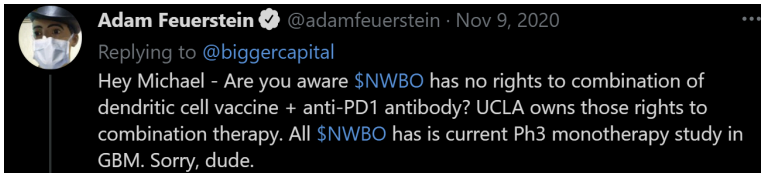
NWBO

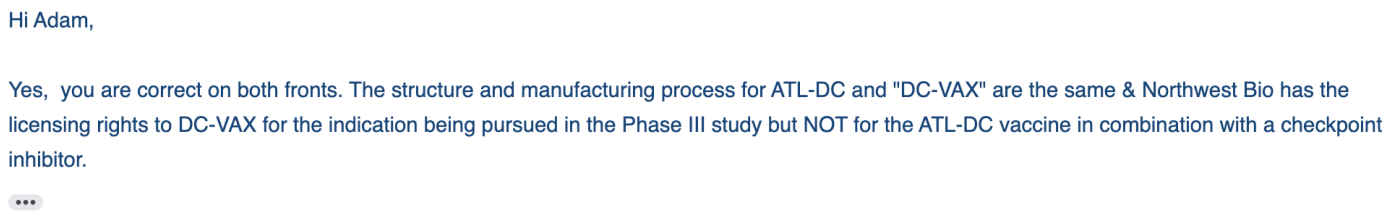
Rights and patents. DCVax, ATL-DC and UCLA combination therapy

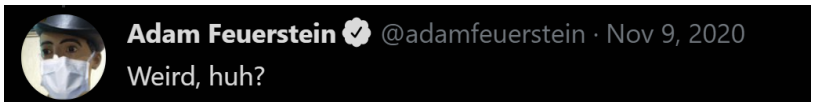
Excerpts from November 9th. Discussion on Twitter between Adam Feuerstein and ATLnsider

Adam Feuerstein suggests, that NWBO has no rights to UCLA combination therapy involving dendritic cell vaccine + anti-PD1 antibody. To back him up he attaches two emails he says are from UCLA, but with no indication of sender.

The mails indicated NWBO has NOT the licensing rights for the ATL-DC vaccine used with the checkpoint inhibitor, that the licensing rights was expired.







Trial record **8 of 10** for: DCVax

◂ Previous Study | Return to List | Next Study ▸

Autologous Dendritic Cells Pulsed With Tumor Lysate Antigen Vaccine and Nivolumab in Treating Patients With Recurrent Glioblastoma

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT03014804

Recruitment Status : Withdrawn (Final contract negotiations)
First Posted : January 9, 2017
Last Update Posted : July 24, 2020

Sponsor:
Jonsson Comprehensive Cancer Center

Collaborators:
Northwest Biotherapeutics
Bristol-Myers Squibb
Brain Tumor Funders Collaborative

Information provided by (Responsible Party):
Jonsson Comprehensive Cancer Center

Previous Study | Return to List | Next Study

Pembrolizumab and a Vaccine (ATL-DC) for the Treatment of Surgically Accessible Recurrent Glioblastoma

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Know the risks and potential benefits of clinical studies and talk to your health care provider before participating. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT04201873

Recruitment Status : Recruiting
First Posted : December 17, 2019
Last Update Posted : July 23, 2020

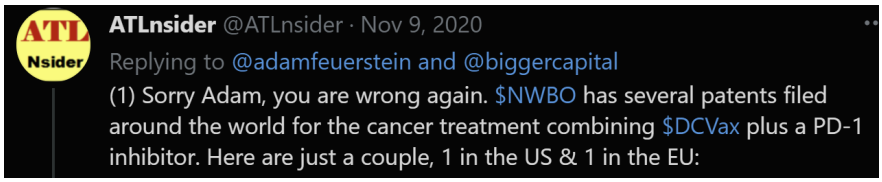
See **Contacts and Locations**

Sponsor:
Jonsson Comprehensive Cancer Center

Collaborators:
National Cancer Institute (NCI)
Merck Sharp & Dohme Corp.
Phase One Foundation
Oncovir, Inc.

