

## TRADEMARK ASSIGNMENT COVER SHEET

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ETAS ID: TM672196

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	INTELLECTUAL PROPERTY SECURITY AGREEMENT		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
AXCELLA HEALTH INC.		09/02/2021	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	SLR INVESTMENT CORP., as agent		
<b>Street Address:</b>	500 Park Avenue, 3rd Floor		
<b>City:</b>	New York		
<b>State/Country:</b>	NEW YORK		
<b>Postal Code:</b>	10022		
<b>Entity Type:</b>	Corporation: MARYLAND		
<b>PROPERTY NUMBERS Total: 6</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Registration Number:</b>	6316011	AXCELLA	
<b>Registration Number:</b>	5851918	X	
<b>Registration Number:</b>	5716055	X	
<b>Registration Number:</b>	5347989	AMINO ACIDS FOR CELL HEALTH	
<b>Serial Number:</b>	87062052	AXCELLA	
<b>Serial Number:</b>	87983740	AXCELLA HEALTH	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	7147558290		
<i>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.</i>			
<b>Phone:</b>	714-540-1235		
<b>Email:</b>	ipdocket@lw.com		
<b>Correspondent Name:</b>	Latham & Watkins LLP		
<b>Address Line 1:</b>	650 Town Center Drive, Suite 2000		
<b>Address Line 4:</b>	Costa Mesa, CALIFORNIA 92626		
<b>ATTORNEY DOCKET NUMBER:</b>	054439-0065		
<b>NAME OF SUBMITTER:</b>	Anna T Kwan		
<b>SIGNATURE:</b>	/atk/		
<b>DATE SIGNED:</b>	09/02/2021		

OP \$165.00 6316011



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**INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT** (this "Agreement") dated as of September 2, 2021, is made by AXCELLA HEALTH INC., a Delaware corporation ("Axcella"), and ACORA NUTRITION LLC, a Delaware limited liability company (together with Axcella, individually and collectively, "Grantor"), in favor of SLR INVESTMENT CORP., a Maryland corporation, in its capacity as collateral agent (in such capacity, "Agent") for the Lenders (as defined below).

RECITALS

A. Grantor has entered into a Loan and Security Agreement dated as of the date hereof (as amended, restated, or otherwise modified from time to time, the "Loan Agreement") with certain financial institutions party thereto (the "Lenders") and Agent. All capitalized terms used but not defined herein shall have the respective meanings given to them in the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Agent for its benefit and the benefit of the Lenders a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

1. Grant of Security Interest. To secure its obligations under the Loan Agreement, Grantor grants and pledges to Agent for its benefit and the benefit of the Lenders a security interest in all of Grantor's right, title and interest in, to and under its intellectual property (all of which shall collectively be called the "Intellectual Property Collateral"), including, without limitation, the following:

(a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");

(b) Any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know how, operating manuals and any and all intellectual property rights in computer software and computer software products, in each case now or hereafter existing, created, acquired or held;

(c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;

(d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, re-examination certificates, utility models, extensions and continuations-in-part of the same, now or hereafter existing, created, acquired or held, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

(e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of such

Grantor connected with and symbolized by such trademarks, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, renewals and extensions of any of the Copyrights, Trademarks, or Patents; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

2. Recordation. Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Agent.

Grantor hereby authorizes Agent to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.

3. Loan Documents. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is hereby incorporated by reference. The provisions of the Loan Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Agent with respect to the Intellectual Property Collateral are as provided by the Loan Agreement and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.

4. Execution in Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument. Delivery of an executed counterpart of a signature page of this Agreement by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

5. Successors and Assigns. The provisions of this Agreement shall inure to the benefit of the parties hereto and their respective successors and assigns. Grantor shall not assign its obligations under this Agreement without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent may assign, transfer, or endorse its rights hereunder pursuant to the terms of the Loan Agreement without prior notice to Grantor, and all of such rights shall inure to the benefit of Agent's successors and assigns.

6. Governing Law. This Agreement has been negotiated and delivered to Agent in the State of New York, and shall have been accepted by Agent in the State of New York. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

7. Electronic Execution of Certain Other Documents. The words “execution,” “execute,” “signed,” “signature,” and words of like import in or related to any document to be signed in connection with this Agreement and the transactions contemplated hereby (including without limitation assignments, assumptions, amendments, waivers and consents) shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

[Signature page follows.]

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

AXCELLA HEALTH INC., a Delaware corporation

DocuSigned by:  
*William Hinshaw*  
By: \_\_\_\_\_  
Name: William Hinshaw  
Title: President and Chief Executive Officer

ACORA NUTRITION LLC, a Delaware limited liability company

DocuSigned by:  
*William Hinshaw*  
By: \_\_\_\_\_  
Name: William Hinshaw  
Title: President and Chief Executive Officer

AGENT:

SLR INVESTMENT CORP., a Maryland corporation

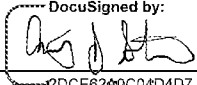
DocuSigned by:  
By:   
Name: Anthony Stormo  
Title: Authorized Signatory



