

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM867951

SUBMISSION TYPE:	RESUBMISSION		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
RESUBMIT DOCUMENT ID:	900826557		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
Abeona Therapeutics Inc.		01/08/2024	Corporation: DELAWARE
RECEIVING PARTY DATA			
Name:	AVENUE VENTURE OPPORTUNITIES FUND, L.P., as agent		
Street Address:	11 West 42nd Street, 9th Floor		
City:	New York		
State/Country:	NEW YORK		
Postal Code:	10036		
Entity Type:	Limited Partnership: DELAWARE		
PROPERTY NUMBERS Total: 9			
Property Type	Number	Word Mark	
Serial Number:	98295013	VIIALYZE	
Serial Number:	98085336	VIIALIZE	
Serial Number:	88411130	ABEONA THERAPEUTICS	
Serial Number:	88411134	ABEONA THERAPEUTICS	
Serial Number:	97598601	ABEONA THERAPEUTICS	
Serial Number:	97596771	VIITAL	
Serial Number:	98085338	KEREBI	
Serial Number:	97874647	VIILZA	
Serial Number:	88937199	VIIALYZE	
CORRESPONDENCE DATA			
Fax Number:			
<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>			
Email:	lblakely@gcalaw.com		
Correspondent Name:	Laura Blakely		
Address Line 1:	2570 W. El Camino Real, Suite 400		
Address Line 4:	Mountain View, CALIFORNIA 94040		
NAME OF SUBMITTER:	Laura Blakely		

SIGNATURE:	/Laura Blakely/
DATE SIGNED:	01/12/2024
Total Attachments: 7 source=Abeona--IPSA (Inc.) (Executed)#page1.tif source=Abeona--IPSA (Inc.) (Executed)#page2.tif source=Abeona--IPSA (Inc.) (Executed)#page3.tif source=Abeona--IPSA (Inc.) (Executed)#page4.tif source=Abeona--IPSA (Inc.) (Executed)#page5.tif source=Abeona--IPSA (Inc.) (Executed)#page6.tif source=Abeona--IPSA (Inc.) (Executed)#page7.tif	

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of the Closing Date by and between AVENUE VENTURE OPPORTUNITIES FUND, L.P., a Delaware limited partnership, as collateral agent for certain Lenders (in such capacity, "Agent") and ABEONA THERAPEUTICS INC., a Delaware corporation ("Grantor").

RECITALS

A. Grantor, certain of Grantor's affiliates, certain lenders from time to time parties thereto (collectively, "Lenders") and Agent, as administrative and collateral agent for Lenders, are entering into that certain Loan and Security Agreement dated as of January 8, 2024 (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement) pursuant to which Lenders will make certain advances of money and extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth therein.

B. Lenders are willing to extend and to continue to extend financial accommodations to Grantor, but only upon the condition, among others, that Grantor shall grant to Agent, for the ratable benefit of Lenders, a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Agent 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 to secure the Obligations.

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 and all other agreements now existing or hereafter arising between Grantor and Lenders, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

1. To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Lenders and Grantor, Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property those Copyrights, Trademarks and Patents listed on Exhibits A, B and C hereto, and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof (collectively, "Intellectual Property Collateral").

2. This security interest is granted in conjunction with the security interest granted to Agent, for the ratable benefit of Lenders under the Loan Agreement. The rights and remedies of Agent with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Agent, for the benefit of Lenders, as a matter of law or equity. Each right, power and remedy of Agent provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for in this Intellectual Property Security Agreement and the exercise by Agent of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Agent, of any or all other rights, powers or remedies.

3. Each Grantor hereby authorizes Agent to (a) file and/or record, in the relevant office(s), including the United States Patent and Trademark Office and the United States Copyright Office, this Intellectual Property Security Agreement and any and all amendments and/or modifications hereto, including to the Exhibits attached

hereto from time to time, and other documents, without the signature of Grantor either in Agent's name or in the name of Agent as agent and attorney-in-fact for Agent, (b) modify this Intellectual Property Security Agreement unilaterally by amending the exhibits to this Intellectual Property Security Agreement to include any United States issued, registered or applied for Copyrights, Trademarks or Patents which such Grantor obtains subsequent to the date of this Intellectual Property Security Agreement, and (c) file a duplicate of this Intellectual Property Security Agreement containing amended exhibits reflecting such new Intellectual Property with the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

4. Sections 9.9 (Execution in Counterparts; Electronic Signatures), 9.11 (Governing Law and Jurisdiction) and 9.12 (Waiver of Jury Trial; Judicial Reference) of the Loan Agreement are incorporated herein by this reference as though set forth in full.