Information provided by (Responsible Party):
Jonsson Comprehensive Cancer Center

ATLnsider argues against and attaches documentation.



United States Patent Application *20150202291*
Kind Code **A1**
Bosch; Marnix Leo ; et al. **July 23, 2015**

COMBINATIONS OF CHECKPOINT INHIBITORS AND THERAPEUTICS TO TREAT CANCER

Abstract

A combination treatment regimen including one or more cycles and/or doses of a checkpoint inhibitor and a therapeutic, either sequentially, in either order, or substantially simultaneously, can be more effective in treating cancer in some subjects and/or can initiate, enable, increase, enhance or prolong the activity and/or number of immune cells, the efficacy of anti-tumor immune responses or a medically beneficial response by a tumor.

Inventors: **Bosch; Marnix Leo**; *(Clyde Hill, WA)* **; Ganjel; James Kelly**; *(Bethesda, MD)* **; Powers; Linda F.**; *(Bethesda, MD)* **; Liau; Linda M.**; *(Los Angeles, CA)* **; Prins; Robert M.**; *(Pacific Palisades, CA)*

Applicant:

Name	City	State	Country	Type
COGNATE BIOSERVICES, INC.	Hanover	MD	US	
NORTHWEST BIOTHERAPEUTICS	Bethesda	MD	US	
The Regents of the University of California	Oakland	CA	US	
RevImmune, Inc.	Hanover	MD	US	

Family ID: **53042035**
Appl. No.: **14/534158**
Filed: **November 5, 2014**

Related U.S. Patent Documents

Application Number	Filing Date	Patent Number

Combinations of checkpoint inhibitors and therapeutics to treat cancer

US20150202291A1
United States

Download PDF | Find Prior Art | Similar

Other languages: English

Inventor: Marnix Leo Bosch, James Kelly Ganjel, Linda F. Powers, Linda M. Liau, Robert M. Prins

Current Assignee : COGNATE BIOSERVICES Inc , RevImmune Inc , University of California , Northwest Biotherapeutics LLC

Worldwide applications

2014 • WO US JP EP BR *MX* CA CN KR *EA* AU US 2016 • *IL PH* 2017 • *HK*

Application US14/534,158 events

2013-11-05 • Priority to US201361900355P

2014-11-05 • Application filed by COGNATE BIOSERVICES Inc, RevImmune Inc, University of California, Northwest Biotherapeutics LLC

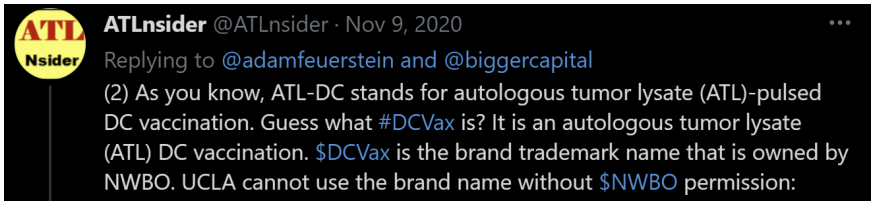
2015-07-23 • Publication of US20150202291A1

Status • Pending

[00123] One example of a dendritic cell vaccine is DCVax. DCVax is a platform technology that uses activated dendritic cells (the master cells of the immune system), and is designed to reinvigorate and educate the immune system to attack cancers. DCVax uses many active agents to hit many targets on the cancer (Liau, LM et al. Journal of Neurosurgery 90: 1115-1124, 1999; Prins RM et al. J Immunother. 2013 Feb; 36(2): 152-7).

