the Purchase Option Agreement.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Excluded ISS” means (a) any ISS testing positive for stimulation of TLR-9 by Dynavax prior to the Closing Date that is not a Selected ISS, or (b) any ISS made and tested for activity by Dynavax during the Term that (i) is not designed to have significant activity with a target other than TLR-9 (whether or not it also acts through TLR-9) and (ii) is not a Selected ISS.

“Existing NDA” has the meaning set forth in Section 2 of the Confidentiality Agreement.

“External Directors” has the meaning set forth in the preamble of the Confidentiality Agreement.

“FDA” means the United States Food and Drug Administration or its successor agency in the United States.

“FDA Sponsor” has the meaning set forth in Section 5.1 of the Amended and Restated Research and Development Agreement.

“Final Discontinuation Price” has the meaning set forth in Section 11.3(c) of the Amended and Restated Research and Development Agreement.

“Financial Audits” has the meaning set forth in Section 6.6 of the Amended and Restated Research and Development Agreement.

“Financing” has the meaning set forth in the Preliminary Statement of the Purchase Option Agreement.

“Fiscal Year” has the meaning set forth in each Operative Document in which it appears.

“Form S-3” means the Registration Statement on Form S-3 as defined under the Securities Act.

“**FTE**” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“**Funding Agreement**” means the Funding Agreement, dated as of the Closing Date, among Dynavax, SCP and Investors.

“**Funding Notice**” has the meaning set forth in Section 2(b) of the Funding Agreement.

“**GAAP**” means generally accepted accounting principles in effect in the United States of America from time to time.

“**Governmental Approvals**” means authorizations, consents, orders, declarations or approvals of, or filings with, or terminations or expirations of waiting periods imposed by any Governmental Authority.

“**Governmental Authority**” means any United States or non-United States federal, national, supranational, state, provincial, local, or similar government, governmental, regulatory or administrative authority, agency or commission or any court, tribunal, or judicial or arbitral body.

“**Governmental Order**” means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

“**Hedge Agreement**” means any interest rate swap, cap or collar agreement, interest rate future or option contract, currency swap agreement, currency future or option contract or other similar hedging agreement.

“**Hepatitis B Products**” mean any pharmaceutical product comprising a Selected ISS, either alone or in combination with Hepatitis B Surface Antigen (HBsAg), whether conjugated or unconjugated to the applicable ISS, for use in Hepatitis B treatment or therapy.

“**Hepatitis B Program**” means the identification, development, manufacture and/or use of any Hepatitis B Products in Accordance with the Development Plan.

“**Hepatitis C Products**” mean any pharmaceutical product comprising a Selected ISS, either alone or in combination with an added Hepatitis C antigen, whether conjugated or unconjugated to the applicable ISS, for use in Hepatitis C treatment or therapy.

“**Hepatitis C Program**” means the identification, development, manufacture and/or use of any Hepatitis C Products in Accordance with the Development Plan.

“**Holdings**” means Symphony Dynamo Holdings LLC, a Delaware limited liability company.

“**Holdings Claims**” has the meaning set forth in Section 5.01 of the Warrant Purchase Agreement.

“**Holdings LLC Agreement**” means the Amended and Restated Limited Liability Company Agreement of Holdings, dated as of the Closing Date.

“HSR Act Filings” means the premerger notification and report forms required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

“IND” means an Investigational New Drug Application, as described in 21 U.S.C. § 355(i)(1) and 21 C.F.R. § 312 in the regulations promulgated by the United States Food and Drug Administration, or any foreign equivalent thereof.

“Indemnification Agreement” means the Indemnification Agreement among Symphony Dynamo and the Directors named therein, dated as of the Closing Date.

“Indemnified Party” has the meaning set forth in each Operative Document in which it appears.

“Indemnified Proceeding” has the meaning set forth in each Operative Document in which it appears.

“Indemnifying Party” has the meaning set forth in each Operative Document in which it appears.

“Independent Accountant” has the meaning set forth in Section 11.3(c) of the Amended and Restated Research and Development Agreement.

“Initial Development Budget” means the initial development budget prepared by representatives of Symphony Dynamo and Dynavax prior to the Closing Date, and attached to the Amended and Restated Research and Development Agreement as Annex D thereto.

“Initial Development Plan” means the initial development plan prepared by representatives of Symphony Dynamo and Dynavax prior to the Closing Date, and attached to the Amended and Restated Research and Development Agreement as Annex C thereto.

“Initial Funds” has the meaning set forth in Section 2(a) of the Funding Agreement.

“Initial Holdings LLC Agreement” means the Agreement of Limited Liability Company of Holdings, dated January 10, 2006.

“Initial Investors LLC Agreement” means the Agreement of Limited Liability Company of Investors, dated January 10, 2006.

“Initial LLC Member” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Interest Certificate” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Investment Company Act” means the Investment Company Act of 1940, as amended.

“Investment Overview” means the investment overview describing the transactions entered into pursuant to the Operative Documents.

“Investment Policy” has the meaning set forth in Section 1(a)(vi) of the RRD Services Agreement.

“Investors” means Symphony Dynamo Investors LLC.

“Investors LLC Agreement” means the Amended and Restated Agreement of Limited Liability Company of Investors dated as of the Closing Date

“IRS” means the U.S. Internal Revenue Service.

“ISS” means any synthetic oligonucleotide sequence or chimeric oligonucleotide sequence that modulates an immune response, including, but not limited to, such sequences referred to by Dynavax as immunostimulatory sequences, chimeric immunomodulatory compounds and branched immunomodulatory compounds.

“Knowledge” means the actual (and not imputed) knowledge of the executive officers of Dynavax, without the duty of inquiry or investigation.

“Law” means any law, statute, treaty, constitution, regulation, rule, ordinance, order or Governmental Approval, or other governmental restriction, requirement or determination, of or by any Governmental Authority.

“License” has the meaning set forth in the Preliminary Statement of the Purchase Option Agreement.

“Licensed Intellectual Property” means the Licensed Patent Rights, Symphony Dynamo Enhancements, Licensor Enhancements and the Licensed Know-How.

“Licensed Know-How” means any and all proprietary technology that is Controlled by Licensor as of the Closing Date and that relates to the Licensed Patent Rights, Regulatory Files, ISSs or the Programs, including without limitation, manufacturing processes or protocols, know-how, writings, documentation, data, technical information, techniques, results of experimentation and testing, diagnostic and prognostic assays, specifications, databases, any and all laboratory, research, pharmacological, toxicological, analytical, quality control pre-clinical and clinical data, and other information and materials, whether or not patentable.

“Licensed Patent Rights” means:

1. any and all patents, patent applications and invention disclosures Controlled by Licensor as of the Closing Date and relating to ISSs or the Programs, including, but not limited to, the patents and patent applications listed on Annex B to the Novated and Restated Technology License Agreement;
2. any and all reissues, continuations, divisionals, continuations-in-part (but only to the extent the subject matter in such continuations-in-part has been disclosed in the patents or patent applications listed on Annex B), reexaminations, renewals, substitutes, extensions or foreign counterparts of the foregoing, whether filed prior to or after the expiration or termination of the Purchase Option; and

3. any and all patents and patent applications that claim Licensor Enhancements or Symphony Dynamo Enhancements.

“**Licensor**” means Dynavax.

“**Licensor Enhancements**” means all findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Patent Rights, Licensed Know-How, Regulatory Files, ISSs, Products or the Programs, in each case, developed by Licensor during the Term in the course of performing Dynavax’s rights and obligations under the Amended and Restated Research & Development Agreement (in each case whether or not patentable), to the extent such items do not otherwise qualify as Symphony Dynamo Enhancements hereunder, regardless of whether such work is funded by Symphony Dynamo or Dynavax.

“**Lien**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**Liquidating Event**” has the meaning set forth in Section 8.01 of the Holdings LLC Agreement.

“**LLC Agreements**” means the Initial Holdings LLC Agreement, the Holdings LLC Agreement, the Initial Investors LLC Agreement and the Investors LLC Agreement.

“**Loss**” has the meaning set forth in each Operative Document in which it appears.

“**Management Budget Component**” has the meaning set forth in Section 4.1 of the Amended and Restated Research and Development Agreement.

“**Management Fee**” has the meaning set forth in Section 6(a) of the RRD Services Agreement.

“**Manager**” means (i) for each LLC Agreement in which it appears, the meaning set forth in such LLC Agreement, and (ii) for each other Operative Document in which it appears, RRD.

“**Management Services**” has the meaning set forth in Section 1(a) of the RRD Services Agreement.

“**Manager Event**” has the meaning set forth in Section 3.01(g) of the Holdings LLC Agreement.

“**Material Adverse Effect**” means, with respect to any Person, a material adverse effect on (i) the business, assets, property or condition (financial or otherwise) of such Person or, (ii) its ability to comply with and satisfy its respective agreements and obligations under the Operative Documents or, (iii) the enforceability of the obligations of such Person of any of the Operative Documents to which it is a party.

“**Material Subsidiary**” means, at any time, a Subsidiary of Dynavax having assets in an amount equal to at least 5% of the amount of total consolidated assets of Dynavax and its Subsidiaries (determined as of the last day of the most recent reported fiscal quarter of Dynavax) or revenues or net income in an amount equal to at least 5% of the amount of total consolidated revenues or net income of Dynavax and its Subsidiaries for the 12-month period ending on the last day of the most recent reported fiscal quarter of Dynavax.

“Medical Discontinuation Event” means (a) as specified in each Protocol, those data that, if collected in such Protocol, demonstrate that such Protocol should not be continued or (b) a series of adverse events, side effects or other undesirable outcomes that, when collected in a Protocol, would cause a reasonable FDA Sponsor to discontinue such Protocol.

“Membership Interest” means (i) for each LLC Agreement in which it appears, the meaning set forth in such LLC Agreement, and (ii) for each other Operative Document in which it appears, the meaning set forth in the Holdings LLC Agreement.

“NASDAQ” means the National Association of Securities Dealers Automated Quotation System.

“NDA” means a New Drug Application, as defined in the regulations promulgated by the United States Food and Drug Administration, or any foreign equivalent thereof.

“Non-Dynavax Capital Transaction” means any (i) sale or other disposition of all or part of the Symphony Dynamo Shares or all or substantially all of the operating assets of symphony Dynamo, to a Person other than Dynavax or an Affiliate of Dynavax or (ii) distribution in kind of the Symphony Dynamo Shares following the expiration of the Purchase Option.

“Non-Symphony Dynamo ISS” means any ISS that is (i) first made and tested for activity by Dynavax during the Term and (ii) designed to have significant activity with a target other than TLR-9, whether or not it also acts through TLR-9.

