

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT4003771

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ANTHROGENESIS CORPORATION, A NEW JERSEY CORPORATION, D/B/A CELGENE CELLULAR THERAPEUTICS	02/29/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HLI CELLULAR THERAPEUTICS, LLC, A DELAWARE LIMITED LIABILITY COMPANY
<b>Street Address:</b>	4570 EXECUTIVE DRIVE
<b>City:</b>	SAN DIEGO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92121
<b>PROPERTY NUMBERS Total: 32</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	11088149
Application Number:	14463461
Application Number:	60689331
Application Number:	11450934
PCT Number:	US2006022729
Application Number:	60849521
Application Number:	11973125
Application Number:	13285738
PCT Number:	US2007021491
Application Number:	60838132
Application Number:	11893409
Application Number:	13333172
PCT Number:	US2007018059
Application Number:	60849319
Application Number:	11906961
PCT Number:	US2007021363
Application Number:	60612408
Application Number:	11230760
Application Number:	11999608

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Property Type	Number
Application Number:	61610355
Application Number:	61611402
Application Number:	14385104
Application Number:	60447252
Application Number:	10779369
Application Number:	11593348
Application Number:	14085366
PCT Number:	US2004004388
Application Number:	60799734
Application Number:	12268319
Application Number:	13709815
PCT Number:	US2007011359
Application Number:	60556683

#### CORRESPONDENCE DATA

**Fax Number:**

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Phone:** 8582497567

**Email:** HLIpatents@humanlongevity.com

**Correspondent Name:** JILL CLARKE

**Address Line 1:** HUMAN LONGEVITY, INC., 4570 EXECUTIVE DRIVE

**Address Line 4:** SAN DIEGO, CALIFORNIA 92121

<b>ATTORNEY DOCKET NUMBER:</b>	HLI CELLULAR THERAPEUTICS
<b>NAME OF SUBMITTER:</b>	JILL CLARKE
<b>SIGNATURE:</b>	/Jill Clarke/
<b>DATE SIGNED:</b>	08/11/2016

**Total Attachments: 9**

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## **PATENT ASSIGNMENT**

This PATENT ASSIGNMENT (this “**Patent Assignment**”) is entered into as of February 29, 2016 by and between Anthrogenesis Corporation, a New Jersey corporation, d/b/a Celgene Cellular Therapeutics (“**Assignor**”) and HLI Cellular Therapeutics, LLC, a Delaware limited liability company (“**Assignee**”).

WHEREAS, Assignor holds the entire right, title, and interest in and to the patents and patent applications listed on the attached Patent Schedule (collectively, the “**Patents**”); and

WHEREAS, Assignor, Assignee, Celgene Corporation, a Delaware corporation, and Human Longevity, Inc., a Delaware corporation, have entered into an Asset Purchase and Sale Agreement, dated as of January 27, 2016, pursuant to which Assignor agreed to sell to Assignee, and Assignee agreed to purchase from Assignor, Assignor’s entire right, title, and interest in the Patents (the “**APA**”), and Assignee desires to secure the entire right, title and interest in the Patents.

NOW, THEREFORE, be it known by all whom it may concern, that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

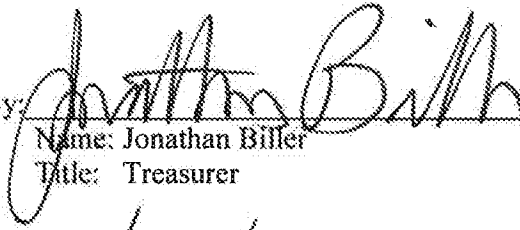
1. Assignor agrees to and hereby does assign, transfer and set over to Assignee, its successors and assigns, and Assignee hereby accepts, all of Assignor’s entire right, title and interest in and to the Patents, to have and to hold the same, unto Assignee for its own use and enjoyment and for the use and enjoyment of its successors and assigns, for the full term or terms of all such rights, including the right to sue for and collect past damages. The assignment of the Patents shall include (i) the right to file domestic patent applications (including all letters patent, design patents, provisional applications, reissues, divisions, continuations, continuations-in-part, renewals, substitutes, patent disclosures and extensions of any patent or patent application), under the laws of the United States and all other countries that claim the benefit of any of the foregoing applications, and to file foreign patent applications in the name of Assignee or its affiliates, wherever such right may be legally exercised, including the right to claim the benefits of the International Convention for such applications, (ii) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing and (iii) any and all claims and causes of action, with respect to any of the foregoing, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, misappropriation, violation, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.
2. Assignor hereby authorizes and requests the United States Commissioner of Patents, and the Patent Office officials in foreign countries as are duly authorized by the respective foreign patent laws to issue patents, to issue any and all patents directed to the Patents to Assignee as the owner thereof.