[00124] There are three key aspects of dendritic cell vaccines, including, DCVax, that make the vaccines effective in treating cancer: (1) dendritic cell vaccines are designed to mobilize the entire immune system, not just one among the many different categories of immune agents in that overall system. As described above, DCVax is comprised of activated, educated dendritic cells, and dendritic cells are the master cells of the immune system, that mobilize or help the entire immune system. Full immune system involves many types of antibodies, and also many other kinds of agents besides antibodies. Dendritic cells mobilize all of these different categories of agents, comprising the whole immune system "army," in combination with each other and in their natural relationships to each other. (2) dendritic cell vaccines are designed to target not just one but the full set of biomarkers on the subject's tumor, which may make it more difficult for tumors to mutate and metastasize. (3) dendritic cell vaccines are personalized, and targets the particular biomarkers

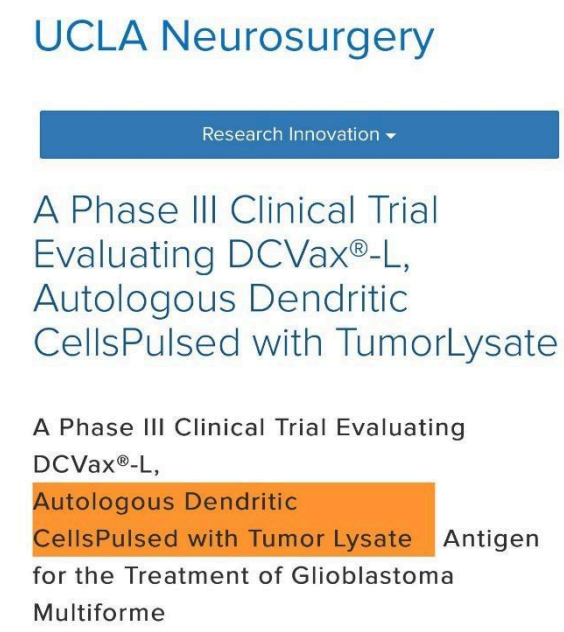
ATLnsider states that ATL-DC is the same as DCVax. It is the brand trademark owned by NWBO, which can not be used by UCLA.



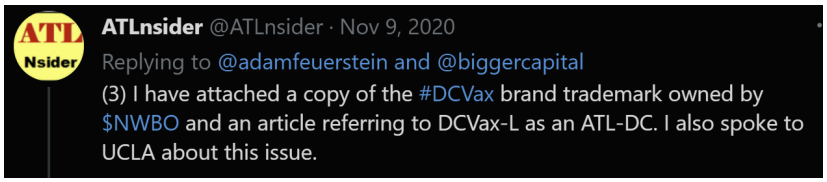
ATLnsider @ATLnsider · Nov 9, 2020

Replying to @adamfeuerstein and @biggercapital

(2) As you know, ATL-DC stands for autologous tumor lysate (ATL)-pulsed DC vaccination. Guess what #DCVax is? It is an autologous tumor lysate (ATL) DC vaccination. $DCVax is the brand trademark name that is owned by NWBO. UCLA cannot use the brand name without $NWBO permission:



ATLnsider attaches documentation for the brand trademark being owned by NWBO. He referres to an article wherein this is stated and that he also spoke with UCLA about this.



DCVAX

Word Mark	DCVAX
Goods and Services	IC 005. US 006 018 044 046 051 052. G & S: Immune cells, namely cells for me use; Biotechnology preparations for the prevention, management and treatment modulation of the immune system or particular elements of the immune system decreasing the extent, timing or duration of the immune response or changing th immune response; Medical preparations for the prevention, management and tr or for the modulation of the immune system or particular elements of the immun increasing or decreasing the extent, timing or duration of the immune response nature of the immune response; Pharmaceutical preparations and substances fo adjuvants, immune system stimulators or suppressors, and immune system mod and modulators of immune cells, namely, vaccines, proteins, peptides, enzymes chemokines, antibodies, DNA, RNA, growth factors, cell lysate, extracellular ma media for medical or veterinary use; Vaccines. FIRST USE: 20020306. FIRST U COMMERCE: 20020306
Standard Characters Claimed	
Mark Drawing Code	(4) STANDARD CHARACTER MARK
Serial Number	86298423
Filing Date	June 3, 2014
Current Basis	1A
Original Filing Basis	1A
Published for Opposition	August 29, 2017
Registration Number	5332321
Registration Date	November 14, 2017
Owner	(REGISTRANT) Northwest Biotherapeutics, Inc. CORPORATION DELAWARE 4 Lane, Suite 800 Bethesda MARYLAND 20814
Attorney of Record	Everett E. Fruehling
Prior Registrations	2636385
Type of Mark	TRADEMARK
Register	PRINCIPAL
Live/Dead Indicator	LIVE