“Novated and Restated Technology License Agreement” means the Novated and Restated Technology License Agreement, dated as of the Closing Date, among Dynavax, Symphony Dynamo and Holdings.

“Operative Documents” means, collectively, the Indemnification Agreement, the Holdings LLC Agreement, the Purchase Option Agreement, the Warrant Purchase Agreement, the Registration Rights Agreement, the Subscription Agreement, the Technology License Agreement, the Novated and Restated Technology License Agreement, the RRD Services Agreement, the Research and Development Agreement, the Amended and Restated Research and Development Agreement, the Confidentiality Agreement, the Funding Agreement and each other certificate and agreement executed in connection with any of the foregoing documents.

“Organizational Documents” means any certificates or articles of incorporation or formation, partnership agreements, trust instruments, bylaws or other governing documents.

“Partial Stock Payment” has the meaning set forth in Section 3(a)(iii) of the Purchase Option Agreement.

“Party(ies)” means, for each Operative Document or other agreement in which it appears, the parties to such Operative Document or other agreement, as set forth therein. With respect to any agreement in which a provision is included therein by reference to a provision in another agreement, the term “Party” shall be read to refer to the parties to the document at hand, not the agreement that is referenced.

“Payment Terms” has the meaning set forth in Section 8.2 of the Amended and Restated Research and Development Agreement.

“Percentage” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Permitted Investments” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Permitted Lien” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Person” means any individual, partnership (whether general or limited), limited liability company, corporation, trust, estate, association, nominee or other entity.

“Personnel” of a Party means such Party, its employees, subcontractors, consultants, representatives and agents.

“Prime Rate” means the quoted “Prime Rate” at JPMorgan Chase Bank or, if such bank ceases to exist or is not quoting a base rate, prime rate reference rate or similar rate for United States dollar loans, such other major money center commercial bank in New York City selected by the Manager.

“Products” means Cancer Products, Hepatitis B Products and Hepatitis C Products.

“Profit” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Program Option” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“Program Option Closing Date” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“Program Option Exercise Date” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“Program Option Exercise Notice” has the meaning set forth in Section 11.1(b) of the Amended and Restated Research and Development Agreement.

“Program Option Period” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“Programs” means Cancer Program, Hepatitis B Program and Hepatitis C Program.

“Protocol” means a written protocol that meets the substantive requirements of Section 6 of the ICH Guideline for Good Clinical Practice as adopted by the FDA, effective May 9, 1997 and is included within the Development Plan or later modified or added to the Development Plan pursuant to the Amended and Restated Research and Development Agreement.

“Public Companies” has the meaning set forth in Section 5(e) of the Purchase Option Agreement.

“Purchase Option” has the meaning set forth in Section 1(a) of the Purchase Option Agreement.

“Purchase Option Agreement” means the Amended and Restated Purchase Option Agreement dated as of the date hereof, among Dynavax, Holdings and Symphony Dynamo.

“Purchase Option Closing” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Closing Date” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Commencement Date” has the meaning set forth in Section 1(c)(iii) of the Purchase Option Agreement.

“Purchase Option Exercise Date” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Exercise Notice” has the meaning set forth in Section 2(a) of the Purchase Option Agreement.

“Purchase Option Period” has the meaning set forth in Section 1(c)(iii) of the Purchase Option Agreement.

“Purchase Price” has the meaning set forth in Section 2(b) of the Purchase Option Agreement.

“QA Audits” has the meaning set forth in Section 6.5 of the Amended and Restated Research and Development Agreement.

“Regents” has the meaning set forth in Section 3.1 of the Novated and Restated Technology License Agreement.

“Regents Agreement” has the meaning set forth in Section 3.1 of the Novated and Restated Technology License Agreement.

“Registration Rights Agreement” means the Amended and Restated Registration Rights Agreement dated as of the date hereof, between Dynavax and Holdings.

“Registration Statement” has the meaning set forth in Section 1(b) of the Registration Rights Agreement.

“Regulatory Authority” means the United States Food and Drug Administration, or any successor agency in the United States, or any health regulatory authority(ies) in any other country that is a counterpart to the FDA and has responsibility for granting registrations or other regulatory approval for the marketing, manufacture, storage, sale or use of drugs in such other country.

“Regulatory Allocation” has the meaning set forth in Section 3.06 of the Holdings LLC Agreement.

“Regulatory Files” means any IND, NDA or any other filings filed with any Regulatory Authority with respect to the Programs.

“Related Oncology Products Agreement” has the meaning set forth in Section 1.1.4 of the Amended and Restated Research and Development Agreement.

“Replacement Warrant(s)” has the meaning set forth in Section 7.08 of the Warrant Purchase Agreement.

“Representative” of any Person means such Person’s shareholders, principals, directors, officers, employees, members, managers and/or partners.

“Research and Development Agreement” means the Research and Development Agreement dated as of the Closing Date, between Dynavax and Holdings.

“Rhein” has the meaning set forth in Section 11.1(a) of the Amended and Restated Research and Development Agreement.

“Rhein Sale Agreement” has the meaning set forth in Section 11.2(a) of the Amended and Restated Research and Development Agreement.

“RRD” means RRD International, LLC, a Delaware limited liability company.

“RRD Indemnified Party” has the meaning set forth in Section 10(a) of the RRD Services Agreement.

“RRD Loss” has the meaning set forth in Section 10(a) of the RRD Services Agreement.

“RRD Parties” has the meaning set forth in Section 9(e) of the RRD Services Agreement.

“RRD Personnel” has the meaning set forth in Section I(a)(ii) of the RRD Services Agreement.

“RRD Services Agreement” means the RRD Services Agreement between Symphony Dynamo and RRD, dated as the Closing Date, 2006.

“Schedule K-1” has the meaning set forth in Section 9.02(a) of the Holdings LLC Agreement.

“**Scheduled Meeting**” has the meaning set forth in Paragraph 6 of Annex B of the Amended and Restated Research and Development Agreement.

“**Scientific Discontinuation Event**” has the meaning set forth in Section 4.2(c) of the Amended and Restated Research and Development Agreement.

“**SCP**” means Symphony Capital Partners, L.P., a Delaware limited partnership.

“**SD Program Option**” has the meaning set forth in Section 11.2(b) of the Amended and Restated Research and Development Agreement.

“**SD Program Option Exercise Notice**” has the meaning set forth in Section 11.2(b) of the Amended and Restated Research and Development Agreement.

“**SEC**” means the United States Securities and Exchange Commission.

“**Securities Act**” means the Securities Act of 1933, as amended.

“**Selected ISS**” means any ISS testing positive for stimulation of TLR-9 selected (i) for inclusion in the Development Plan or (ii) as a backup ISS, in each case pursuant to Paragraph 12 of the Development Committee Charter. Selected ISS may include sequences that subsequent to the Closing Date are shown to act through one or more additional mechanisms in addition to stimulation of TLR-9.

“**Shareholder**” means any Person who owns any Symphony_ Dynamo Shares.

“**Solvent**” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“**SSP**” means Symphony Strategic Partners, LLC, a Delaware limited liability company.

“**Stock Payment Date**” has the meaning set forth in Section 2 of the Subscription Agreement.

“**Stock Purchase Price**” has the meaning set forth in Section 2 of the Subscription Agreement.

“**Subcontracting Agreement**” has the meaning set forth in Section 6.2 of the Amended and Restated Research and Development Agreement.

“**Subscription Agreement**” means the Subscription Agreement between Symphony Dynamo and Holdings, dated as the Closing Date.

“**Subsidiary**” of any Person means any corporation, partnership, joint venture, limited liability company, trust or estate of which (or in which) more than 50% of (a) the issued and outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether at the time capital stock of any other class or classes of such corporation shall or might have voting power upon the occurrence of any contingency); (b) the interest in the capital or profits of such partnership, joint venture or limited liability company; or (c) the beneficial interest in such trust or estate is at the time directly or indirectly owned or controlled by such Person, by such person and one or more of its other Subsidiaries or by one or more of such Person’s other Subsidiaries.

“Surviving Entity” means the surviving or resulting “parent” legal entity which is surviving entity to Dynavax after giving effect to a Change of Control.

“Symphony Capital” means Symphony Capital LLC, a Delaware limited liability company.

“Symphony Dynamo” means Symphony Dynamo, Inc., a Delaware corporation.

“Symphony Dynamo Auditors” has the meaning set forth in Section 5(b) of the RRD Services Agreement.

“Symphony Dynamo Board” means the board of directors of Symphony Dynamo.

“Symphony Dynamo By-laws” means the By-laws of Symphony Dynamo, as adopted by resolution of the Symphony Dynamo Board on the Closing Date.

“Symphony Dynamo Charter” means the Amended and Restated Certificate of Incorporation of Symphony Dynamo, dated as of the Closing Date.

“Symphony Dynamo Director Event” has the meaning set forth in Section 3.01(h)(i) of the Holdings LLC Agreement.

“Symphony Dynamo Enhancements” means findings, improvements, discoveries, inventions, additions, modifications, enhancements, derivative works, clinical development data, or changes to the Licensed Intellectual Property, Regulatory Files, ISSs, Products or the Programs, made by or on behalf of Symphony Dynamo during the Term, in each case whether or not patentable.

“Symphony Dynamo Equity Securities” means the Common Stock and any other stock or shares issued by Symphony Dynamo.

“Symphony Dynamo Loss” has the meaning set forth in Section 10(b) of the RRD Services Agreement.

“Symphony Dynamo Shares” has the meaning set forth in Section 2.02 of the Holdings LLC Agreement.

“Symphony Fund(s)” means Symphony Capital Partners, L.P., a Delaware limited partnership, and Symphony Strategic Partners, LLC, a Delaware limited liability company.

“Tangible Materials” means any tangible documentation, whether written or electronic, existing as of the Closing Date or during the Term, that is Controlled by the Licensor, embodying the Licensed Intellectual Property, Regulatory Files, Products or the Programs, including, but not limited to, documentation, patent applications and invention disclosures.

“Tax Amount” has the meaning set forth in Section 4.02 of the Holdings LLC Agreement.

“Technology License Agreement” means the Technology License Agreement, dated as of the Closing Date, between Dynavax and Holdings.

“Term” has the meaning set forth in Section 4(b)(iii) of the Purchase Option Agreement, unless otherwise stated in any Operative Document.

“Territory” means the world.

“Third Party IP” has the meaning set forth in Section 2.11 of the Novated and Restated Technology License Agreement.

“Third Party Licensor” means a third party from which Dynavax has received a license or sublicense to Licensed Intellectual Property.

“Transfer” has for each Operative Document in which it appears the meaning set forth in such Operative Document.

“Transferee” has, for each Operative Document in which it appears, the meaning set forth in such Operative Document.