3. From time to time, each of the parties hereto shall execute and deliver all such further assignments or other instruments of conveyance and transfer as the other party may reasonably request for the purpose of giving effect to, or evidencing or giving notice of, the transactions contemplated by this Patent Assignment.
4. Except as provided for in Sections 2 and 3 hereof, nothing in this Patent Assignment shall alter any liability or obligation of Assignor or Assignee arising under the APA, which shall govern the representations, warranties and obligations of the parties with respect to the Patents. In the event of any conflict or ambiguity between the terms hereof and the terms of the APA, the terms of the APA shall govern and be controlling.
5. This Patent Assignment will be governed by and construed in accordance with the domestic laws of the State of Delaware for contracts entered into and to be performed in such state without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Delaware.
6. This Patent Assignment may be executed in counterparts, all of which taken together shall constitute one agreement. For purposes of this Agreement, signatures delivered by facsimile or by email in the portable document format (PDF) or any other electronic format shall be accepted and binding as original signatures.

*[Signature Page Follows]*

IN WITNESS WHEREOF, each of Assignor and Assignee has caused this Patent Assignment to be duly signed on its behalf.

ANTHROGENESIS CORPORATION  
D/B/A CELGENE CELLULAR  
THERAPEUTICS

By:   
Name: Jonathan Biller  
Title: Treasurer  
Date: 2/29/16

STATE OF N J )

: SS.

COUNTY OF Union

The person whose name is subscribed to the accompanying instrument is personally known to me or has proved his/her identity to me on the basis of satisfactory evidence. On February 29, 2016, he/she appeared before me and acknowledged that he/she has read the accompanying instrument and knows the contents thereof, and that he/she executed the same as their free act and deed for the purposes set forth therein. If he/she is acting on behalf of an entity, he/she also acknowledged that he/she executed the accompanying instrument in his/her authorized capacity, and that by his/her signature on the instrument, the entity executed the same.

FELICIA TURNER  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires June 2, 2019



NOTARY PUBLIC

Residing at Union County  
New Jersey

My Commission Expires: June 2, 2019

[Signature Page to Patent Assignment]

HLI CELLULAR THERAPEUTICS, LLC

By: [Signature]

Name: IVET ODEHAKH

Title: GENERAL COUNSEL

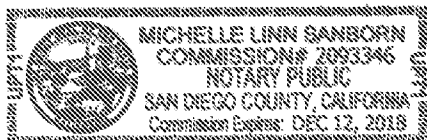
2/29/16  
Date

STATE OF ~~CALIFORNIA~~ )

: ss.

COUNTY OF SAN DIEGO)

The person whose name is subscribed to the accompanying instrument is personally known to me or has proved his/her identity to me on the basis of satisfactory evidence. On FEBRUARY 29, 2016, he/she appeared before me and acknowledged that he/she has read the accompanying instrument and knows the contents thereof, and that he/she executed the same as their free act and deed for the purposes set forth therein. If he/she is acting on behalf of an entity, he/she also acknowledged that he/she executed the accompanying instrument in his/her authorized capacity, and that by his/her signature on the instrument, the entity executed the same.



[Signature]

NOTARY PUBLIC

Residing at 1860 Chateaufort St.