activated by the ATL vaccine.[110] However, patients treated with the ATL-pulsed DC vaccine had significantly better outcomes than those treated with the GAA peptide-pulsed DC vaccine (PFS = 18.1 vs. 9.6 months; OS = 34.4 vs. 14.5 months).[110]

Dozens of clinical trials investigating DC vaccines are ongoing (see Table 2), most of which are phase I or II trials investigating various DC loads.[58] The most noteworthy study is the DCVax clinical trial (a DC vaccine project by Northwest Biotherapeutics), which began in 2006[112] and has entered a phase III clinical trial NCT00045968.[58] In this trial, 348 patients with newly diagnosed GBM underwent surgical resection with concurrent radiotherapy and chemotherapy, and tumor lysate proteins were used to prepare DCVax(R)-L. The treatment cohort was vaccinated on days 0, 10, and 20 and on weeks 8, 16, 32, 48, 72, and 120, and PFS was measured as the primary outcome. Expanded access to DCVax is underway (NCT02146066), which will play a critical role in the application of the DC vaccine for the treatment of GBM.[58]

UCLA's ATL-DC vaccine IS NWBOs DCVax.

It's the generic form of NWBO's branded vaccine, let’s walk through some other documentation:

ATLnsider @ATLnsider · Mar 27

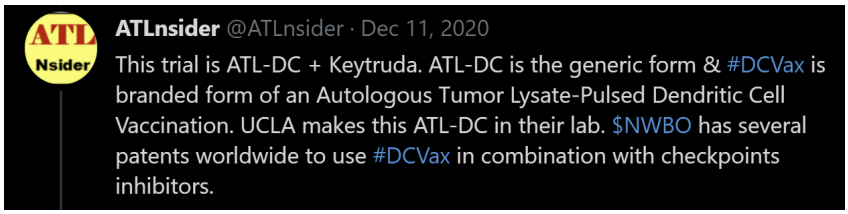
Here’s more evidence UCLA is using #DCVax (ATL-DC) in the combination trial with Keytruda (Pembrolizumab). Most of us already know UCLA is using $NWBO DCVax combined with Keytruda but some are saying they’re not. You can hear this around 43:10 minute mark: vimeo.com/529196354

https://vimeo.com/529196354

ATLnsider
@ATLnsider

$NWBO #DCVax: 12/20 edition UCLA Neurosurgery Connections-“He was referred to UCLA to undergo surgery by world-renowned neurosurgeon-scientist, Dr. Linda Liau and enroll in a new clinical trial only available at UCLA”: uclahealth.org/neurosurgery/a...

https://www.uclahealth.org/neurosurgery/art-vision-steve-lyons



And the UCLA health website for brain tumor therapy mentions this

https://www.uclahealth.org/braintumor/biologics

Brain Tumor Immunotherapy at UCLA

The UCLA Brain Tumor program is home to one of the nation's foremost brain tumor immunotherapy researchers. Our efforts have led to novel treatments for complex tumors such as gliomas.

Immunotherapies harness the immune system to boost your body's natural ability to fight disease. These therapies work by binding to tumors at a molecular level, then destroying them.

Immunotherapies available at UCLA include:

- **Vaccines:** Vaccines are among the most promising immunotherapies. Researchers at UCLA developed the first personalized vaccine for brain tumors (dendritic cell-based vaccine, or DCVax®). DCVax® has extended survival of many of our glioblastoma patients for more than a year, and some are thriving more than 10 years after their initial diagnosis.
- **Immune checkpoint (PD-1) inhibitors:** We are exploring ways to stimulate certain white blood cells (T-cells) so they become more effective in attacking and destroying cancer cells. This therapy helps patients who have not had success with other treatments or are at risk for building a treatment resistance.