“Voluntary Bankruptcy” has the meaning set forth in Section 1.01 of the Holdings LLC Agreement.

“Warrant(s)” means the “Warrant” as defined in Section 2.01 of the Warrant Purchase Agreement, and/or any successor certificates exercisable for Warrant Shares issued by Dynavax.

“Warrant Closing” has the meaning set forth in Section 2.03 of the Warrant Purchase Agreement.

“Warrant Date” has the meaning set forth in Section 2.02 of the Warrant Purchase Agreement.

“Warrant Purchase Agreement” means the Warrant Purchase Agreement, dated as of the date hereof, between Dynavax and Holdings.

“Warrant Shares” has the meaning set forth in Section 2.01 of the Warrant Purchase Agreement.

“Warrant Surrender Price” has the meaning set forth in Section 7.08 of the Warrant Purchase Agreement.

FORM OF WARRANT

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN THE SUBJECT OF REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN (OR WILL BE, WITH RESPECT TO THE SECURITIES ISSUABLE UPON EXERCISE HEREOF) ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF MAY BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.

THE WARRANT EVIDENCED BY THIS CERTIFICATE IS SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN THE WARRANT PURCHASE AGREEMENT, DATED AS OF NOVEMBER 9, 2009, COPIES OF WHICH ARE ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF THIS WARRANT WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH.

**DYNAVAX TECHNOLOGIES CORPORATION
WARRANT TO PURCHASE COMMON STOCK**

No. CW-__

[____, __], 2009

Void After [____, __], 2014

THIS CERTIFIES THAT, for value received, **SYMPHONY DYNAMO HOLDINGS LLC**, a Delaware limited liability company, with its principal office at 7361 Calhoun Place, Suite 325, Rockville, MD 20855, or its assigns (the "Holder"), is entitled to subscribe for and purchase at the Exercise Price (defined below) from **DYNAVAX TECHNOLOGIES CORPORATION**, a Delaware corporation, with its principal office at 2929 Seventh Street, Suite 100, Berkeley, CA 94710-2753 (the "Company") Two Million (2,000,000) shares of Common Stock, par value \$0.001 per share, of the Company (the "Common Stock"), subject to adjustment as provided herein.

This Warrant is being issued pursuant to the terms of the Warrant Purchase Agreement, dated November 9, 2009, between the Company and the Holder (the "Warrant Purchase Agreement"). Capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the Warrant Purchase Agreement.

1. DEFINITIONS. Capitalized terms used but not defined herein are used as defined in the Warrant Purchase Agreement. As used herein, the following terms shall have the following respective meanings:

- (a) "Common Stock" shall mean shares of Dynavax Technologies Corporation Common Stock, par value \$0.001.
- (b) "Exercise Period" shall mean the period commencing on [____], 20[____] and ending on [____], 20[____], except as otherwise provided below.

(c) "Exercise Price" shall mean \$1.94 per share, subject to adjustment pursuant to Section 4 below.

(d) "Exercise Shares" shall mean the outstanding and unexercised shares of Common Stock issuable upon exercise of this Warrant from time to time, subject to adjustment pursuant to the terms herein, including but not limited to adjustment pursuant to Sections 4, 6 and 7 below.

(e) "Purchase Option" shall have the meaning set forth in the Warrant Purchase Agreement.

2. EXERCISE OF WARRANT.

2.1 Generally. The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period, by delivery of the following to the Company at its address set forth above (or at such other address as it may designate pursuant to Section 12 hereof):

(a) an executed Notice of Exercise in the form attached hereto;

(b) payment of the Exercise Price of the shares thereby subscribed for by means of any of the following: (i) wire transfer; (ii) cashier's check drawn on a U.S. bank made out to the Company; or (iii) a cashless exercise pursuant to Section 2.2; and

(c) this Warrant.

Upon the exercise of the rights represented by this Warrant, a certificate or certificates for the Exercise Shares so purchased, registered in the name of the Holder or persons affiliated with the Holder, if the Holder so designates, shall be issued and delivered to the Holder as soon as practicable, but in no event later than thirty (30) days, after the date of exercise pursuant to this Section 2.1. The Company shall, upon request of the Holder, if available and if allowed under applicable securities laws, use commercially reasonable efforts to deliver Exercise Shares electronically through the Depository Trust Corporation or another established clearing corporation performing similar functions, or if requested by Holder, certificates evidencing the Exercise Shares. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the Exercise Shares, deliver to Holder a new Warrant evidencing the rights of Holder to purchase the unexercised Exercise Shares remaining under this Warrant, which new Warrant shall in all other respects be identical to this Warrant.

The person in whose name any Exercise Shares are to be issued upon exercise of this Warrant shall be deemed to have become the holder of record of such shares on the date on which the Notice of Exercise, this Warrant and payment of the Exercise Price and all taxes required to be paid by the Holder, if any, were made, irrespective of the date of delivery of any certificate or certificates evidencing the Exercise Shares, except that, if the date of such surrender and payment is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of the Exercise Shares at the close of business on the next business day on which the stock transfer books are open.

2.2 Cashless Exercise. The Holder may exercise the Warrant pursuant to Section 2.1(b)(iii) and receive shares equal to the value (as determined below) of this Warrant (or the portion thereof being exercised) by delivery and notice of cashless exercise in accordance with Section 2.1, in which event the Company shall issue to the Holder a number of shares of Common Stock computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where X = the number of shares of Common Stock to be issued to the Holder

Y = the number of shares of Common Stock purchasable under the Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being exercised (at the date of such calculation)

A = the fair market value of one share of Common Stock (at the date of such calculation)

B = Exercise Price (as adjusted to the date of such calculation)

For purposes of the above calculation, the fair market value of one share of Common Stock shall equal the average closing price of the Common Stock, as reported by the NASDAQ National Market, or other national exchange that is then the primary exchange on which the Common Stock is listed, for the thirty (30) trading days immediately preceding the second trading day prior to the date on which the Holder delivers to the Company the Warrant and an executed Notice of Exercise in the form attached hereto. If the Common Stock is not quoted on the NASDAQ National Market, or listed on another national exchange, the fair market value of one share of Common Stock shall be determined by the Company's Board of Directors in good faith.

2.3 Legend.

(a) All certificates evidencing the shares to be issued to the Holder may bear the following legends:

“THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR UNDER THE SECURITIES LAWS OF ANY STATE, AND THE SAME HAVE BEEN ISSUED IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS. SUCH SHARES MAY NOT BE SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF EXCEPT AS PERMITTED UNDER SUCH SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM.”

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AS SET FORTH IN THE WARRANT PURCHASE AGREEMENT, DATED AS OF NOVEMBER 9, 2009 COPIES OF WHICH ARE ON FILE AT THE PRINCIPAL EXECUTIVE OFFICES OF THE ISSUER. NO REGISTRATION OF TRANSFER OF THESE SHARES WILL BE MADE ON THE BOOKS OF THE ISSUER UNLESS AND UNTIL SUCH RESTRICTIONS SHALL HAVE BEEN COMPLIED WITH.”

(b) If the certificates representing shares include either or both of the legends set forth in Section 2.3(a) hereof, the Company shall, upon a request from a Holder, or subsequent transferee of a Holder, as soon as practicable but in no event more than thirty (30) days after receiving such request, remove or cause to be removed (i) if the shares cease to be restricted securities, the securities law portion of the legend and/or (ii) in the event of a sale of the shares subject to issuance following the transfer of the shares in compliance with the transfer restrictions, the transfer restriction portion of the legend, from certificates representing the shares delivered by a Holder (or a subsequent transferee).

2.4 Charges, Taxes and Expenses. Issuance of the Exercise Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of any electronic or paper certificate, all of which taxes and expenses shall be paid by the Company, and such

certificates shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event Exercise Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder; and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

3. COVENANTS OF THE COMPANY.

3.1 No Impairment. Except and to the extent as waived or consented to by the Holder, the Company shall at all times in good faith assist in the carrying out of all the provisions of this Warrant and in the taking of all such action as may be necessary or appropriate in order to protect the exercise rights of the Holder against impairment.

3.2 Notices of Record Date. If at any time:

(a) the Company shall take a record of the holders of Common Stock for the purpose of entitling them to receive a dividend or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right (other than with respect to any equity or equity equivalent security issued pursuant to a rights plan adopted by the Company's Board of Directors);

(b) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company; or

(c) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to Holder at least ten (10) days' prior written notice of the record date for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, recapitalization, consolidation, merger, sale, transfer, disposition, dissolution, liquidation or winding up of the Company. Any notice provided hereunder shall specify the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and the then current estimated date for the closing of the transaction contemplated by any proposed reorganization, reclassification, recapitalization, consolidation, merger, sale, transfer, disposition, dissolution, liquidation or winding up of the Company.

4. ADJUSTMENT OF EXERCISE PRICE.

4.1 Changes in Common Stock. In the event of changes in the outstanding Common Stock by reason of stock dividends, split-ups, recapitalizations, reclassifications, combinations or exchanges of shares, separations, reorganizations, liquidations or the like, the number and class of shares available under this Warrant in the aggregate and the Exercise Price shall be correspondingly adjusted to give the Holder of this Warrant, on exercise for the same aggregate Exercise Price, the total number, class and kind of shares as the Holder would have owned had the Warrant been exercised prior to the event and had the Holder continued to hold such shares until after the event requiring adjustment. The form of this Warrant need not be changed because of any adjustment in the number of Exercise Shares subject to this Warrant pursuant to this Section 4.1.

5. FRACTIONAL SHARES. No fractional shares shall be issued upon the exercise of this Warrant, including as a consequence of any adjustment pursuant hereto. If the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the fair market value of an Exercise Share (determined as provided in Section 2.2 hereof) by such fraction.