5. This Intellectual Property Security Agreement constitutes a Loan Document.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantor:

6555 Carnegie Avenue, Floor 4
Cleveland, OH 44103
Attention: Joseph Vazzano
Email: jvazzano@abeonatherapeutics.com
Phone: 908-625-9541

GRANTOR:

ABEONA THERAPEUTICS INC.
By Joseph Vazzano
Name: Joseph Vazzano
Title: Chief Financial Officer

Address of Agent:

11 West 42nd Street, 9th Floor
New York, NY 10036
Attention: Legal Reporting
Email: : tgreenberg@avenuecapital.com
Phone: #212-878-3523

AGENT:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: _____
Name: Sonia Gardner
Title: Member

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

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6555 Carnegie Avenue, Floor 4
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Attention: Joseph Vazzano
Email: jvazzano@abeonatherapeutics.com
Phone: 908-625-9541

GRANTOR:

ABEONA THERAPEUTICS INC.

By _____
Name: Joseph Vazzano
Title: Chief Financial Officer

Address of Agent:

11 West 42nd Street, 9th Floor
New York, NY 10036
Attention: Legal Reporting
Email: : tgreenberg@avenuecapital.com
Phone: #212-878-3523

AGENT:

AVENUE VENTURE OPPORTUNITIES FUND, L.P.

By: _____
Name: Avenue Venture Opportunities Partners, LLC
Its: General Partner

By: _____
Name: Sonia Gardner
Title: Member

EXHIBIT A
COPYRIGHTS

N/A

<u>OWNER</u>	<u>DESCRIPTION</u>	<u>REGISTRATION NUMBER</u>	<u>REGISTRATION DATE</u>
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EXHIBIT B

PATENTS

<u>OWNER</u>	<u>DESCRIPTION</u>	<u>PATENT / APPLICATION NUMBER</u>	<u>ISSUE / APPLICATION DATE</u>
Abeona Therapeutics, Inc.	Recombinant Adeno-Associated Viral Vectors for Multipartite Gen Delivery	18015412	7/14/2021
Abeona Therapeutics, Inc.	Devices, Systems, and Methods for Packaging and Transport of Biological Tissue	17626987	7/16/2020
Abeona Therapeutics, Inc.	Intrathecal and Intravenous Combination Gene Therapy for the Treatment of Infantile Batten Disease	17607315	4/26/2020
Abeona Therapeutics, Inc.	Recombinant Adeno-Associated Viral Vectors for Gene Delivery	17299434	12/04/2019
Abeona Therapeutics, Inc.	Targeted Nanocarrier Systems for Delivery of Active Across Biological Membranes	14804168	7/20/2015

EXHIBIT C

TRADEMARKS

OWNER	DESCRIPTION	REGISTRATION/ SERIAL NUMBER	REGISTRATION/ APPLICATION DATE
Abeona Therapeutics, Inc.	VIIALYZE	98295013	12/01/2023
Abeona Therapeutics, Inc.	VIIALIZE	98085336	7/14/2023
Abeona Therapeutics, Inc.	ABEONA THERAPEUTICS	88411130	5/01/2019
Abeona Therapeutics, Inc.	 (Words + Image)	88411134	5/01/2019
Abeona Therapeutics, Inc.	ABEONA THERAPEUTICS	97598601	9/20/2022
Abeona Therapeutics, Inc.	 (Words + Image)	97596771	9/19/2022
Abeona Therapeutics, Inc.	KEREBI	98085338	7/14/2023
Abeona Therapeutics, Inc.	VIIILZA	97874647	4/05/2023
Abeona Therapeutics, Inc.	VIIALYZE	88937199	5/28/2020