NWBO

Rights and patents. DCVax, ATL-DC and UCLA combination therapy

The rights don't expire. The patent is assigned and that is that. There has been no reassignment back to UCLA. The definitive assignment is what is in the patent database maintained by the government.

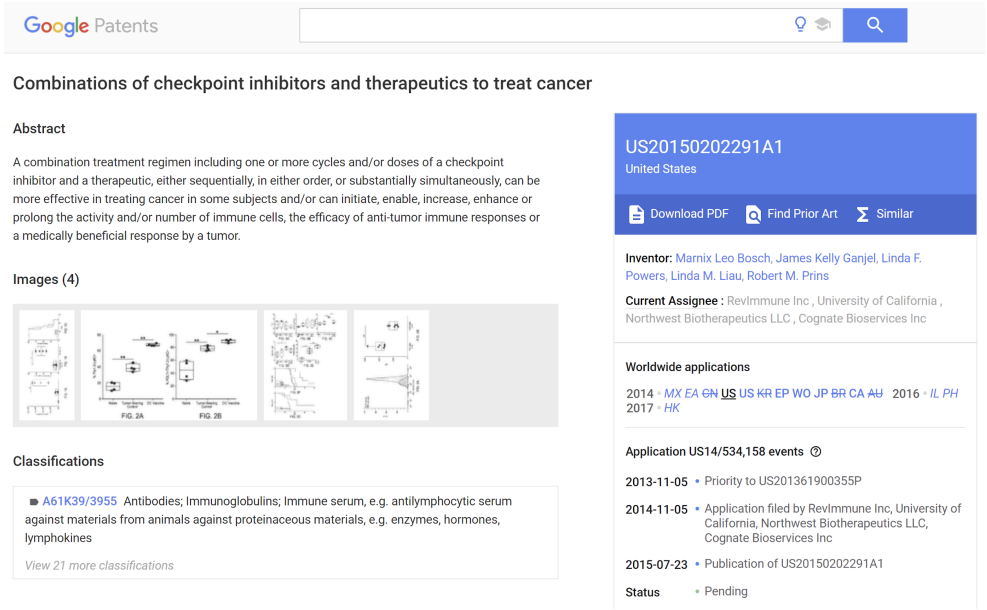
Comments regarding the images Adam Feuerstein provided as proof for UCLA correspondance :

The links to images that Adam provided are not legally cognizant documents related to who owns or will own what patent. The patent application is clear who will own the right, for instance, to the combination patent, not who the sponsor is to the trial.

And an image not identifying who wrote an email Adam claims is from "UCLA" hides who it is from and is flatly not factually correct. Who is the originator? Hiding a source making such a claim, is irresponsible of Adam. UCLA is a public institution, and that patent right that is assigned by the originating documentation creating the patent, both originates from public funding, and is not editable without a legal agreement or document signed by all the parties after the fact and then it has to be filed and recognized by the patent registrar and the info has to be revised in that record to inform anyone who might wish to license or contact the assigned owner of the patent. I believe, and could look it up, that the inventors are broadly listed and NIH also was part of that process.

Plus, the original inventors include key NWBO personnel. Adam would have to have much more than his tweets to even suggest there was an ambiguity here.

https://patents.google.com/patent/US20150202291A1/en



“Inventor: Marnix Leo BOSCH, James Kelly GANJEI, Linda F. POWERS, Linda M. Liau, Robert M. PRINS”

Invention means these parties all hold equal rights in the invention. We’d have knowledge if the application, which has not been granted yet, were to change the assignees, and there is likely a clear agreement between all the parties as to who has what exact rights from the INVENTORS:

“Current Assignee: RevImmune Inc University of California Northwest Biotherapeutics LLC Cognate Bioservices Inc”

Most likely, as I have said before, the University retains research rights, as does NWBO, and improvements likely accrue according to the way the original assignment agreement stipulates. None of the other parties has ever represented that it has the rights to market DCVax as a commercial product with the FDA or other regulators except NWBO. There is no indication that any of this has changed. Emails from unknown persons do not transfer rights on behalf of the INVENTORS or assignees. That has to be a signed agreement to which all of these interested parties have agreed, signed by authorized persons for the relevant rights holders.