6. CORPORATE TRANSACTIONS. In the event that the Company enters into a merger or acquisition in which the surviving or “resulting” parent entity (“Surviving Entity”) is other than the Company, then the Holder shall surrender the Warrant for a new warrant exercisable in return for shares or common stock of the Surviving Entity (as defined in the Warrant Purchase Agreement) (the “Replacement Warrant”); provided that:

6.1 Mixed Consideration. In accordance with Section 7.08 of the Warrant Purchase Agreement, if the consideration for a merger or acquisition consists of a combination of cash and stock of the Surviving Entity, then the Replacement Warrant issued to Holder shall be solely for common stock of the Surviving Entity at an exchange ratio reflecting the total consideration paid by the Surviving Entity at the time of such change in control as if the total consideration (including cash) for each share of the Common Stock was instead paid only in common stock of the Surviving Entity at the time of such change of control (as illustrated on Exhibit B to the Warrant Purchase Agreement), and the holders of the Replacement Warrants shall have the registration rights for stock issuable upon exercise of the Replacement Warrants as provided under the Registration Rights Agreement; or

6.2 Cash Consideration. In accordance with Section 7.08 of the Warrant Purchase Agreement, if prior to the end of the Term (as defined in the Warrant Purchase Agreement), a merger or acquisition shall occur and the consideration for such merger or acquisition shall be paid entirely in cash, then the Holder of this Warrant shall then have the option to irrevocably elect within fifteen (15) Business Days of the public announcement of the merger or acquisition by written notice of election to the Company, either (a) to retain the Warrant and the right to exercise the Warrant then outstanding for Exercise Shares in accordance with the terms of this Warrant, which exercise shall occur no later than immediately prior to the closing of such merger or acquisition; or (b) to surrender the Warrant to the Company in consideration of a cash payment for each share of the Common Stock subject to purchase under this Warrant in an amount equal to forty percent (40%) of the per share cash consideration to be received by a holder of one share of the Company’s Common Stock to be tendered in the merger or acquisition, provided that the aggregate total cash payments to all holders of outstanding Warrants shall not exceed five million dollars (\$5,000,000) (the “Warrant Surrender Price”). The Warrant Surrender Price shall be paid upon the surrender of the Warrants promptly following the closing of the all cash merger or acquisition. Any failure by the Holder to deliver a written notice of election to the Company pursuant to this Section 6.2 shall be deemed an election of Section 6.2(a) hereunder.

Following a merger or acquisition involving consideration of cash and stock in which the Surviving Entity is other than the Company, reference to Common Stock shall instead be deemed a reference to the common stock of the Surviving Entity. For purposes of Section 6.1, “common stock of the Surviving Entity” shall include stock of such corporation of any class which is not preferred as to dividends or assets over any other class of stock of such corporation and which is not subject to redemption and shall also include any evidences of indebtedness, shares of stock or other securities which are convertible into or exchangeable for any such stock, either immediately or upon the arrival of a specified date or the occurrence of a specified event and any warrants or other rights to subscribe for or purchase any such stock. The foregoing provisions of this Section 6 shall similarly apply to successive reorganizations, reclassifications, mergers, consolidations or disposition of assets.

7. NOTICE OF ADJUSTMENT. Whenever the number of Exercise Shares or number or kind of securities or other property purchasable upon the exercise of this Warrant or the Exercise Price is adjusted, as herein provided, the Company shall give notice thereof to the Holder at the address of such Holder appearing on the books of the Company, which notice shall state the number of Exercise Shares (and other securities or property) purchasable upon the exercise of this Warrant and the Exercise Price of such Exercise Shares (and other securities or property) after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

8. ADDITIONAL ADJUSTMENTS. This Warrant is subject to the provisions of Section 2.05 of the Warrant Purchase Agreement.

9. ORDERLY SALE. This Warrant and the Exercise Shares are subject to the provisions of Sections 6.04 and 6.05 of the Warrant Purchase Agreement.

10. NO STOCKHOLDER RIGHTS. This Warrant does not entitle the Holder to any voting rights or other rights as a stockholder of the Company prior to the exercise hereof. Upon the exercise of this Warrant in accordance with Section 2, the Exercise Shares so purchased shall be and be deemed to be issued to such Holder as the record owner of such shares as of the close of business on the date of such exercise.

11. TRANSFER OF WARRANT. Subject to applicable laws, the restriction on transfer set forth on the first page of this Warrant and the provisions of Article VI of the Warrant Purchase Agreement, this Warrant and all rights hereunder are transferable by the Holder, in person or by duly authorized attorney, upon delivery of this Warrant, the Assignment Form attached hereto and funds sufficient to pay any transfer taxes payable upon the making of such transfer, to any transferee designated by Holder. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. A Warrant, if properly assigned, may be exercised by a new holder for the purchase of Exercise Shares without having a new Warrant issued. The Company may require, as a condition of allowing a transfer (i) that the Holder or transferee of this Warrant, as the case may be, furnish to the Company a written opinion of counsel (which opinion shall be in form, substance and scope customary for opinions of counsel in comparable transactions) to the effect that such transfer may be made without registration under the Securities Act and under applicable state securities or blue sky laws, (ii) that the holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company, (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act and (iv) the transferee agree in writing to be bound by the terms of this Warrant and the Warrant Purchase Agreement as if an original signatory thereto.

12. LOST, STOLEN, MUTILATED OR DESTROYED WARRANT. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as the Warrant so lost, stolen, mutilated or destroyed.

13. NOTICES, ETC. Any notice, request, demand, waiver, consent, approval or other communication that is required or permitted to be given hereto shall be in writing and shall be deemed given only if delivered to the applicable party personally or sent to the party by facsimile transmission (promptly followed by a hard-copy delivered in accordance with this Section 12), by next business day delivery by a nationally recognized courier service, or by registered or certified mail (return receipt requested), with postage and registration or certification fees thereon prepaid, addressed to the party at its address set forth in the Warrant Purchase Agreement, or at such other address as the Company or Holder may designate by ten (10) days advance written notice to the other party hereto.

14. ACCEPTANCE. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

15. GOVERNING LAW. This Warrant and all rights, obligations and liabilities hereunder shall be governed by the laws of the State of New York.

16. SATURDAYS, SUNDAYS, HOLIDAYS, ETC. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall be a Saturday, Sunday or a legal holiday, then such action may be taken or such right may be exercised on the next succeeding day not a Saturday, Sunday or legal holiday.

17. AMENDMENT. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

18. SUCCESSORS AND ASSIGNS. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors of the Company and the successors and permitted assigns of Holder.

19. REGISTRATION RIGHTS. The holder of this Warrant and of the Exercise Shares shall be entitled to the registration rights and other applicable rights with respect to the Exercise Shares as and to the extent set forth in the Warrant Purchase Agreement and the Registration Rights Agreement.

20. HEADINGS. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its duly authorized officer as of [DATE OF ISSUE].

DYNAVAX TECHNOLOGIES CORPORATION

By: _____
Title: _____

NOTICE OF EXERCISE

TO: DYNVAX TECHNOLOGIES CORPORATION

ATTN: CHIEF FINANCIAL OFFICER

(1) The undersigned hereby elects to purchase ___ shares of Common Stock of DYNVAX TECHNOLOGIES CORPORATION (the “Company”) pursuant to the terms of the attached Warrant dated [DATE OF ISSUE], as follows:

___ shares pursuant to the terms of the cashless exercise provisions set forth in Section 2.2, and shall tender payment of all applicable transfer taxes, if any.

(2) Please issue said shares of Common Stock in the name of the undersigned or in such other name as is specified below:

(Name)

(Address)

(iii)(3) The undersigned represents that:

(A) It is an “accredited investor” within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended (the “Securities Act”).

(B) It has relied completely on the advice of, or has consulted with or has had the opportunity to consult with, its own personal tax, investment, legal or other advisors and has not relied on the Company or any of its affiliates for advice.

(C) It has been advised and understands that the offer and sale of the attached Warrant and the shares of Common Stock issued upon exercise of the Warrant (the “Warrant Shares”) have not been registered under the Securities Act. It is able to bear the economic risk of such investment for an indefinite period and to afford a complete loss thereof.

(D) It is acquiring the Warrant Shares solely for its own account for investment purposes as a principal and not with a view to the resale of all or any part thereof. It agrees that the Warrant Shares may not be resold (1) without registration thereof under the Securities Act (unless an exemption from such registration is available), or (2) in violation of any law. It acknowledges that the Company is not required to register the Warrant Shares under the Securities Act. It is not and will not be an underwriter within the meaning of Section 2(11) of the Securities Act with respect to the Warrant Shares.

(E) No person or entity acting on behalf of, or under the authority of, the undersigned is or will be entitled to any broker’s, finder’s or similar fees or commission payable by the Company or any of its affiliates.

(Date)

(Signature)

(Print Name)

B-10

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____

(Please Print)

Address: _____

(Please Print)

Dated: _____, 20__

Holder's
Signature: _____

Holder's
Address: _____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

WARRANT CONVERSION EXAMPLE

In the event that Dynavax is the target of a merger or acquisition in which the share purchase price paid by the acquiror is paid in cash or a mixture of cash and stock, the outstanding Warrants are to be exchanged for Replacement Warrants of the Surviving Entity such that the holders of Warrants shall receive additional Replacement Warrants in lieu of the cash portion of the share purchase price, as set out in the following example:

- A holder hereunder holds a Warrant exercisable for 100,000 shares of Dynavax Common Stock at an exercise price of \$8.00, and the share purchase price paid by the acquiror is \$10.00 per share of Dynavax Common Stock, with \$3.00 to be paid in cash and \$7.00 to be paid in shares of the common stock of the Surviving Entity (“*New Stock*”), based on a price of \$70.00 per share of New Stock.
- The Warrants of the holder, exercisable for 100,000 shares of Dynavax Common Stock, shall be converted as follows:
 - (1) The New Stock portion of the purchase price (\$7.00 / share, or a ratio of New Stock to Dynavax Common Stock of 10 to 1) shall yield a Replacement Warrant exercisable for 10,000 shares of New Stock; and
 - (2) The cash portion of the purchase price (\$3.00 / share, or \$300,000 total) shall, at the New Stock price of \$70 /share, yield a Replacement Warrant exercisable for 4,286 shares of New Stock (\$300,000 / \$70).
- Therefore, in such a scenario, a holder of a Warrant exercisable for 100,000 shares of Dynavax Common Stock would receive Replacement Warrants exercisable for an aggregate total of 14,286 shares of New Stock at an exercise price of \$56.00 per share.

**AMENDED AND RESTATED
REGISTRATION RIGHTS AGREEMENT**

between

DYNAVAX TECHNOLOGIES CORPORATION

and

SYMPHONY DYNAMO HOLDINGS LLC

Dated as of November 9, 2009

Table of Contents

<u>Section</u>		<u>Page</u>
Section 1.	Definitions	2
Section 2.	Registration	3
Section 3.	Related Obligations	4
Section 4.	Obligations of the Investor(s)	6
Section 5.	Expenses of Registration	7
Section 6.	Indemnification	7
Section 7.	Contribution	10
Section 8.	Reports Under The Exchange Act	10
Section 9.	Assignment of Registration Rights	10
Section 10.	Amendment of Registration Rights	10
Section 11.	Miscellaneous	11
Section 12.	Original Agreement	13

AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT

AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”), dated as of November 9, 2009, by and between DYNAVAX TECHNOLOGIES CORPORATION, a Delaware corporation (“**Dynavax**”), and SYMPHONY DYNAMO HOLDINGS LLC, a Delaware limited liability company (together with its permitted successors, assigns and transferees, “**Holdings**”).