EXHIBIT A  
Copyrights

None

EXHIBIT B

Patents

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
MICROORGANISMS AND METHODS FOR PRODUCING UNSATURATED FATTY ACIDS	United States	13/326,211	12/14/2011	12/14/2011	US 2012-0116108 A1	05/10/2012	8,790,901	07/29/2014	Axcella
NUTRITIVE PROTEINS AND METHODS	United States	14/387,675	09/24/2014	09/24/2014	US 2015-0087602 A1	03/26/2015	9,605,040	03/28/2017	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	Australia	2013240183	09/18/2014	03/15/2013	2013240183	10/03/2013	2013240183	02/02/2017	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	Australia	2017200234	01/13/2017	03/15/2013			2017200234	09/21/2017	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	EPO	13767426.3	10/24/2014	03/15/2013	EP2831098	02/04/2015			Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	Japan	2018-072592	04/04/2018	03/15/2013	2018-139589	09/13/2018	6853801	03/16/2021	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	Japan	2021-040044	03/12/2021	03/15/2013					Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	United States	13/836,855	03/15/2013	03/15/2013	US 2013-0296231 A1	11/07/2013	8,809,259	08/19/2014	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	United States	14/219,943	03/19/2014	03/19/2014	US 2014-0212541 A1	07/31/2014	8,822,412	09/02/2014	Axcella
CHARGED NUTRITIVE PROTEINS AND METHODS	United States	14/337,563	07/22/2014	07/22/2014	US 2014-0342978 A1	11/20/2014	9,611,298	04/04/2017	Axcella
Charged Nutritive Proteins and Methods	United States	15/429,420	02/10/2017	02/10/2017	US 2017-0246244 A1	08/31/2017	10,450,350	10/22/2019	Axcella
Charged Nutritive Proteins and Methods	United States	16/566,734	09/10/2019	09/10/2019	US-2020-0109175-A1	04/09/2020			Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Australia	2013240184	09/11/2014	03/15/2013			2013240184	09/07/2017	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Germany	602013068182.1	04/22/2020	03/15/2013	EP2831099	02/04/2015	EP2831099	04/22/2020	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	EPO	13768128.4	10/24/2014	03/15/2013	EP2831099	02/04/2015	EP2831099	04/22/2020	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	EPO	20159593.1	02/26/2020	03/15/2013	EP3715365	09/30/2020			Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	France	13768128.4	04/22/2020	03/15/2013	EP2831099	02/04/2015	EP2831099	04/22/2020	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	United Kingdom	13768128.4	04/22/2020	03/15/2013	EP2831099	02/04/2015	EP2831099	04/22/2020	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Hong Kong	42021026570.8		03/15/2013	40037265A	06/11/2021			Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Israel	234617	09/11/2014	03/15/2013			234617	07/31/2017	Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Japan	2018-072382	04/04/2018	03/15/2013	2018-138029	09/06/2018			Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Japan								Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	Russian Federation	2014143031	10/24/2014	03/15/2013	2014143031	05/20/2016	2634407	10/26/2017	Axcella <sup>1</sup>
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	United States	14/374,127	07/23/2014	07/23/2014	US 2015-0011482	01/08/2015	9,598,474	03/21/2017	Axcella
Nutrive Fragments, Proteins and Methods	United States	15/429,412	02/10/2017	02/10/2017	US 2017-0253639	09/07/2017	9,944,681	04/17/2018	Axcella
NUTRITIVE FRAGMENTS, PROTEINS AND METHODS	United States	14/387,684	09/24/2014	09/24/2014	US 2015-0080296	03/19/2015	9,700,071	07/11/2017	Axcella
NUTRITIVE POLYPEPTIDES AND FORMULATIONS THEREOF, AND METHODS OF PRODUCTION AND USE THEREOF	EPO	14792624.0	04/22/2016	09/25/2014	EP3076991	10/12/2016			Axcella
Compositions and Formulations for Treatment of Gastrointestinal Tract Malabsorption Diseases and Inflammatory Conditions and Methods of Production and Use Thereof	United States	15/024,696	03/24/2016	03/24/2016	US 2016-0317614	11/03/2016	9,878,004	01/30/2018	Axcella
Compositions and Formulations and Methods of Production and Use Thereof	United States	16/918,167	07/01/2020	10/04/2017	US 2020-0405807	12/31/2020			Axcella
Nutrive Polypeptides and Formulations Thereof, and Methods of Production and Use Thereof	United States	15/081,004	03/25/2016	03/25/2016	US 2016-0339078	11/24/2016	10,463,711	11/05/2019	Axcella
Nutrive Polypeptides and Formulations Thereof, and Methods of Production and Use Thereof	United States	16/585,357	09/27/2109	09/27/2019	US-2020-0188481-A1	06/18/2020			Axcella
Nutrive Polypeptides and Formulations Thereof, and Methods of Production and Use Thereof	United States	16/819,817	03/16/2020	03/16/2020	US 2020-0306342	10/01/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United Arab Emirates	P6000881/19	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	ARIPO	AP/P/2019/011734	07/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Argentina	P170103572		12/19/2017	AR 110396 A1	03/27/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Australia	2017382170	05/27/2019	12/19/2017					Axcella

<sup>1</sup> Ownership to be confirmed and corrected if needed.