The patent offices and their records are the definitive and key records, not the clinical trial database to which Adam linked.

https://www.law.cornell.edu/uscode/text/35/261

35 U.S. Code § 261 - Ownership; assignment

Subject to the provisions of this title, patents shall have the attributes of personal property. The Patent and Trademark Office shall maintain a register of interests in patents and applications for patents and shall record any document related thereto upon request, and may require a fee therefor.

Applications for patent, patents, or any interest therein, shall be assignable in law by an instrument in writing. The applicant, patentee, or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent, or patents, to the whole or any specified part of the United States.

A certificate of acknowledgment under the hand and official seal of a person authorized to administer oaths within the United States, or, in a foreign country, of a diplomatic or consular officer of the United States or an officer authorized to administer oaths whose authority is proved by a certificate of a diplomatic or consular officer of the United States, or apostille of an official designated by a foreign country which, by treaty or convention, accords like effect to apostilles of designated officials in the United States, shall be prima facie evidence of the execution of an assignment, grant or conveyance of a patent or application for patent.

An interest that constitutes an assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent and Trademark Office within three months from its date or prior to the date of such subsequent purchase or mortgage."

Here is a complete list of published patent applications associated with Northwest Biotherapeutics:

http://appft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=%2Fnetahtml%2FPTO%2Fsearch-adv.html&r=0&p=1&f=S&l=50&Query=AN%2F%28northwest+and+biotherapeutics%29&d=PG01

Searching AppFT Database...

Results of Search in AppFT Database for:
AN/(northwest and biotherapeutics): 25 applications.
*Hits **1** through **25** out of **25***

Jump To

Refine Search AN/(northwest and biotherapeutics)

	PUB. APP. NO.	Title
1	20210102169	GENERATION OF DENDRITIC CELLS FROM MONOCYTIC DENDRITIC PRECURSOR CELLS WITH GM-CSF IN THE ABSENCE OF ADDITIONAL CYTOKINES
2	20190046568	METHODS RELATING TO ACTIVATED DENDRITIC CELL COMPOSITIONS AND IMMUNOTHERAPEUTIC TREATMENTS FOR SUBJECTS WITH ADVANCED CANCERS
3	20180187145	OPTIMALLY ACTIVATED DENDRITIC CELLS THAT INDUCE AN IMPROVED OR INCREASED ANTI-TUMOR IMMUNE RESPONSE
4	20170363625	QUALITY ASSAYS FOR ANTIGEN PRESENTING CELLS
5	20140072564	THERAPEUTIC AND DIAGNOSTIC APPLICATIONS BASED ON THE ROLE OF THE CXCR-4 GENE IN TUMORIGENESIS
6	20130273654	Generation of Dendritic Cells from Monocytic Dendritic Precursor Cells with GM-CSF in the Absence of Additional Cytokines
7	20130017600	ISOLATION AND/OR PRESERVATION OF DENDRITIC CELLS FOR PROSTATE CANCER IMMUNOTHERAPY
8	20120252034	QUALITY ASSAYS FOR ANTIGEN PRESENTING CELLS
9	20120251561	ADMINISTRATION OF DENDRITIC CELLS PARTIALLY MATURED IN VITRO FOR THE TREATMENT OF TUMORS
10	20120244620	COMPOSITIONS AND METHODS FOR INDUCING THE ACTIVATION OF IMMATURE MONOCYTIC DENDRITIC CELLS
11	20110189150	TANGENTIAL FLOW FILTRATION DEVICES AND METHODS FOR LEUKOCYTE ENRICHMENT
12	20100062003	THERAPEUTIC AND DIAGNOSTIC APPLICATIONS BASED ON THE ROLE OF THE CXCR-4 GENE IN TUMORIGENESIS
13	20100008892	QUALITY ASSAYS FOR ANTIGEN PRESENTING CELLS
14	20080254537	Compositions and Methods for Inducing the Activation of Immature Monocytic Dendritic Cells
15	20080254064	COMPOSITIONS AND METHODS FOR PRIMING MONOCYTIC DENDRITIC CELLS AND T CELLS FOR TH-1 RESPONSE
16	20080171023	METHOD TO INCREASE CLASS I PRESENTATION OF EXOGENOUS ANTIGENS BY HUMAN DENDRITIC CELLS
17	20060234309	Quality assays for antigen presenting cells
18	20060234286	HUMAN PARIS-1 ANTIGEN AND NUCLEIC ACIDS: DIAGNOSTIC AND THERAPEUTIC USES
19	20060057120	Administration of dendritic cells partially matured in vitro for the treatment of tumors
20	20050202019	Therapeutic and diagnostic applications based on the role of the CXCR-4 gene in tumorigenesis
21	20050189297	Tangential flow filtration devices and methods for stem cell enrichment
22	20050173315	Tangential flow filtration devices and methods for leukocyte enrichment
23	20040203143	Generation of dendritic cells from monocytic dendritic precursor cells with GM-CSF in the absence of additional cytokines
24	20040197903	Method for induction of proliferation of natural killer cells by dendritic cells cultured with GM-CSF and IL-15
25	20040024188	Monoclonal antibodies specific for the extracellular domain of prostate-specific membrane antigen