RECITALS:

WHEREAS, in connection with the exercise by Dynavax of the Purchase Option under the Amended and Restated Purchase Option Agreement, by and among Dynavax, Holdings and Symphony Dynamo, Inc., a Delaware corporation (“**Symphony Dynamo**”), of even date herewith (the “**Purchase Option Agreement**”), Dynavax will issue (a) shares of Dynavax’s common stock, par value \$0.001 per share (“**Dynavax Common Stock**”) (all such shares of Dynavax Common Stock, when and if issued, the “**Purchase Option Shares**”) or (b) the Alternate Closing Securities (as defined in the Purchase Option Agreement) (all such Alternate Closing Securities, when and if issued, the “**Purchase Option Alternate Closing Securities**”), to Holdings in partial payment of the Purchase Price in accordance with the terms of the Purchase Option Agreement;

WHEREAS, in connection with the Warrant Purchase Agreement by and between the parties hereto of even date herewith (the “**Warrant Purchase Agreement**”), Dynavax has agreed, upon the terms and subject to the conditions of the Warrant Purchase Agreement, to issue and sell to Holdings (a) certain warrants (the “**Warrants**”) which will be exercisable to purchase shares of Dynavax Common Stock (such shares of Dynavax Common Stock as exercised, the “**Warrant Shares**”) in accordance with the terms of the Warrant Purchase Agreement and the Warrants or (b) the Alternate Closing Securities (as defined in the Warrant Purchase Agreement) (all such Alternate Closing Securities, when and if issued, the “**Warrant Alternate Closing Securities**”);

WHEREAS, pursuant to a post-closing adjustment set forth in Section 2B(a) of the Purchase Option Agreement, Dynavax may issue Alternate Securities (as defined in the Purchase Option Agreement) (all such Alternate Securities, when and if issued, the “**Purchase Option Adjustment Securities**”) to Holdings;

WHEREAS, pursuant to a post-closing adjustment set forth in Section 2.05 of the Warrant Purchase Agreement, Dynavax may issue Alternate Securities (as defined in the Warrant Purchase Agreement) (all such Alternate Securities, when and if issued, the “**Warrant Adjustment Securities**”) to Holdings;

WHEREAS, pursuant to the Dynavax Promissory Note (as defined in the Purchase Option Agreement), Dynavax may issue to Holdings shares of Dynavax Common Stock as repayment thereunder (all such Dynavax Common Stock, when and if issued, the “**Promissory Note Securities**”);

WHEREAS, Dynavax and Holdings are party to that certain Registration Rights Agreement dated as of April 18, 2006 (the “**Original Agreement**”), pursuant to which Dynavax has agreed to provide certain registration rights under the Securities Act of 1933, as amended (the “**Securities Act**”), and applicable state securities laws with respect to the Purchase Option Shares; and

WHEREAS, the parties to the Original Agreement desire to amend and restate the Original Agreement and accept the rights and covenants hereof in lieu of their rights and covenants under the Original Agreement.

Amended And Restated Registration Rights Agreement

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Dynavax and Holdings (the "**Parties**") hereby agree as follows:

Section 1. Definitions.

(a) Capitalized terms used but not defined herein are used as defined in Purchase Option Agreement (including Annex A thereto).

(b) As used in this Agreement, the following terms shall have the following meanings:

(i) "**Effective Registration Date**" means the date that the Registration Statement (as defined below) is first declared effective by the SEC.

(ii) "**Investor(s)**" means Holdings, any transferee or assignee thereof to whom Holdings assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

(iii) "**Purchase Option Related Registrable Securities**" means (i) the Purchase Option Shares, (ii) any Dynavax Common Stock issued with respect to the Purchase Option Shares as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, (iii) the Purchase Option Alternate Closing Securities and (iv) the Purchase Option Adjustment Securities

(iv) "**register**," "**registered**," and "**registration**" refer to a registration effected by preparing and filing one or more Registration Statements in compliance with the Securities Act and pursuant to Rule 415, and the declaration or ordering of effectiveness of such Registration Statement(s) by the SEC.

(v) "**Registrable Securities**" means, collectively, the Warrant Related Registrable Securities, the Purchase Option Related Registrable Securities and the Promissory Note Securities; provided, however, that any such securities will cease to be Registrable Securities on the earlier of (A) the date as of which the Investor(s) may sell such securities without restriction pursuant to Rule 144(b)(i) (or successor thereto) promulgated under the Securities Act, or (B) the date on which the Investor(s) shall have sold all such securities.

(vi) "**Registration Statement**" means a registration statement or registration statements of Dynavax filed under the Securities Act covering the Registrable Securities.

(vii) "**Rule 144**" has the meaning set forth in Section 8 of this Agreement.

(viii) "**Rule 415**" means Rule 415 under the Securities Act or any successor rule providing for offering securities on a continuous or delayed basis.

(ix) "**Warrant Related Registrable Securities**" means (i) the Warrant Shares issued or issuable upon exercise of the Warrant, (ii) any shares of capital stock issued or issuable with respect to the Warrant Shares or the Warrant as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, and in the case of the Warrant, without regard to any limitations on exercise, (iii) the Warrant Alternate Closing Securities and (iv) the Warrant Adjustment Securities.

Section 2. Registration. Right to Registration.

(i) Dynavax shall prepare and, as soon as practicable but in no event later than two (2) Business Days after the Purchase Option Closing Date and each Adjusted Securities Payment Date (as defined in the Purchase Option Agreement), file with the SEC a Registration Statement on Form S-3 covering the resale of the then unregistered Registrable Securities (except for any Promissory Note Securities). Each Registration Statement prepared pursuant hereto shall register for resale that number of shares of Dynavax Common Stock equal to (A) the number of the then unregistered Related Registrable Securities (except for any Promissory Note Securities) constituting Dynavax Common Stock, plus (B) the maximum number of shares of Dynavax Common Stock issuable upon the exercise, conversion or exchange (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) of the then unregistered Registrable Securities (other than the Registrable Securities constituting Dynavax Common Stock and any Promissory Note Securities), in each case, as of the trading day immediately preceding the date such Registration Statement is initially filed with the SEC, subject to adjustment as provided in Sections 2(c). Dynavax shall use commercially reasonable efforts to have each such Registration Statement declared effective by the SEC as soon as practicable following the Purchase Option Closing Date or Adjusted Securities Payment Date, as applicable.

(ii) Concurrently with the issuance of any Promissory Note Securities, Dynavax shall prepare and file with the SEC a Registration Statement on Form S-3 covering the resale of the then unregistered Promissory Note Securities. Each Registration Statement prepared pursuant hereto shall register for resale that number of shares of Dynavax Common Stock equal to the number of the then unregistered Promissory Note Securities constituting Dynavax Common Stock as of the trading day immediately preceding the date such Registration Statement is initially filed with the SEC, subject to adjustment as provided in Section 2(c). Dynavax shall use commercially reasonable efforts to have each such Registration Statement declared effective by the SEC as soon as practicable following the issuance of any Promissory Note Securities.

(b) Ineligibility for Form S-3. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, Dynavax shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to Holdings (which acceptable forms shall include Form S-1); and (ii) undertake to register the Registrable Securities on Form S-3 as soon as such form is available; provided that Dynavax shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the SEC.

(c) Sufficient Number of Shares Registered. In the event the number of shares available under a Registration Statement filed pursuant to Section 2(a) is insufficient to cover all of the Registrable Securities required to be covered by such Registration Statement, Dynavax shall amend the applicable Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover at least 100% of the number of such Registrable Securities as of the trading day immediately preceding the date of the filing of such amendment or new Registration Statement, in each case, as soon as practicable, but in any event not later than fifteen (15) days after Dynavax becomes aware of the necessity therefor. Dynavax shall use commercially reasonable efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof. For purposes of the foregoing provision, the number of shares available under a Registration Statement shall be deemed "insufficient to cover all of the Registrable Securities" if at any time the number of shares of Dynavax Common Stock available for resale under such Registration Statement is less than the number of Registrable Securities. The calculation set forth in the foregoing sentence shall be made without regard to any limitations on the exercise of any Warrant and such calculation shall assume that each Warrant is then exercisable into shares of Dynavax Common Stock.

Section 3. Related Obligations. At such time as Dynavax is obligated to file a Registration Statement with the SEC pursuant to Section 2(a), 2(b) or 2(c), Dynavax will use commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the Investors' intended methods of disposition thereof and, pursuant thereto (except at such times as Dynavax may be required to delay or suspend the use of a prospectus forming a part of the Registration Statement pursuant to Section 3(l)), at which time Dynavax's obligations under Sections 3(a), (b), (c), (d), (i) and (k) may also be suspended, as required), Dynavax shall have the following obligations:

(a) Dynavax shall keep each Registration Statement effective pursuant to Rule 415 at all times until the earlier of (i) the date as of which the Investor(s) may sell all of the Registrable Securities covered by such Registration Statement without restriction pursuant to Rule 144(b)(i) (or successor thereto) promulgated under the Securities Act, or (ii) the date on which the Investor(s) shall have sold all the Registrable Securities covered by such Registration Statement (the "**Registration Period**").

(b) Dynavax shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the prospectus used in connection with such Registration Statement as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities of Dynavax covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of Dynavax filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Exchange Act, Dynavax shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC on the same day on which the Exchange Act report is filed which created the requirement for Dynavax to amend or supplement such Registration Statement.

(c) Dynavax shall furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, and each preliminary prospectus; (ii) upon the effectiveness of any Registration Statement, one (1) copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as such Investor may reasonably request); and (iii) such other documents, including copies of any preliminary or final prospectus, as such Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by such Investor.

(d) Dynavax shall use commercially reasonable efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by Investor(s) of the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of such jurisdictions in the United States as Investor(s) reasonably request; (ii) prepare and file in those jurisdictions such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period; and (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period; provided, however, that Dynavax shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. Dynavax shall promptly notify each Investor who holds Registrable Securities of the receipt by Dynavax of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(e) Dynavax shall notify each Investor in writing of the happening of any event (without an obligation to provide the details of such event), as promptly as practicable after becoming aware of such event, as a result of which the prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and, subject to Section 3(l) hereof, promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission. Dynavax shall also promptly notify each Investor in writing when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective.

(f) Dynavax shall use commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment.