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Bahrain	20190149	06/11/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Brazil	112019012529-9	06/18/2019	12/19/2017	Awaiting	11/19/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Canada	3,046,551	06/07/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Chile	1686-2019	06/19/2019	12/19/2017	1686-2019	08/30/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	China	201780078656.7	06/19/2019	12/19/2017	CN110087647A	08/02/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Colombia	NC2019/0006291	06/17/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Cuba	2019-0058	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Algeria	190371	07/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	EAPC	201991502	07/18/2019	12/19/2017	201991502 A1	03/04/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Ecuador	201943710	06/19/2019	12/19/2017	SENAD/201943710	07/30/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Egypt	944/2019	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	EPO	17829105.0	07/10/2019	12/19/2017	EP3554492	10/23/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Hong Kong	62020003614.8		12/19/2017	40013672	08/07/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Indonesia	P00201904959	06/17/2019	12/19/2017	2019/07964	11/08/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Israel	267480	06/18/2019	12/19/2017					Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Israel	284371	06/24/2021	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	India	201917026419	07/02/2019	12/19/2017	201917026419A	08/23/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Iran	139850140003 002391	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Jordan	JOP20190146	06/18/2019	12/19/2017	699	02/17/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Japan	2019-533079	06/18/2019	12/19/2017	2020-504108	02/06/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Korea, Republic of	10-2019-7020657	07/23/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Kuwait	KW/P/2019/000196	06/17/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Libya	5397/2019	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Mexico	MX/a/2019/007351	06/19/2019	12/19/2017	MX/a/2019/007351	10/07/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Malaysia	PI2019003531	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Nigeria	NG/PT/C/2019/3786	06/10/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	New Zealand	753929	05/27/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	OAPI	1201900243	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Oman	OM/P/2019/000242	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Paranama	92715-01	06/14/2019	12/19/2017	374	02/12/2020			Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Peru	1281-2019/DIN	06/19/2019	12/19/2017	Awaiting	09/02/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Philippines	1-2019-501414	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Qatar	QA/201906/00314	06/11/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Saudi Arabia	519402108	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Singapore	11201905473Q	06/14/2019	12/19/2017	11201905473Q	07/09/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Singapore	10201913946W	12/30/2019	12/19/2017	10201913946W	03/30/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Thailand	1901003757	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Taiwan	106144662		12/19/2017	201834645	10/01/2018			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Ukraine	201908266	07/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United States	15/847,289	12/19/2017	12/19/2017	US-2018-0207118-A1	07/26/2018	11,096,914	08/24/2021	Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United States	16/918,606	07/01/2020	12/19/2017	US-2020-0330477-A1	10/22/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United States	15/858,444	12/29/2017	12/29/2017	US 2018-0169045 A1	06/21/2018	10238617	03/26/2019	Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United States	16/004,918	06/11/2018	06/11/2018			10,201,513	02/12/2019	Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	United States	16/210,940	12/05/2018	12/05/2018	US 2019-0105294 A1	04/11/2019	10,471,034	11/12/2019	Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Viet Nam	1-2019-03433	06/27/2019	12/19/2017	69150 A	03/25/2020			Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	South Africa	2019/03580	06/04/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	South Africa	2021/00647	01/29/2021	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	United Arab Emirates	P6000882/19	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	ARIPO	AP/P/2019/011733	07/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Argentina	P170103573		12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Australia	2017379825	05/28/2019	12/19/2017	2017379825	06/13/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Bahrain	20190150	06/11/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Brazil	BR112019012476-4	06/17/2019	12/19/2017	2571	04/14/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Canada	3046558	06/07/2019	12/19/2017	3046558	06/28/2018			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Chile	2019-1685	06/19/2019	12/19/2017	Unassigned	08/30/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	China	201780078594.X	06/19/2019	12/19/2017	110267655	09/20/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Colombia	NC2019/0006292	06/17/2019	12/19/2017	864	06/28/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Cuba	2019-0057	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Algeria	190372	07/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	EAPO	201991504	07/18/2019	12/19/2017	201991504	11/29/2019			Axcella

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AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Ecuador	SENADI-2019-43725	06/19/2019	12/19/2017	Awaiting	07/30/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Egypt	943/2019	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	EPO	17895529.3	07/10/2019	12/19/2017	EP9354493	10/23/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES	Hong Kong	62020003613.0		12/19/2017	40013671	08/07/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Indonesia	P00201905906	07/12/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Israel	267210	06/10/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	India	201917026427	07/02/2019	12/19/2017	34/2019	08/23/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Iran	139850140003 002382	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Jordan	JOP20190147	06/18/2019	12/19/2017	699	02/17/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Japan	2019-532941	06/18/2019	12/19/2017	2020-502183	01/23/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Korea, Republic of	10-2019-7020658	07/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Kuwait	KW/P/2019/000197	06/17/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Libya	5398/2019	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Mexico	MX/a/2019/007352	06/19/2019	12/19/2017	MX/a/2019/007352	10/07/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Malaysia	PI2019003528	06/19/2019	12/19/2017					Axcella



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AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Nigeria	NG/PT/C/2019/3782	06/10/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	New Zealand	753961	05/28/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	ARIPO	1201900242	06/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Oman	OM/P/2019/000243	06/18/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Panama	92716-01	06/17/2019	12/19/2017	374	02/12/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Peru	1282-2019/DIN	06/19/2019	12/19/2017	1282-2019	09/10/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Philippines	1-2019-501339	06/13/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Qatar	QA/201906/00316	06/11/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Saudi Arabia	519402131	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Singapore	11201904941P	06/04/2019	12/19/2017	11201904941P	07/30/2019			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Thailand	1901003758	06/19/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Taiwan	106144666		12/19/2017	201827068	08/01/2018			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Ukraine	a201908267	07/16/2019	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	United States	17/156,071	01/22/2021	12/19/2017					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	United States	15/858,475	12/29/2017	12/29/2017	US 2018-0169046 A1	06/21/2018			Axcella