San Diego, CA 92109

My Commission Expires: Dec 12, 2018

[Signature Page to Patent Assignment]

## Patent Schedule

TITLE	REFERENCE NO.	APPLICATION NO.	FILING DATE	PATENT NO.	STATUS	COUNTRY
SYSTEMS AND METHODS FOR PROVIDING A STEM CELL BANK	2368-307-US-P	60/556,683	Mar-26-2004	NA	Expired	United States
SYSTEMS AND METHODS FOR PROVIDING A STEM CELL BANK	2368-307-US	11/088,149	Mar-22-2005	NA	Abandoned	United States
SYSTEMS AND METHODS FOR PROVIDING A STEM CELL BANK	2368-641-US	14/463,461	Aug-19-2014	NA	Pending	United States
SYSTEMS AND METHODS FOR PROVIDING A STEM CELL BANK	2368-307-NZ	550027	Mar-22-2005	550027	Registered	New Zealand
SYSTEMS AND METHODS FOR PROVIDING A STEM CELL BANK	2368-307-ZA	2006/07800	Mar-22-2005	2006/07800	Registered	South Africa
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-US-P	60/689,331	Jun-10-2005	NA	Expired	United States
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-US	11/450,934	Jun-09-2006	NA	Abandoned	United States
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-WO	PCT/US2006/022729	Jun-08-2006	NA	Converted	Patent Cooperation Treaty
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-MX	MX/a/2007/015541	Jun-08-2006	290924	Registered	Mexico
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-NZ	564563	Jun-08-2006	564563	Registered	New Zealand
HUMAN PLACENTAL COLLAGEN COMPOSITIONS, PROCESSES FOR THEIR PREPARATION, METHODS OF THEIR USE AND KITS COMPRISING THE COMPOSITIONS	2703-398-ZA	2008/00144	Jun-08-2006	2008/00144	Registered	South Africa

TITLE	REFERENCE NO.	APPLICATION NO.	FILING DATE	PATENT NO.	STATUS	COUNTRY
PLACENTAL OR UMBILICAL CORD TISSUE COMPOSITIONS	3017-417-US-P	60/849,521	Oct-04-2006	NA	Expired	United States
PLACENTAL OR UMBILICAL CORD TISSUE COMPOSITIONS	3017-417-US	11/973,125	Oct-04-2007	8,071,135	Registered	United States
PLACENTAL OR UMBILICAL CORD TISSUE COMPOSITIONS	3017-200-US	13/285,738	Oct-31-2011	NA	Abandoned	United States
PLACENTAL OR UMBILICAL CORD TISSUE COMPOSITIONS	3017-417-WO	PCT/US2007/021491	Oct-04-2007	NA	Expired – not converted	Patent Cooperation Treaty
UMBILICAL CORD BIOMATERIAL FOR MEDICAL USE	3014-434-US-P	60/838,132	Aug-15-2006	NA	Expired	United States
UMBILICAL CORD BIOMATERIAL FOR MEDICAL USE	3014-434-US	11/893,409	Aug-15-2007	8,105,634	Registered	United States
UMBILICAL CORD BIOMATERIAL FOR MEDICAL USE	3014-218-US	13/333,172	Dec-21-2011	NA	Abandoned	United States
UMBILICAL CORD BIOMATERIAL FOR MEDICAL USE	3014-434-WO	PCT/US2007/018059	Aug-15-2007	NA	Expired – not converted	Patent Cooperation Treaty
USE OF PLACENTAL BIOMATERIAL FOR OCULAR SURGERY	3019-503-US-P	60/849,319	Oct-03-2006	NA	Expired	United States
USE OF PLACENTAL BIOMATERIAL FOR OCULAR SURGERY	3019-503-US	11/906,961	Oct-03-2007	NA	Pending	United States
USE OF PLACENTAL BIOMATERIAL FOR OCULAR SURGERY	3019-503-WO	PCT/US2007/021363	Oct-03-2007	NA	Expired – not converted	Patent Cooperation Treaty
CORD BLOOD AND PLACENTA COLLECTION KIT	1121-329-US-P	60/612,408	Sep-23-2004	NA	Expired	United States
CORD BLOOD AND PLACENTA COLLECTION KIT	1121-329-US	11/230,760	Sep-20-2005	7,147,626	Registered	United States
CORD BLOOD AND PLACENTA COLLECTION KIT	3020-573-US	11/999,608	Dec-05-2007	7,909,806	Registered	United States
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-265-US-P	61/610,355	Mar-13-2012	NA	Expired	United States
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-US-P	61/611,402	Mar-15-2012	NA	Expired	United States
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-US	14/385,104	Sep-12-2014	NA	Pending	United States