(g) In the event that any Investor reasonably believes that it may be deemed to be an “underwriter” with respect to the Registrable Securities, upon the written request of such Investor in connection with such Investor’s due diligence requirements, if any, Dynavax shall make available for inspection by (i) such Investor, and (ii) any legal counsel, accountants or other agents retained by the Investor (collectively, “**Inspectors**”), all pertinent financial and other records, and pertinent corporate documents and properties of Dynavax (collectively, “**Records**”), as shall be reasonably deemed necessary by each Inspector, and cause Dynavax’s officers, directors and employees to supply all information which any Inspector may reasonably request; provided, however, that each Inspector and such Investor shall agree (and if requested by Dynavax shall agree in writing) to hold in strict confidence and shall not make any disclosure (except with respect to an Inspector, to the relevant Investor) or use of any Record or other information which Dynavax determines in good faith to be confidential, and of which determination the Inspectors are so notified, unless the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction. Each Investor agrees that it shall, upon learning that disclosure of such Records is required or is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt notice to Dynavax and allow Dynavax, at its expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, the Records deemed confidential. Nothing herein (or in any other confidentiality agreement between Dynavax and any Investor) shall be deemed to limit the Investor(s)’ ability to sell Registrable Securities in a manner which is otherwise consistent with applicable laws and regulations.

(h) Dynavax shall hold in confidence and not make any disclosure of information concerning an Investor provided to Dynavax unless (i) disclosure of such information is necessary to comply with federal or state securities laws or the rules of any securities exchange or trading market on which the Dynavax Common Stock is listed or traded, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, or (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction. Dynavax agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at the Investor’s expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

(i) Dynavax shall use commercially reasonable efforts either to (i) cause all the Registrable Securities covered by a Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by Dynavax are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all the Registrable Securities covered by a Registration Statement on the NASDAQ National Market. Dynavax shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(i).

(j) Dynavax shall cooperate with the Investor(s) who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Investor(s) may reasonably request and registered in such names as the Investor(s) may request.

(k) If requested by an Investor, Dynavax shall (i) as soon as practicable incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the plan of distribution, the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering and (ii) as soon as practicable make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment.

(l) Notwithstanding anything to the contrary herein, at any time after the Registration Statement has been declared effective by the SEC, Dynavax may delay or suspend the effectiveness of any Registration Statement or the use of any prospectus forming a part of the Registration Statement due to the non-disclosure of material, non-public information concerning Dynavax the disclosure of which at the time is not, in the good faith opinion of Dynavax, in the best interest of Dynavax (a “**Grace Period**”); provided, that Dynavax shall promptly notify the Investor(s) in writing of the existence of a Grace Period in conformity with the provisions of this Section 3(l) and the date on which the Grace Period will begin (such notice, a “**Commencement Notice**”); and, provided further, that no Grace Period shall exceed forty-five (45) days, and such Grace Periods shall not exceed an aggregate total of ninety (90) days during any three hundred sixty five (365) day period. For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date specified by Dynavax in the Commencement Notice and shall end on and include the date the Investor(s) receive written notice of the termination of the Grace Period by Dynavax (which notice may be contained in the Commencement Notice). The provisions of Section 3(f) hereof shall not be applicable during any Grace Period. Upon expiration of the Grace Period, Dynavax shall again be bound by the first sentence of Section 3(e) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable. Notwithstanding anything to the contrary, Dynavax shall cause its transfer agent to deliver unlegended shares of Dynavax Common Stock to a transferee of an Investor in accordance with the terms of the Warrant Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale, and delivered a copy of the prospectus included as part of the applicable Registration Statement, prior to the Investor’s receipt of the notice of a Grace Period and for which the Investor has not yet settled.

Section 4. Obligations of the Investor(s).

(a) At least seven (7) Business Days prior to the first anticipated filing date of a Registration Statement, Dynavax shall notify each Investor in writing of the information Dynavax requires from each such Investor if such Investor elects to have any of such Investor’s Registrable Securities included in such Registration Statement. It shall be a condition precedent to the obligations of Dynavax to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that such Investor shall furnish to Dynavax such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as Dynavax may reasonably request.

(b) Each Investor, by such Investor’s acceptance of the Registrable Securities, agrees to cooperate with Dynavax as reasonably requested by Dynavax in connection with the preparation and filing of any Registration Statement hereunder, unless such Investor has notified Dynavax in writing of such Investor’s election to exclude all of such Investor’s Registrable Securities from such Registration Statement.

(c) Each Investor agrees that, upon receipt of any notice from Dynavax of the happening of any event of the kind described in Section 3(f) or the first sentence of Section 3(e), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor’s receipt of the copies of the supplemented or amended prospectus contemplated by the second sentence of Section 3(e) or receipt of notice that no supplement or amendment is required.

(d) Each Investor covenants and agrees that it will comply with any applicable prospectus delivery requirements of the Securities Act as applicable to it in connection with sales of Registrable Securities pursuant to a Registration Statement.

Section 5. Expenses of Registration. All reasonable expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3 hereof, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for Dynavax shall be paid by Dynavax. All underwriting discounts and selling commissions applicable to the sale of the Registrable Securities shall be paid by the Investor(s), provided, however, that Dynavax shall reimburse the Investor(s) for the reasonable actual fees and disbursements of one legal counsel designated by the holders of at least a majority of the Registrable Securities in connection with registration, filing or qualification pursuant to Sections 2 and 3 of this Agreement, which amount shall be limited to \$40,000 in total over the term of this Agreement.

Section 6. Indemnification. In the event any Registrable Securities are included in a Registration Statement under this Agreement:

(a) To the fullest extent permitted by law, Dynavax will, and hereby does, indemnify and hold harmless each Investor, the directors, officers, partners, members, employees, agents, representatives of, and each Person, if any, who controls any Investor within the meaning of the Securities Act or the Exchange Act (each, an “**Investor Indemnified Person**”), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys’ fees, amounts paid in settlement or expenses, joint or several (collectively, “**Claims**”), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an Indemnified Person is or may be a party thereto (“**Indemnified Damages**”), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other “blue sky” laws of any jurisdiction in which Registrable Securities are offered (“**Blue Sky Filing**”), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading; (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the Effective Registration Date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if Dynavax files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which the statements therein were made, not misleading; (iii) any violation or alleged violation by Dynavax of any federal, state or common law, rule or regulation applicable to Dynavax in connection with any Registration Statement, prospectus or any preliminary prospectus, any amendment or supplement thereto, or the issuance of any Registrable Securities to Holdings; or (iv) any material violation of this Agreement (the matters in the foregoing clauses (i) through (iv) being, collectively, “**Violations**”). Subject to Section 6(c), Dynavax shall reimburse the Investor Indemnified Persons, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (A) shall not apply to a Claim by an Investor Indemnified Person arising out of or based upon a Violation that occurs in reliance upon and in conformity with information furnished in writing to Dynavax by or on behalf of any such Investor Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto if such information was timely made available by Dynavax pursuant to Section 3(c); (B) with respect to any preliminary prospectus, shall not inure to the benefit of any such Person from whom the Person asserting any such Claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any Person controlling such Person) if the untrue statement or omission of material fact contained in the preliminary prospectus was corrected in the prospectus, as then amended or supplemented, if such prospectus was timely made available by Dynavax pursuant to Section 3(d), and the Investor Indemnified Person was promptly advised in writing not to use the incorrect prospectus prior to the use giving rise to a violation and such Investor Indemnified Person, notwithstanding such advice, used it or failed to deliver the correct prospectus as required by the Securities Act and such correct prospectus was timely made available pursuant to Section 3(d); (C) shall not be available to the extent such Claim is based on a failure of the Investor Indemnified Person to deliver or to cause to be delivered the

prospectus made available by Dynavax, including a corrected prospectus, if such prospectus or corrected prospectus was timely made available by Dynavax pursuant to Section 3(d); and (D) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of Dynavax, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain full force and effect regardless of any investigation made by or on behalf of the Investor Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor(s) pursuant to Section 9. Dynavax shall also provide customary indemnities to any underwriters of the Registrable Securities, their officers, directors and employees and each Person who controls such underwriters (within the meaning of Section 15 of the Securities Act) to the same extent as provided above with respect to the indemnification of Investor Indemnified Persons.

(b) In connection with any Registration Statement in which an Investor is participating, each such Investor agrees to severally and not jointly indemnify, and hold harmless, to the same extent and in the same manner as is set forth in Section 6(a), Dynavax, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls Dynavax within the meaning of the Securities Act or the Exchange Act (each, a “**Company Indemnified Person**”), against any Claim or Indemnified Damages to which any of them may become subject, under the Securities Act, the Exchange Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information furnished to Dynavax by such Investor expressly for use in connection with such Registration Statement; and, subject to Section 6(d), such Investor will reimburse, promptly as such expenses are incurred and are due and payable, any legal or other expenses reasonably incurred by a Company Indemnified Person in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed; provided, further, however, that an Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Company Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor(s) pursuant to Section 9. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(b) with respect to any preliminary prospectus shall not inure to the benefit of any Company Indemnified Person if the untrue statement or omission of material fact contained in the preliminary prospectus was corrected on a timely basis in the prospectus, as then amended or supplemented.

(c) If either an Investor Indemnified Person or a Company Indemnified Person (an “**Indemnified Person**”) proposes to assert a right to be indemnified under this Section 6, such Indemnified Person shall notify either Dynavax or the relevant Investor(s), as applicable (the “**Indemnifying Person**”), promptly after receipt of notice of commencement of any action, suit or proceeding against such Indemnified Person (an “**Indemnified Proceeding**”) in respect of which a Claim is to be made under this Section 6, or the incurrence or realization of any Indemnified Damages in respect of which a Claim is to be made under this Section 6, of the commencement of such Indemnified Proceeding or of such incurrence or realization, enclosing a copy of all relevant documents, including all papers served and claims made, but the omission to so notify the applicable Indemnifying Person promptly of any such Indemnified Proceeding or incurrence or realization shall not relieve (x) such Indemnifying Person from any liability that it may have to such Indemnified Person under this Section 6 or otherwise, except, as to such Indemnifying Person’s liability under this Section 6, to the extent, but only to the extent, that such Indemnifying Person shall have been prejudiced by such omission, or (y) any other Indemnifying Person from liability that it may have to any Indemnified Person under the Operative Documents.