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AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	Viet Nam	1-2019-039866	07/17/2019	12/19/2017	67855	01/30/2020			Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	South Africa	2019/03581	06/04/2019	12/19/2017	2019/03581	12/23/2020	2019/03581	12/23/2020	Axcella
AMINO ACID COMPOSITIONS AND THEIR USE FOR THE TREATMENT OF TRAUMATIC BRAIN INJURY	China	201880035067.5	11/27/2019	04/27/2018	201880035067.5	01/10/2020			Axcella
AMINO ACID COMPOSITIONS AND THEIR USE FOR THE TREATMENT OF TRAUMATIC BRAIN INJURY	EPO	18724718.4	11/18/2019	04/27/2018	EP3615018	03/04/2020			Axcella
AMINO ACID COMPOSITIONS AND THEIR USE FOR THE TREATMENT OF TRAUMATIC BRAIN INJURY	Hong Kong	18724718.4		04/27/2018	40023999	12/04/2020			Axcella
AMINO ACID COMPOSITIONS AND THEIR USE FOR THE TREATMENT OF TRAUMATIC BRAIN INJURY	Japan	2019-558411	10/25/2019	04/27/2018	2020-517703	06/18/2020			Axcella
AMINO ACID COMPOSITIONS AND THEIR USE FOR THE TREATMENT OF TRAUMATIC BRAIN INJURY	United States	16/608349	10/25/2019	04/27/2018	US-2020-0163919-A1	05/28/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	United Arab Emirates	P6000203/20	02/13/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	ARIPO	AP/P/2020/012282	03/12/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Argentina	P180102315		08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Australia	2018318112	01/20/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Bahrain	20200025	02/14/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Brazil	BR112020002419-8	02/05/2020	08/14/2018	2586	07/28/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Canada	3070856	02/05/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Chile	382-2020	02/14/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	China	201880066161.7	04/08/2020	08/14/2018	CN11295187A	06/16/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Colombia	NC2020/0001702	02/14/2020	08/14/2018	893	05/29/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Cuba	012-2020	02/14/2020	08/14/2018					Axcella

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AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Algeria	200160	03/08/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	EIPO	202090506	03/13/2020	08/14/2018	6	06/02/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Ecuador	SENADI-2020-11578	02/14/2020	08/14/2018	666	04/22/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Egypt	255/2020	02/14/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	EPO	18762721.1	03/12/2020	08/14/2018	EP3668499	06/24/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Hong Kong	62020022311.8		08/14/2018	40032881	04/01/2021			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Indonesia	P00202001225	02/12/2020	08/14/2018	2020/PID/04169	11/26/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Israel	272309	01/29/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	India	202017004793	02/04/2020	08/14/2018	09/2020	02/28/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Iran	139850140003 010505	02/10/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Jordan	PCT/JO/2020/3	02/13/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Japan	2020-508047	02/12/2020	08/14/2018	2020-530845	10/29/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Korea, Republic of	10-2020-7007009	03/10/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Kuwait	KW/P/2020/00053	02/11/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Libya	5445/2020	02/02/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Mexico	MX/a/2020/001765	02/13/2020	08/14/2018	MX/a/2020/001765	08/13/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Malaysia	P12020000709	02/07/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Nigeria	NG/PT/C/2020/4335	01/31/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	New Zealand	761011	01/20/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	ARIPO	1202000079	02/14/2020	08/14/2018					Axcella

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AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Oman	OM/P/2020/00045	02/11/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Parana	92997-01	02/14/2020	08/14/2018	379	12/11/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Peru	247-2020/DIN	02/14/2020	08/14/2018	2020-0747	07/24/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Philippines	1-2020-500321	02/12/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Qatar	QA/202002/00075	02/14/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Saudi Arabia	520411393	02/13/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Singapore	11202001142V	02/07/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Thailand	2001000809	02/12/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Taiwan	107128367		08/14/2018	201919601	06/01/2019			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Ukraine	a202001754	03/13/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS ASSOCIATED WITH ONE OR BOTH OF HYPERAMMONEMIA OR MUSCLE WASTING	United States	16/103,207	08/14/2018	08/14/2018	US-2019-0046487-A1	02/14/2019	10,682,325	06/16/2020	Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS ASSOCIATED WITH ONE OR BOTH OF HYPERAMMONEMIA OR MUSCLE WASTING	United States	16/848,952	04/15/2020	04/29/2019	US 2020-0306214 A1	10/01/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS ASSOCIATED WITH ONE OR BOTH OF HYPERAMMONEMIA OR MUSCLE WASTING	United States	16/397,274	04/29/2019	04/29/2019	US-2019-0247351-A1	08/15/2019	10,660,870	05/26/2020	Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	Viet Nam	1-2020-00827	02/14/2020	08/14/2018	72388 A	08/25/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	South Africa	2020/00725	02/04/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF LIVER DISEASE	South Africa	2021/00779	02/04/2021	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	ARIPO	AP/P/2020/012283	03/12/2020	08/14/2018					Axcella