Of those patent applications, here are the ones that have issued into patents:

http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=%2Fnetahtml%2FPTO%2Fsearch-adv.htm&r=0&p=1&f=S&l=50&Query=AN%2F%28northwest+and+biotherapeutics%29%0D%0A&d=PTXT

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

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Searching US Patent Collection...

Results of Search in US Patent Collection db for:
AN/(northwest AND biotherapeutics): 14 patents.
*Hits **1** through **14** out of **14***

Jump To

Refine Search AN/(northwest and biotherapeutics)

	PAT. NO.	Title
1	10,731,130	Generation of dendritic cells from monocytic dendritic precursor cells with GM-CSF in the absence of additional cytokines
2	9,566,294	Therapeutic and diagnostic applications based on the role of the CXCR-4 gene in tumorigenesis
3	9,102,917	Generation of dendritic cells from monocytic dendritic precursor cells with GM-CSF in the absence of additional cytokines
4	8,518,636	Tangential flow filtration devices and methods for leukocyte enrichment
5	8,409,566	Therapeutic and diagnostic applications based on the role of the CXCR-4 gene in tumorigenesis
6	8,389,278	Generation of dendritic cells from monocytic dendritic precursor cells with GM-CSF in the absence of additional cytokines
7	7,790,039	Tangential flow filtration devices and methods for stem cell enrichment
8	7,695,627	Tangential flow filtration devices and methods for leukocyte enrichment
9	7,087,715	Human paris-1 antigen and nucleic acids: diagnostic and therapeutic uses
10	6,936,448	Nucleic acids and proteins of a rat ganglioside GM1-specific .alpha.1-2fucosyltransferase and uses thereof
11	6,863,887	Therapeutic and diagnostic applications based on the role of the CXCR-4 gene in tumorigenesis
12	6,150,508	Monoclonal antibodies specific for the extracellular domain of prostate-specific membrane antigen
13	5,990,294	Nucleotide and amino acid sequences of C4-2, a tumor suppressor gene, and methods of use thereof
14	5,874,290	Nucleotide and amino acid sequences of a D2-2 gene associated with brain tumors and methods based thereon

Regarding how UCLA is using NWBO technology, it is possible that (1) they have a license from NWBO (if they're practicing a patented technology) or (2) the technology they're practicing hasn't been patented yet (e.g., patent pending).

Also, here is a good article explaining the concept of patent term extension. NWBO has a number of patents whose term are coming due soon. Conceivably, if these patents are related to the DCvax and NWBO finally receives approval from the FDA, the term of these patents may be extended by up to 5 years.

https://www.alacrita.com/whitepapers/pharmaceutical-patent-term-extension-an-overview

“The maximum term extension is five (5) years, provided that the extension does not result in a total remaining patent term of more than fourteen (14) years.”