(d) In case any Indemnified Proceeding shall be brought against any Indemnified Person and it shall notify the applicable Indemnifying Person of the commencement thereof as provided by Section 6(c) and such Indemnifying Person shall be entitled to participate in, and provided such Indemnified Proceeding involves a claim solely for money damages and does not seek an injunction or other equitable relief against the Indemnified Person and is not a criminal or regulatory action, to assume the defense of, such Indemnified Proceeding with counsel reasonably satisfactory to such Indemnified Person, and after notice from such Indemnifying Person to such Indemnified Person of such Indemnifying Person’s election so to assume the defense thereof and the failure by such

Indemnified Person to object to such counsel within ten (10) Business Days following its receipt of such notice, such Indemnifying Person shall not be liable to such Indemnified Person for legal or other expenses related to such Indemnified Proceedings incurred after such notice of election to assume such defense except as provided below and except for the reasonable costs of investigating, monitoring or cooperating in such defense subsequently incurred by such Indemnified Person reasonably necessary in connection with the defense thereof. Such Indemnified Person shall have the right to employ its counsel in any such Indemnified Proceeding, but the reasonable fees and expenses of such counsel shall be at the expense of such Indemnified Person unless:

(i) the employment of counsel by such Indemnified Person at the expense of the applicable Indemnifying Person has been authorized in writing by such Indemnifying Person;

(ii) such Indemnified Person shall have reasonably concluded in its good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between the applicable Indemnifying Person and such Indemnified Person in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes of action available to such Indemnified Person (it being agreed that in any case referred to in this clause (ii) such Indemnifying Person shall not have the right to direct the defense of such Indemnified Proceeding on behalf of the Indemnified Person);

(iii) the applicable Indemnifying Person shall not have employed counsel reasonably acceptable to the Indemnified Person, to assume the defense of such Indemnified Proceeding within a reasonable time after notice of the commencement thereof (provided, however, that this clause shall not be deemed to constitute a waiver of any conflict of interest that may arise with respect to any such counsel); or

(iv) any counsel employed by the applicable Indemnifying Person shall fail to timely commence or diligently conduct the defense of such Indemnified Proceeding and such failure has materially prejudiced (or, in the reasonable judgment of the Indemnified Person, is in danger of materially prejudicing) the outcome of such Indemnified Proceeding;

in each of which cases the reasonable fees and expenses of counsel for such Indemnified Person shall be at the expense of such Indemnifying Person. Only one counsel shall be retained by all Indemnified Persons with respect to any Indemnified Proceeding, unless counsel for any Indemnified Person reasonably concludes in good faith (which conclusion shall be determinative unless a court determines that such conclusion was not reached reasonably and in good faith) that there is or may be a conflict of interest between such Indemnified Person and one or more other Indemnified Persons in the conduct of the defense of such Indemnified Proceeding or that there are or may be one or more different or additional defenses, claims, counterclaims, or causes or action available to such Indemnified Person.

(e) Without the prior written consent of such Indemnified Person, such Indemnifying Person shall not settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding, unless such settlement, compromise, consent or related judgment (i) includes an unconditional release of such Indemnified Person from all liability for Losses arising out of such claim, action, investigation, suit or other legal proceeding, (ii) provides for the payment of money damages as the sole relief for the claimant (whether at law or in equity), (iii) involves no finding or admission of any violation of law or the rights of any Person by the Indemnified Person, and (iv) is not in the nature of a criminal or regulatory action. No Indemnified Person shall settle or compromise, or consent to the entry of any judgment in, any pending or threatened Indemnified Proceeding in respect of which any payment would result hereunder or under the Operative Documents without the prior written consent of the Indemnifying Person, such consent not to be unreasonably conditioned, withheld or delayed.

(f) The indemnification required by this Section 6 shall be made by periodic payments of the amount of Claims during the course of the investigation or defense, as and when Indemnified Damages are incurred.

Section 7. Contribution. To the extent any indemnification by an Indemnifying Person is prohibited or limited by law, such Indemnifying Person agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning Section 11(f) of the Securities Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) the obligation to contribute shall be several and not joint and contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities pursuant to such Registration Statement.

Section 8. Reports Under The Exchange Act. With a view to making available to the Investor(s) the benefits of Rule 144 promulgated under the Securities Act or any other similar rule or regulation of the SEC that may at any time permit the Investor(s) to sell securities of Dynavax to the public without registration ("**Rule 144**"), Dynavax agrees to use commercially reasonable efforts to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144;

(b) file with the SEC in a timely manner all reports and other documents required of Dynavax under the Securities Act and the Exchange Act so long as Dynavax remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

(c) furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request, (i) a written statement by Dynavax, if true, that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of Dynavax and such other reports and documents so filed by Dynavax, and (iii) such other information as may be reasonably requested to permit the Investor(s) to sell such securities pursuant to Rule 144 without registration.

Section 9. Assignment of Registration Rights. The rights under this Agreement shall be automatically assignable by the Investor(s) to any transferee of all or at least 50,000 shares of such Investor's Registrable Securities (or if an Investor shall hold less than 50,000 such shares, then a transfer of all such shares) if: (i) the Investor agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to Dynavax within a reasonable time after such assignment; (ii) Dynavax is, within a reasonable time after such transfer or assignment, furnished with written notice of (A) the name and address of such transferee or assignee, and (B) the securities with respect to which such registration rights are being transferred or assigned; (iii) immediately following such transfer or assignment the further disposition of such securities by the transferee or assignee is restricted under the Securities Act and applicable state securities laws; (iv) at or before the time Dynavax receives the written notice contemplated by clause (ii) of this sentence the transferee or assignee agrees in writing with Dynavax to be bound by all of the provisions contained herein; and (v) (A) in the case of a transfer of Warrant Related Registrable Securities, such transfer shall have been made in accordance with the applicable requirements, if any, of the Warrant Purchase Agreement, and (B) in the case of a transfer of the Purchase Option Related Registrable Securities, such transfer shall have been made in accordance with the applicable requirements, if any, of the Purchase Option Agreement.

Section 10. Amendment of Registration Rights.

(a) The terms of this Agreement shall not be altered, modified, amended, waived or supplemented in any manner whatsoever except by a written instrument signed by each of (i) Dynavax and (ii) Investor(s) holding a majority of the Registrable Securities (other than in the case of any alteration, modification,

amendment, waiver or supplement which affects any individual Investor in a manner that is less favorable or more detrimental to such Investor than to the other Investor(s) solely based on the face of such alteration, modification, amendment, waiver or supplement and without regard to the number of Registrable Securities held by such Investor, in which case, such alteration, modification, amendment, waiver or supplement must also be approved by such less favorably or more detrimentally treated Investor).

(b) Notwithstanding Section 10(a), any party hereto may waive, solely with respect to itself, any one or more of its rights hereunder without the consent of any other party hereto; provided that no such waiver shall be effective unless set forth in a written instrument executed by the party against whom such waiver is to be effective.

Section 11. Miscellaneous.

(a) A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If Dynavax receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, Dynavax shall act upon the basis of instructions, notice or election received from the such record owner of such Registrable Securities.

(b) Any notice, request, demand, waiver, consent, approval or other communication which is required or permitted to be given to any party hereto shall be in writing and shall be deemed given only if delivered to the party personally or sent to the party by facsimile transmission (promptly followed by a hard-copy delivered in accordance with this Section 11(b)), by next Business Day delivery by a nationally recognized courier service, or by registered or certified mail (return receipt requested), with postage and registration or certification fees thereon prepaid, addressed to the party at its address set forth below:

If to Dynavax:

Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attn: Michael S. Ostrach, Esq., Vice President,
Chief Business Officer and General Counsel
Facsimile: (510) 848-1327

with copies to:

Cooley Godward Kronish LLP
Five Palo Alto Square, 4th Floor
3000 El Camino Real
Palo Alto, CA 94306-2155
Attn: Glen Y. Sato, Esq.
Facsimile: (650) 849-7400

If to Holdings:

Symphony Dynamo Holdings LLC
7361 Calhoun Place, Suite 325
Rockville, MD 20850
Attn: Robert L. Smith, Jr.
Facsimile: (301) 762-6154

with copies to:

Symphony Capital Partners, L.P.
875 Third Avenue, 3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

and

Symphony Strategic Partners, LLC
875 Third Avenue, 3rd Floor
New York, NY 10022
Attn: Mark Kessel
Facsimile: (212) 632-5401

or to such other address as such party may from time to time specify by notice given in the manner provided herein to each other party entitled to receive notice hereunder.

(c) This Agreement shall be governed by, and construed in accordance with, the laws of the State of New York; except to the extent that this Agreement pertains to the internal governance of Holdings or Dynavax, and to such extent this Agreement shall be governed and construed in accordance with the laws of the State of Delaware.

(d) Each of the parties hereto hereby irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of any New York State court, any Delaware State court or federal court of the United States of America sitting in The City of New York, Borough of Manhattan or Wilmington, Delaware, and any appellate court from any jurisdiction thereof, in any action or proceeding arising out of or relating to this Agreement, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in any such New York State court, any such Delaware State court or, to the fullest extent permitted by law, in such federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that any party hereto may otherwise have to bring any action or proceeding relating to this Agreement.

(e) Each of the parties hereto irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement in any New York State or federal court, or any Delaware State or Federal court. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court. Each of the parties hereby consent to service of process by mail.

(f) WAIVER OF JURY TRIAL. EACH OF THE PARTIES HERETO IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT.

(g) Entire Agreement. This Agreement (including any Annexes, Schedules, Exhibits or other attachments hereto) constitutes the entire agreement between the parties hereto with respect to the matters covered hereby and supersedes all prior agreements and understandings with respect to such matters between the parties hereto.

(h) Successors; Assignment; Counterparts.

(i) Nothing expressed or implied herein is intended or shall be construed to confer upon or to give to any Person, other than the parties hereto, any right, remedy or claim under or by reason of this Agreement or of any term, covenant or condition hereof, and all the terms, covenants, conditions, promises and agreements contained herein shall be for the sole and exclusive benefit of the parties hereto and their successors and permitted assigns provided, however, that, subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

(ii) This Agreement may be executed in one or more counterparts, each of which, when executed, shall be deemed an original but all of which taken together shall constitute one and the same Agreement.

(i) Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(j) All consents and other determinations required to be made by the Investor(s) pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by Investor(s) holding at least a majority of the Registrable Securities.

Section 12. Original Agreement. The Original Agreement is hereby amended and superseded in its entirety and restated herein. Such amendment and restatement is effective upon execution of this Agreement by the parties hereto. Upon such execution, all provisions of, rights granted and covenants made in the Original Agreement are hereby superseded in their entirety by the provisions hereof and shall have no further force or effect.

[SIGNATURES FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their respective officers or other representatives thereunto duly authorized, as of the date first above written.