TITLE	REFERENCE NO.	APPLICATION NO.	FILING DATE	PATENT NO.	STATUS	COUNTRY
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-WO	PCT/US2013/030463	Mar-12-2013	NA	Converted	Patent Cooperation Treaty
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-AU	2013203832	Mar-12-2013	NA	Pending	Australia
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-EP	13760391.6	Mar-12-2013	NA	Pending	European Patent Office
MODIFIED ERYTHROCYTE PRECURSOR CELLS AND USES THEREOF	2226-276-HK	15106952.6	Mar-12-2013	NA	Pending	Hong Kong
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-US-P	60/447,252	Feb-13-2003	NA	Expired	United States
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-US	10/779,369	Feb-13-2004	NA	Abandoned	United States
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-522-US	11/593,348	Nov-06-2006	NA	Abandoned	United States
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-497-US	14/085,366	Nov-20-2013	NA	Pending	United States
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-WO	PCT/US2004/004388	Feb-13-2004	NA	Converted	Patent Cooperation Treaty
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-AU	2004212009	Feb-13-2004	2004212009	Registered	Australia
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-724-AU	2010233030	Oct-13-2010	2010233030	Registered	Australia
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-NZ	542127	Feb-13-2004	542127	Registered	New Zealand
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-724-NZ	566132	Feb-21-2008	566132	Registered	New Zealand

TITLE	REFERENCE NO.	APPLICATION NO.	FILING DATE	PATENT NO.	STATUS	COUNTRY
USE OF UMBILICAL CORD BLOOD TO TREAT INDIVIDUALS HAVING A DISEASE, DISORDER OR CONDITION	2367-141-ZA	2005/06405	Feb-13-2004	2005/06405	Registered	South Africa
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-931-US-P	607/99,734	May-11-2006	NA	Expired	United States
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-931-US	12/268,319	May-11-2007	8,329,468	Registered	United States
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-US	13/709,815	Dec-10-2012	NA	Pending (allowed)	United States
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-WO	PCT/US2007/011359	May-11-2007	NA	Converted	Patent Cooperation Treaty
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-BR	2007/P111599	May-11-2007	NA	Pending	Brazil
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-CA	2,652,051	May-11-2007	2,652,051	Registered	Canada
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-959-CA	2,909,053	May-11-2007	NA	Pending	Canada
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-CN	200780024901.2	May-11-2007	NA	Abandoned	China
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-959-CN	201510472807	Nov-25-2015	NA	Pending	China
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-EP	20070776980	May-11-2007	NA	Pending	European Patent Office
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-HK	09106995.3	May-11-2007	NA	Pending	Hong Kong
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-IN	2405/MUMNP/2008	May-11-2007	246517	Registered	India
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-IL	195241	May-11-2007	195241	Registered	Israel
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-JP	2009-509869	May-11-2007	5260499	Registered	Japan
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-KR	10-2008-7031092	May-11-2007	NA	Pending	Korea
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-MY	PI20084530	May-11-2007	NA	Pending	Malaysia

TITLE	REFERENCE NO.	APPLICATION NO.	FILING DATE	PATENT NO.	STATUS	COUNTRY
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-959-MY	PI2011004671	May-11-2007	NA	Pending	Malaysia
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-MX	2008014426	May-11-2007	314273	Registered	Mexico
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-SG	2011003291	May-11-2007	NA	Pending	Singapore
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-959-SG	2013040373	May-11-2007	NA	Pending	Singapore
METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS	3222-932-ZA	2008/09770	May-11-2007	2008/09770	Registered	South Africa

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**RECORDED: 08/11/2016**