Assignments are made to the owners of the patents. So, the patents are assigned to NWBO by the inventors. NWBO is able to provide others with licenses to practice the patented technology, but these licenses are not usually public record like an assignment is.

Also, even if NWBO doesn’t have the rights to the combination, whoever uses the combination still has to practice the NWBO-owned portion of that combination, which they cannot do without a license from NWBO.

Discussion regarding this

***exwannabe**:*

The combo patent is still being denied by the USPTO as being obvious because all it really claims is using the combination, and others already have.

As far as patents on -L specifically, I do not think any are still valid. I have gone through their patent list and fail to see one. No long has every chirped in with an actual patent that is still in force.

You do know the -L tech is 20+ years old?

***muee88**:*

Hey, Ex, do you know the concept of patent term extension?

exwannabe:

Yes.

The only big one would be Waxman Hatch, that is up to 6 years to account for clinical trial development delays. But for that to apply, they have to be approved before the patent term expires.

The other extensions because the PTO was slow to reply are typically minor.

Anything else?

Muee88:

No, those are called patent term adjustments when the PTO adjusts the term. And do you really believe it’s going to be another 2 years before FDA opines? Give me a break.

Here’s another more recent patent app dealing with DCvax. Eat your blessed heart out. Should be allowed next action.

http://appft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PG01&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.html&r=1&f=G&l=50&s1=%2220180187145%22.PGNR.&OS=DN/20180187145&RS=DN/20180187145

United States Patent Application ***20180187145***
Kind Code **A1**
Bosch; Marnix Leo **July 5, 2018**

OPTIMALLY ACTIVATED DENDRITIC CELLS THAT INDUCE AN IMPROVED OR INCREASED ANTI-TUMOR IMMUNE RESPONSE

Abstract

The present disclosure provides populations of cells comprising partially mature and optimally activated dendritic cells that can be used for administration to individuals having a cancer and/or tumor. Partially matured dendritic cells, those contacted with a dendritic cell maturation agent for about 10 to about 19 hours, upon administration efficiently take up and process tumor antigens in the area of the tumor site, complete maturation, and can subsequently migrate to the lymph nodes of a treated individual. Once in a lymph node the now fully mature antigen presenting dendritic cells secrete the appropriate cytokines (e.g., TNF.alpha., IL-6, IL-8, and/or IL-12) and contact T cells inducing a substantial and optimal clinical and/or anti-tumor immune response.

Inventors: **Bosch; Marnix Leo**; *(Clyde Hill, WA)*

Applicant:	**Name**	**City**	**State**	**Country**	**Type**
	Northwest Biotherapeutics, Inc.	Bethesda	MD	US	

Assignee: **Northwest Biotherapeutics, Inc.**
Bethesda
MD

Family ID: **57609106**
Appl. No.: **15/740094**
Filed: **June 29, 2016**
PCT Filed: **June 29, 2016**
PCT NO: **PCT/US16/40134**
371 Date: **December 27, 2017**

Likely there have been a series of agreements for initial research and funding and collaboration that spelled out who owned what for those rights. Agreed. It is generally not possible to undo those without a signed agreement, by all the parties, which would then need to be provided to the USPTO and other registrars, according to the statutory and legal guidelines, which I posted separately.

Agreed, though the application clearly lays out who the inventors are and likely falls under the original assignment related agreement. It is more of a bock to others who might seek to market a combination therapy than a right to, for instance, Keytruda. But it could be useful, assuming it is ultimately granted.

Usually with the biotechs I have generally seen, particularly those in cellular related technologies, the original assignment agreement allows the inventors to have certain rights to continue doing research, but the commercial rights are retained by the assignee along with any improvement rights.

https://www.uclahealth.org/personalized-vaccine-may-increase-longterm-survival-in-people-with-deadliest-form-of-brain-cancer

“The research was supported by Northwest Biotherapeutics, Inc., which manufactures DCVax-L, and by the National Cancer Institute through the UCLA brain cancer program, which was recently designated a Specialized Program of Research Excellence by the NCI.”

So, it’s likely that if NWBO was funding the research, there would have been an agreement that all products of that research would be assigned to NWBO. Again, this agreement is like not to be public record.