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COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Argentina	P180102316		08/14/2018	1087	06/03/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Australia	2018318091	01/23/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Brazil	BR112020002244-6	02/03/2020	08/14/2018	2587	08/04/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Canada	3072092	02/04/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Chile	383-2020	02/14/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	China	201880065642.6	04/08/2020	08/14/2018	CN11295186A	06/16/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Colombia	NC2020/0001627	02/13/2020	08/14/2018	894	06/09/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	EAPC	202090460	03/05/2020	08/14/2018	5	05/28/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Egypt	272/2020	02/11/2020	08/14/2018					Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF NEURONAL INJURY	EPO	18762716.1	03/12/2020	08/14/2018	EP3684350	07/29/2020			Axcella
AMINO ACID COMPOSITIONS FOR THE TREATMENT OF NEURONAL INJURY	Hong Kong	62020022348.0		08/14/2018	40032230	03/19/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Indonesia	P00202001190	02/11/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Israel	272336	01/29/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	India	202017005167	02/06/2020	08/14/2018	12/2020	03/20/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Iran	139850140003010512	02/10/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Jordan	PCT/JO/2020/35	02/13/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Japan	2020-507989	02/14/2020	08/14/2018	2020-530843	10/29/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Korea, Republic of	10-2020-7007011	03/10/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Mexico	MX/a/2020/001766	02/13/2020	08/14/2018	MX/a/2020/001766	08/13/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Malaysia	PI20200000679	02/06/2020	08/14/2018					Axcella

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COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Nigeria	NG/P/T/C/2020/4337	01/31/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	New Zealand	761326	01/31/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Peru	251-2020/DIN	02/14/2020	08/14/2018	2020-0748	07/24/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Saudi Arabia	520411392	02/13/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Singapore	11202001131T	02/07/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	Taiwan	107128277		08/14/2018	201919602	06/01/2019			Axcella
COMPOSITIONS AND METHODS FOR TREATMENT OF NEURAL DAMAGE	Ukraine	a202001714	03/12/2020	08/14/2018					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	United States	16/103,200	08/14/2018	08/14/2018	US-2019-0046486-A1	02/14/2019			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF NEURONAL INJURY	South Africa	2020/00854	02/10/2020	08/14/2018					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Argentina	P190101694		06/19/2019	AR 115581 A1	02/03/2021			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Australia	2019288371	11/17/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Brazil	BR112020025831-8	12/17/2020	06/19/2019	Journal No. 2620	03/23/2021			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Canada	3099762	11/06/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Chile	3277-2020	12/17/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	China	201980054581.8	02/19/2021	06/19/2019	CN112823018A	05/18/2021			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Colombia	NC2020/0015847	12/16/2020	06/19/2019	914	12/31/2020			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	EPO	19737943.1	01/20/2021	06/19/2019	EP3810168	04/28/2021			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Israel	279328	12/10/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	India	202017053534	12/09/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Jordan	PCT/JO/2020/323	12/14/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Japan	2020-570677	12/18/2020	06/19/2019					Axcella

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METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Korea, Republic of	10-2020-7035956	12/14/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Mexico	MX/a/2020/013732	12/15/2020	06/19/2019		03/17/2021			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Malaysia	PI2020006373	12/02/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Singapore	11202011611X	12/02/2020	06/19/2019					Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	Taiwan	108121575		06/20/2019	202015668	05/01/2020			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	United States	16446171	06/19/2019	06/19/2019	US-2019-0388374-A1	12/26/2019			Axcella
METHODS OF MANUFACTURING AMINO ACID COMPOSITIONS	South Africa	2020/06936	11/06/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	United Arab Emirates	P6001828/20	12/20/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	ARIPO	AP/P/2021/012909	01/13/2021	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Argentina	P190101696		06/16/2019	AR 117593 A1	08/18/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Australia	2019290620	12/15/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Bahrain	20200241	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Brazil	BR112020026110-6	12/18/2020	06/19/2019	Journal No. 2619	03/16/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Canada	3104279	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Chile	3276-2020	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	China	201980054587.5	02/19/2021	06/19/2019	CN112654263A	04/13/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIA	Colombia	NC2020/0015899	12/17/2020	06/19/2019	914	12/31/2020			Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Cuba	2020-0106	12/21/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Algeria	200668	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	EAPC	202190073	01/19/2021	06/19/2019		04/12/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Ecuador	SENADI-2020-81996	12/17/2020	06/19/2019	684	01/29/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Egypt	2027/2020	12/20/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	EPO	1974653.7	01/20/2021	06/19/2019	EP3809881	04/28/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Indonesia	P00202100331	01/15/2021	06/19/2019	2021/PID/06560	08/02/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Israel	279467	12/15/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	India	202017054735	12/16/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Iran	139950140003 008281	12/16/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Jordan	PCT/JO/2020/3 25	12/14/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Japan	2020-570705	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Korea, Republic of	10-2021-7001194	01/14/2021	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Kuwait	KW/P/2020/000 430	12/20/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Libya	5525/2020	12/20/2020	06/19/2019					Axcella



Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Mexico	MX/a/2020/013833	12/16/2020	06/19/2019	10602	04/16/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Malaysia	P/2020006834	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Nigeria	NG/PT/C/2020/5110	12/16/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	New Zealand	771143	12/15/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	ARIPO	1202000471	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Oman	OM/P/2020/00494	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Panama	93341-1	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Peru	2097-2020/DIN	12/17/2020	06/19/2019	2021-0371	02/26/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Philippines	1-2020-552212	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Qatar	QA/202012/00656	12/20/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Saudi Arabia	520420843	12/20/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Singapore	11202012714Q	12/17/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Thailand	2001007260	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Taiwan	108121574		06/20/2019	202015667	05/01/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	Ukraine	a202100181	01/19/2021	06/19/2019					Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	United States	16/446,374	06/19/2019	06/19/2019	US-2019-0388376-A1	12/26/2019	11,058,654	07/13/2021	Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	United States	17/341,716	06/08/2021	06/08/2021					Axcella
Compositions For The Treatment Of Hemoglobinopathies And Thalassemias	Viet Nam	1-2021-00200	01/14/2021	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	South Africa	2020/07957	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS	Argentina	P190101697		06/19/2019	AR 115533 A1	02/03/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS	Taiwan	108121571		06/20/2018	202015664	05/01/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS	United States	16/446,412	06/19/2019	06/19/2019	US-2019-0388377-A1	12/26/2019			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF FIBROSIS	China	201980054596-4	02/19/2021	06/19/2019	CN112839709A	05/25/2021			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF FIBROSIS	EPO	19739468.7	01/20/2021	06/19/2019	EP3810272	04/28/2021			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF FIBROSIS	India	202017052444	12/02/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF FIBROSIS	Japan	2020-570744	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF FIBROSIS	United States	17/254,089	12/18/2020	12/18/2020					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INFLAMMATION	China	201980054580-3	02/19/2021	06/19/2019	CN112839712A	05/25/2021			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INFLAMMATION	EPO	19739469.5	01/20/2021	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INFLAMMATION	India	202017052448	12/02/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INFLAMMATION	Japan	2020-570685	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INFLAMMATION	United States	17/254,131	12/18/2020	12/18/2020	US 2021-0260010 A1	08/26/2021			Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INSULIN RESISTANCE AND METABOLIC CONDITIONS	China	201980054586.0	02/19/2021	06/19/2019	CN112699509A	04/20/2021			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INSULIN RESISTANCE AND METABOLIC CONDITIONS	EPO	19796883.0	01/20/2021	06/19/2019	EP3810122	04/28/2021			Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INSULIN RESISTANCE AND METABOLIC CONDITIONS	India	202017052636	12/03/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INSULIN RESISTANCE AND METABOLIC CONDITIONS	Japan	2020-570747	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE REDUCTION OR TREATMENT OF INSULIN RESISTANCE AND METABOLIC CONDITIONS	United States	17/254,027	12/18/2020	12/18/2020					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	Argentina	P190101699		06/19/2019	AR 115585 A1	02/03/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	China	201980054575.2	02/19/2021	06/19/2019	CN112839643A	05/25/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	EPO	19740442.9	01/20/2021	06/19/2019	EP3810123	04/28/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	India	202017052641	12/03/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	Japan	2020-570746	12/18/2020	06/19/2019					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	Taiwan	108121573		06/20/2019	202015666	05/01/2020			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	United States	16/446,328	06/19/2019	06/19/2019	US-2020-0016104-A1	01/16/2020	10,596,136	03/24/2020	Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	United States	16/784,453	02/07/2020	02/07/2020	US 2020-0281882 A1	09/10/2020	10,973,793	04/13/2021	Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	United States	17/189,884	03/02/2021	02/07/2020					Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Argentina	P190101700		06/19/2019	AR 116213 A1	04/14/2021			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Australia	2019290662	11/10/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Brazil	BR112020025702-8	12/16/2020	06/19/2019	Journal No. 2619	03/16/2021			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Canada	3,101,058	11/19/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Chile	3278-2020	12/17/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	China	201980054941.4	02/19/2021	06/19/2019	CN112689504A	04/20/2021			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Colombia	NC2020/0015850	12/16/2020	06/19/2019	914	12/31/2020			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	EPO	19735156.2	01/20/2021	06/19/2019	EP3810090	04/28/2021			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Israel	279335	12/09/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	India	202017053726	12/10/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Jordan	PCT/JO/2020/324	12/14/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Japan	2020-570887	12/18/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Korea, Republic of	10-2020-7035957	12/14/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Mexico	MX/a/2020/013731	12/15/2020	06/19/2019		03/17/2021			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Malaysia	PI2020006590	12/10/2020	06/19/2019					Axcella

Title	Country / Region	Application #	Local Application Date	International Application Date	Publication #	Publication Date	Patent #	Issue Date	Owner
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Singapore	11202011657V	1/124/2020	06/19/2019					Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	Taiwan	108121572		06/19/2019	202015665	05/01/2020			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	United States	16446192	06/19/2019	06/19/2019	US-2019-0388375-A1	12/26/2019			Axcella
COMPOSITIONS FOR THERAPY AND HEALTH CONTAINING AMINO ACIDS WITH BITTER TASTE	South Africa	2020/06938	1/106/2020	06/19/2019					Axcella
Formulations for low volume dispersions of amino acids	Argentina	awaiting		10/09/2020					Axcella
REDUCED VOLUME FORMULATIONS INCLUDING AMINO ACID ENTITIES	Taiwan	109135228		10/12/2020					Axcella
REDUCED VOLUME FORMULATIONS INCLUDING AMINO ACID ENTITIES	United States	17/067,187	10/09/2020	10/09/2020	US-2021-0128466 A1	05/06/2021			Axcella
Formulations for low volume dispersions of amino acids	WIPO	PCT/US2020/055068		10/09/2020	WO 2021/072259	04/15/2021			Axcella
COMPOSITIONS AND METHODS EXCLUDING OR WITH REDUCED GLUTAMINE FOR THE TREATMENT OF HEMOGLOBINOPATHIES AND THALASSEMIAS	WIPO	PCT/US2020/063476	12/04/2020	12/04/2020	WO 2021/113762	06/10/2021			Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF FAT INFILTRATION IN MUSCLE	WIPO	PCT/US2020/066890		12/23/2020					Axcella
COMPOSITIONS AND METHODS FOR THE TREATMENT OF LIVER DISEASES AND DISORDERS	WIPO	PCT/US2020/066903		12/23/2020					Axcella
AMINO ACID COMPOSITIONS AND METHODS FOR THE TREATMENT OF MUSCLE DISEASES AND DISORDERS	WIPO	PCT/US2021/021167		03/05/2021					Axcella