DYNAVAX TECHNOLOGIES CORPORATION

By: /s/ Michael S. Ostrach

Name: Michael S. Ostrach

Title: Vice President

SYMPHONY DYNAMO HOLDINGS LLC

By: Symphony Capital Partners, L.P., its Manager

By: Symphony Capital GP, L.P., its general partner

By: Symphony GP, LLC, its general partner

By: /s/ Mark Kessel

Name: Mark Kessel

Title: Managing Member

Signature Page to the Amended And Restated Registration Rights Agreement

Symphony Dynamo Holdings LLC
7361 Calhoun Place, Suite 325
Rockville, MD 20855

December 30, 2009

Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attn: Michael S. Ostrach, Esq., Vice President,
Chief Business Officer and General Counsel

Ladies and Gentlemen:

In connection with the acquisition of shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of Dynavax Technologies Corporation, a Delaware corporation (the "Company"), by Symphony Dynamo Holdings LLC, a Delaware limited liability company (together with its permitted successors, assigns and transferees, the "Purchaser"), pursuant to the terms of that certain Amended and Restated Purchase Option Agreement, dated as of November 9, 2009, among the Company, the Purchaser and Symphony Dynamo, Inc. (the "Amended and Restated Purchase Option Agreement"), the Company and the Purchaser agree as follows:

1. Definitions. For purposes of this letter agreement, the following terms have the respective meanings set forth below:

"Affiliate" shall mean, with respect to any Person, (i) any Person directly or indirectly controlling, controlled by or under common control with such Person, (ii) any officer, director, general partner, member or trustee of such Person, or (iii) any Person who is an officer, director, general partner, member or trustee of any Person described in clauses (i) or (ii) of this sentence. For purposes of this definition, the terms "controlling," "controlled by" or "under common control with" shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person or entity, whether through the ownership of voting securities, by contract or otherwise, or the power to elect at least 50% of the directors, managers, general partners, or persons exercising similar authority with respect to such Person or entities.

"Beneficially Owns" (including the terms "Beneficial Ownership" or "Beneficially Owned") shall mean beneficial ownership within the meaning of Rule 13d-3 under the Exchange Act.

“Board” shall mean the Board of Directors of the Company.

“Exchange Act” shall mean the U.S. Securities Exchange Act of 1934, as amended.

“Person” shall mean any individual, partnership (whether general or limited), limited liability company, corporation, trust, estate, association, nominee or other entity.

2. Standstill. Except for the exercise of the Dynavax Closing Warrants (as defined in the Amended and Restated Purchase Option Agreement), the acquisition of Dynavax Closing Warrant Shares (as defined in the Amended and Restated Purchase Option Agreement), the acquisition of the Dynavax Promissory Note Shares (as defined in the Amended and Restated Purchase Option Agreement) and the acquisition of Alternate Securities (as defined in the Amended and Restated Purchase Option Agreement), if any, for so long as the Purchaser and its Affiliates Beneficially Own more than 10% of the Company’s outstanding Common Stock, neither the Purchaser nor any of its Affiliates shall, without the prior written consent of a majority of the independent members of the Board who are not Affiliated with the Purchaser, in any manner, whether directly or indirectly:

(a) make, effect, initiate, cause or participate in (i) any acquisition of Beneficial Ownership of any securities of the Company or any securities of any subsidiary or other Affiliate of the Company, (ii) any acquisition of any assets of the Company or any assets of any subsidiary or other Affiliate of the Company, (iii) any tender offer, exchange offer, merger, business combination, recapitalization, restructuring, liquidation, dissolution or extraordinary transaction involving the Company or any subsidiary or other Affiliate of the Company, or involving any securities or assets of the Company or any securities or assets of any subsidiary or other Affiliate of the Company, or (iv) any “solicitation” of “proxies” (as those terms are used in the proxy rules of the Securities and Exchange Commission (“SEC”)) or consents with respect to any securities of the Company;

(b) form, join or participate in a “group” (as defined in the Securities Exchange Act and the rules promulgated thereunder) with respect to the Beneficial Ownership of any securities of the Company;

(c) without limiting any rights of the Purchaser pursuant to Section 6 hereof, act, alone or in concert with others, to seek to control or influence the management, board of directors or policies of the Company;

(d) take any action that might require the Company to make a public announcement regarding any of the types of matters set forth in clause “(a)” of this sentence;

(e) agree or offer to take, or encourage or propose (publicly or otherwise) the taking of, any action prohibited by clause “(a)”, “(b)”, “(c)” or “(d)” of this sentence;

(f) assist, induce or encourage any other Person to take any action of the type prohibited by clause “(a)”, “(b)”, “(c)”, “(d)” or “(e)” of this sentence;

(g) enter into any discussions, negotiations, arrangement or agreement with any other Person relating to any of the foregoing; or

(h) request or propose that the Company or any of the Company's Affiliates amend, waive or consider the amendment or waiver of any provision set forth in this Section 2.

3. No Effect on Directors. Notwithstanding any of the foregoing, the provisions set forth in Section 2 shall in no way limit the ability of any individual who is serving as a director of the Company to take any actions (or to refrain from taking any actions) in his or her capacity as a director of the Company.

4. Voting Agreement. In the event the Purchaser and its Affiliates Beneficially Own more than 33% of the Company's outstanding Common Stock, any shares of Common Stock entitled to vote for the election of directors Beneficially Owned by the Purchaser and its Affiliates in excess of 33% of the shares of Common Stock then outstanding, with respect to the election or removal of directors only, shall be voted either, solely at the Purchaser's election (a) as recommended by the Board or (b)(i) in an election, in the same proportion with the votes of shares of Common Stock voted in such election (excluding shares with respect to which the votes were withheld, abstained or otherwise not cast) and not Beneficially Owned by the Purchaser (excluding withheld shares and abstentions) or (ii) in a removal vote, in the same proportions as all outstanding shares of Common Stock not Beneficially Owned by the Purchaser (including shares with respect to which the votes were withheld, abstained or otherwise not cast), whether at an annual or special meeting of stockholders of the Company, by written consent or otherwise. The Purchaser shall retain its right to vote (or to withhold its vote) all of its shares on all other matters.

5. Lock-Up. The Purchaser and its Affiliates shall not, for a period of six (6) months after the date hereof, directly or indirectly, offer, sell, exchange, pledge, hypothecate, encumber, transfer, assign or otherwise dispose of, whether voluntarily, involuntarily or by operation of law, other than to any Affiliate, any of its Dynavax Closing Shares, Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities (as defined in the Amended and Restated Purchase Option Agreement) or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable; provided, however, that nothing contained in this Section 5 shall in any way restrict (a) the ability of the Purchaser to transfer any Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable, to Symphony Dynamo Investors LLC or Symphony Dynamo Holdings LLC and (b) the ability of Symphony Dynamo Investors LLC and Symphony Dynamo Holdings LLC to transfer any Dynavax Closing Warrants, Dynavax Closing Warrant Shares, Alternate Closing Securities or Alternate Securities, if applicable, or Dynavax Promissory Note Shares, if applicable, to any of their respective members.

6. Board Composition. For so long as the Purchaser and its Affiliates Beneficially Own more than 10% of the Company's outstanding Common Stock, then, subject to applicable law and the rules and regulations of the SEC and the NASDAQ Stock Market, the Company will nominate and use its commercially reasonable efforts to cause to be elected and cause to remain as directors on the Board (x) one (1) individual designated by the Purchaser (as determined in its sole discretion) and (y) one (1) individual who shall be an independent third party designated by Purchaser and reasonably acceptable to the Company.

7. Representations. Each party represents to the other that: (a) this letter agreement has been duly authorized by all necessary corporate or partnership action, as the case may be; and (b) this letter agreement is a valid and binding agreement of such party, enforceable against it in accordance with its terms.

8. Specific Enforcement; Legal Effect. The parties hereto agree that any breach of this letter agreement would result in irreparable injury to the other party and that money damages would not be an adequate remedy for such breach. Accordingly, without prejudice to the rights and remedies otherwise available under applicable law, either party shall be entitled to specific performance and equitable relief by way of injunction or otherwise if the other party breaches or threatens to breach any of the provisions of this letter agreement. It is further understood and agreed that no failure or delay by either party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power or privilege hereunder. If any term, provision, covenant or restriction in this letter agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this letter agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated, provided that the parties hereto shall negotiate in good faith to attempt to place the parties in the same position as they would have been in had such provision not been held to be invalid, void or unenforceable. This letter agreement contains the entire agreement between the parties hereto concerning the matters addressed herein. No modification of this letter agreement or waiver of the terms and conditions hereof shall be binding upon either party hereto, unless approved in writing by each such party; provided, however, that no waiver or amendment shall be effective as against the Company unless such waiver or amendment is approved in writing by the vote of a majority of the independent members of the Board who are not Affiliated with the Purchaser. This Agreement shall be governed by and construed in accordance with the law of the State of New York.

9. Termination. This agreement shall continue in full force and effect from the date hereof until such time as the Purchaser and its Affiliates Beneficially Own less than 10% of the Company's outstanding Common Stock.

10. Counterparts. This letter agreement may be executed in counterpart (including by facsimile), each of which shall be deemed an original.

[Remainder of page left blank intentionally]

If you are in agreement with the terms set forth above, please sign this letter agreement in the space provided below and return an executed copy to the undersigned.

Very truly yours,

SYMPHONY DYNAMO HOLDINGS LLC

By: Symphony Capital Partners, L.P.,
its Manager

By: Symphony Capital GP, L.P.,
its General Partner

By: Symphony GP, LLC,
its General Partner

By: /s/ Mark Kessel

Name: Mark Kessel

Title: Managing Member

Confirmed and Agreed:

DYNAVAX TECHNOLOGIES CORPORATION

By: /s/ Michael S. Ostrach

Name: Michael S. Ostrach

Title: Vice President

Signature Page to the Standstill and Board Member Agreement

List of Subsidiaries

Rhein Biotech GmbH
Symphony Dynamo Incorporated

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statements (Form S-3 Nos. 333-145836, 333-149117 and 333-164254) of Dynavax Technologies Corporation and in the related Prospectuses,
 - (2) Registration Statements (Form S-3/A Nos. 333-139664, 333-134688 and 333-147455) of Dynavax Technologies Corporation and in the related Prospectuses, and
 - (3) Registration Statements (Form S-8 Nos. 333-113220, 333-136345, 333-145094, 333-152819, 333-157741 and 333-164255) pertaining to the 1997 Equity Incentive Plan, the 2004 Stock Incentive Plan, the 2004 Employee Stock Purchase Plan and the 2010 Employment Inducement Award Plan of Dynavax Technologies Corporation;
- of our reports dated March 15, 2010, with respect to the consolidated financial statements of Dynavax Technologies Corporation and the effectiveness of internal control over financial reporting of Dynavax Technologies Corporation, included in this Annual Report (Form 10-K) for the year ended December 31, 2009.

/s/ **Ernst & Young LLP**

San Francisco, California
March 15, 2010

**Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code**

I, Jennifer Lew, hereby certify, pursuant to 18 U.S.C § 1350, as adopted pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and to § 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of Dynavax Technologies Corporation (the "Company"), that, to the best of my knowledge:

(i) The Annual Report of the Company on Form 10-K for the period ended December 31, 2009 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Exchange Act; and

(ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: _____ /S/ JENNIFER LEW
Jennifer Lew
Vice President, Finance
(Principal Accounting and Financial Officer)

Date: March 16, 2010

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Dynavax Technologies Corporation under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.