EXHIBIT C  
Trademarks

Title	Status	Country	Application #	International Application Date	Registration #	Registration Date	Owner
AXCELLA	Withdrawn	Argentina	3564575	12/05/2016			Axcella
AXCELLA	Abandoned	Argentina	3564577	12/05/2016			Axcella
AXCELLA	Withdrawn	Argentina	3564576	12/05/2016			Axcella
AXCELLA	Registered	Australia	1810794	11/22/2016	1810794	05/09/2018	Axcella
AXCELLA	Filed	Brazil	912013192	12/06/2016			Axcella
AXCELLA	Registered	Brazil	912013303	12/06/2016	912013303	09/04/2018	Axcella
AXCELLA	Filed	Brazil	912013249	12/06/2016			Axcella
AXCELLA	Abandoned	Canada	1810762	12/06/2016			Axcella
AXCELLA	Registered	Switzerland	64589/2016	11/29/2016	699867	03/14/2017	Axcella
AXCELLA	Registered	China	22114614	12/02/2016	22114614	02/28/2018	Axcella
AXCELLA	Registered	China	22114613	12/02/2016	22114613	01/21/2018	Axcella
AXCELLA	Registered	China	22114615	12/02/2016	22114615	01/21/2018	Axcella
AXCELLA	Registered	European Union	016088262	11/25/2016	016088262	06/16/2017	Axcella
AXCELLA	Registered	Israel	289/750	11/23/2016	289750	08/01/2018	Axcella
AXCELLA	Registered	India	3421222	11/28/2016	3421222	02/05/2020	Axcella
AXCELLA	Registered	Japan	2016-136743	12/05/2016	5999433	11/24/2017	Axcella
AXCELLA	Registered	Mexico	182900	12/06/2016	1744176	04/18/2147	Axcella
AXCELLA	Filed	Russian Federation	2016745561	12/01/2016			Axcella
AXCELLA	Registered	Singapore	40201620544P	12/01/2016	40201620544P	12/01/2016	Axcella
AXCELLA	Registered	Taiwan	105070630	11/25/2016	01904452	03/16/2018	Axcella
AXCELLA	Allowed	United States	87/062,052	06/06/2016			Axcella
AXCELLA	Registered	United States	87/983,741	06/06/2016	6,316,011	04/06/2021	Axcella
AXCELLA HEALTH	Allowed <sup>2</sup>	United States	87/062,063	06/06/2016			Axcella
AXCELLA HEALTH	Pending	United States	87/983740	06/06/2016			Axcella

<sup>2</sup> Intent to use

Title	Status	Country	Application #	International Application Date	Registration #	Registration Date	Owner
AMINO ACIDS FOR CELL HEALTH	Registered	United States	87/062,066	06/06/2016	5347989	11/28/2017	Axcella
X logo	Registered	Argentina	3564578	12/05/2016	2976313	2/19/2019	Axcella
X logo	Registered	Argentina	3564580	12/05/2016	2929866	03/16/2018	Axcella
X logo	Registered	Argentina	3564579	12/05/2016	2929867	03/16/2018	Axcella
X logo	Registered	Australia	1810799	11/22/2016	1810799	05/09/2018	Axcella
X logo	Registered	Brazil	912013591	12/06/2016	912013591	9/4/2018	Axcella
X logo	Registered	Brazil	912013842	12/06/2016	912013842	2/12/2019	Axcella
X logo	Registered	Brazil	912013745	12/06/2016	912013745	9/4/2018	Axcella
X logo	Registered	Canada	1810907	12/06/2016	1,063,684	11/19/2019	Axcella
X logo	Registered	Switzerland	64590/2016	11/29/2016	699851	03/14/2017	Axcella
X logo	Registered	China	22114609	12/02/2016	22114609	01/21/2018	Axcella
X logo	Registered	China	22114608	12/02/2016	22114608	01/21/2018	Axcella
X logo	Registered	China	22114607	12/02/2016	22114607	01/21/2018	Axcella
X logo	Registered	European Union	016088312	11/25/2016	016088312	06/10/2017	Axcella
X logo	Registered	Israel	289,770	11/24/2016	289770	07/03/2018	Axcella
X logo	Registered	India	3421224	11/28/2016	3421224	06/30/2017	Axcella
X logo	Abandoned	India	3421225	11/28/2016			Axcella
X logo	Registered	Japan	2016-136745	12/05/2016	5999435	11/24/2017	Axcella
X logo	Registered	Korea, Republic of	40-2016-0109106	12/06/2016	40-1345956	03/30/2018	Axcella
X logo	Registered	Mexico	1828994	12/06/2016	1749100	04/27/2017	Axcella
X logo	Registered	Mexico	1828997	12/06/2016	1743173	04/17/2017	Axcella
X logo	Registered	Mexico	1828996	12/06/2016	1743172	04/17/2017	Axcella
X logo	Registered	Norway	201614396	12/01/2016	292086	04/24/2017	Axcella
X logo	Registered	New Zealand	1055684	11/22/2016	1055684	03/23/2018	Axcella
X logo	Registered	Russian Federation	2016745560	12/01/2016	643143	01/25/2018	Axcella
X logo	Registered	Russian Federation	2016745559	12/01/2016	634309	10/30/2017	Axcella
X logo	Filed	Singapore	40201620547Y	12/01/2016			Axcella
X logo	Registered	Taiwan	105070638	11/25/2016	01904454	03/16/2018	Axcella

Title	Status	Country	Application #	International Application Date	Registration #	Registration Date	Owner
X logo	Registered	United States	87/246,438	11/23/2016	5716055	04/02/2019	Axcella
X logo	Registered	United States	87/062,070	06/06/2016	5851918	09/03/2019	Axcella
ACORA	Withdrawn	Argentina	3564572	12/05/2016			Axcella
ACORA	Registered	Argentina	3564574	12/05/2016	2929868	03/16/2018	Axcella
ACORA	Registered	Argentina	3564573	12/05/2016	2929870	03/16/2018	Axcella
ACORA	Registered	Australia	1810792	11/22/2016	1810792	05/09/2018	Axcella
ACORA	Abandoned	Brazil	912013320	12/06/2016			Axcella
ACORA	Registered	Brazil	912013389	12/06/2016	912013389	9/4/2018	Axcella
ACORA	Abandoned	Brazil	912013370	12/06/2016			Axcella
ACORA	Registered	Canada	1810763	11/22/2016	TMA1063683	11/19/2019	Axcella
ACORA	Registered	China	22114612	12/02/2016	22114612	01/21/2018	Axcella
ACORA	Registered	China	22114610	12/02/2016	22114610	02/28/2018	Axcella
ACORA	Registered	China	22114611	12/02/2016	22114611	02/28/2018	Axcella
ACORA	Registered	European Union	016088288	11/25/2016	016088288	02/15/2018	Axcella
ACORA	Registered	Israel	289751	11/23/2016	289751	04/09/2018	Axcella
ACORA	Abandoned	India	3421223	11/28/2016			Axcella
ACORA	Registered	Japan	2016-136744	12/05/2016	5999434	11/24/2017	Axcella
ACORA	Registered	Mexico	1828988	12/06/2016	1750958	03/05/2017	Axcella
ACORA	Registered	Mexico	1828990	12/06/2016	1743171	04/17/2017	Axcella
ACORA	Registered	New Zealand	1055682	11/22/2016	1055682	06/06/2016	Axcella
ACORA	Filed	Russian Federation	2016745562	12/06/2016			Axcella
ACORA	Published	Singapore	40201620546U	12/01/2016			Axcella
ACORA	Registered	Taiwan	105070634	11/25/2016	01904453	03/16/2018	Axcella
ACORA	Filed <sup>3</sup>	United States	90/535,695	02/19/2021			Axcella
ACORA	Registered	WIPO	1538569	05/13/2020	1538569	05/13/2020	Axcella
ACORA	Pending	Japan	1538569	05/13/2020	1538569	05/13/2020	Axcella
ACORA	Pending	Mexico	1538569	05/13/2020	1538569	05/13/2020	Axcella
ACORA	Registered	New Zealand	1538569	05/13/2020	1152658	05/13/2020	Axcella

3 Intent to use



Title	Status	Country	Application #	International Application Date	Registration #	Registration Date	Owner
ACORA	Abandoned	Mexico	1828993	12/6/2016			Axcella
ACORA	Registered	United Kingdom	UK016088288	11/25/2016	UK00916088288	2/15/2018	Axcella
AXCELLA	Abandoned	Mexico	1828998	12/6/2016			Axcella
AXCELLA	Abandoned	Mexico	1828999	12/6/2016			Axcella
AXCELLA	Registered	United Kingdom	UK016088262	11/25/2016	UK00916088262	6/16/2017	Axcella
AXCELLERATOR	To be abandoned	Argentina	3674033	1/2/2018	3043549	11/22/2019	Axcella
AXCELLERATOR	To be abandoned	Brazil	913985686	1/5/2018			Axcella
AXCELLERATOR	To be abandoned	India	3802197	12/29/2017			Axcella
DAAC	To be abandoned	Argentina	3672389	12/26/2017	3009636	9/4/2019	Axcella
DAAC	To be abandoned	Argentina	3672388	12/26/2017	3009635	9/4/2019	Axcella
DAAC	To be abandoned	India	3793444	12/18/2017			Axcella
DAAC	To be abandoned	Taiwan	106080608	12/19/2017			Axcella
X Logo	Registered	United Kingdom	UK016088312	11/25/2016	UK00916088312	6/19/2017	Axcella

EXHIBIT D  
Mast Works

None

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