TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ETAS ID: TM570212

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
AKEBIA THERAPEUTICS, INC.		04/01/2020	Corporation: DELAWARE
KERYX BIOPHARMACEUTICALS, INC.		04/01/2020	Corporation: DELAWARE

RECEIVING PARTY DATA

Name:	BIOPHARMA CREDIT PLC
Street Address:	51 New North Road
Internal Address:	C/O Beaufort House
City:	Exeter EX4 4EP
State/Country:	UNITED KINGDOM
Entity Type:	Public Limited Company: ENGLAND AND WALES

PROPERTY NUMBERS Total: 1

Property Type	Number	Word Mark
Registration Number:	4956680	AURYXIA

CORRESPONDENCE DATA

Fax Number: 2028874288

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: 2149692741

blove@akingump.com Email:

Correspondent Name: Brenda Love

Address Line 1: 2001 K Street N.W. Address Line 4: Washington, D.C. 20006

NAME OF SUBMITTER:	Brenda Love
SIGNATURE:	/Brenda Love/
DATE SIGNED:	04/02/2020

Total Attachments: 9

source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page1.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page2.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page3.tif

source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page4.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page5.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page6.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page7.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page8.tif source=Pharmakon-Akebia - Amended and Restated Intellectual Property Security Agreement#page9.tif

This AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of April 1, 2020, is made by AKEBIA THERAPEUTICS, INC. and KERYX BIOPHARMACEUTICALS, INC., (the "Grantors" and each a "Grantor"), in favor of BIOPHARMA CREDIT PLC (together with its successors and permitted assigns, the "Collateral Agent") on behalf of Lenders and the other Secured Parties (as defined in the Loan Agreement referred to below).

WITNESSETH:

WHEREAS, pursuant to the Loan Agreement, dated as of November 11, 2019 (as the same may be amended, amended and restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), by and among AKEBIA THERAPEUTICS, INC. ("Borrower"), KERYX BIOPHARMACEUTICALS, INC. (as an additional Credit Party), BIOPHARMA CREDIT PLC (as the "Collateral Agent" and a "Lender"), and BIOPHARMA CREDIT INVESTMENTS V (MASTER) LP (as a "Lender"), each Lender has agreed to make extensions of credit to Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, each Grantor has agreed, pursuant to a Guaranty and Security Agreement dated as of November 25, 2019 in favor of the Collateral Agent for the benefit of Lenders and the other Secured Parties (as such agreement may be amended, amended and restated, supplemented or otherwise modified from time to time, the "Guaranty and Security Agreement"), to guarantee the Obligations (as defined in the Loan Agreement) of Borrower; and

WHEREAS, each Grantor is party to the Guaranty and Security Agreement pursuant to which Grantor executed and delivered to the Collateral Agent an Intellectual Property Security Agreement, dated as of November 25, 2019 (the "Existing Intellectual Property Security Agreement");

WHEREAS, one or more Grantors have subsequently acquired additional Collateral and, pursuant to the Guaranty and Security Agreement, are required to execute and deliver to the Collateral Agent this Amended and Restated Intellectual Property Security Agreement Security Agreement; and

WHEREAS, this Amended and Restated Intellectual Property Security Agreement amends and restates the Existing Intellectual Property Security Agreement in its entirety;

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree, intending to be legally bound, as follows:

- Section 1. <u>Defined Terms</u>. Capitalized terms used herein without definition are used as defined in the Guaranty and Security Agreement.
- Section 2. <u>Grant of Security Interest in IP Collateral</u>. Each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations, hereby mortgages, pledges and hypothecates to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, and grants to the Collateral Agent, for the benefit of Lenders and the other Secured Parties, a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of such Grantor, in each case, solely to the extent constituting Collateral (and excluding any Excluded Property) (the "Intellectual Property Collateral"):
- (a) any and all United States Patents, Trademarks and other Intellectual Property and IP Licenses (including any IP Licenses under the Current Company IP Agreements to which a Grantor is a party and the rights of such Grantor thereunder, and all of a Grantor's right, title and interest in, to and

under any Internet Domain Names and Software) owned by a Grantor, in each case, relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Product in the Territory, including, without limitation, those referred to on <u>Schedule 1</u> hereto; and

- (b) all proceeds, products, accessions, rents and profits of or in respect of any of the foregoing.
- Section 3. <u>Guaranty and Security Agreement</u>. The security interest granted pursuant to this Amended and Restated Intellectual Property Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent for the benefit of Lenders and the other Secured Parties, pursuant to the Guaranty and Security Agreement and each Grantor hereby acknowledges and agrees that the obligations, rights and remedies of such Grantor and of the Collateral Agent on behalf of Lenders and the other Secured Parties with respect to the security interest in the Intellectual Property Collateral made and granted hereby are more fully set forth in the Guaranty and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.
- Section 4. <u>Grantor Remains Liable</u>. Each Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other reasonably necessary actions in connection with their Intellectual Property and IP Licenses subject to a security interest hereunder.
- Section 5. <u>Counterparts.</u> This Amended and Restated Intellectual Property Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.
- Section 6. <u>Governing Law.</u> This Amended and Restated Intellectual Property Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York without regard to any principle of conflicts of law that could require the application of the law of any other jurisdiction.

IN WITNESS WHEREOF, each Grantor has caused this Amended and Restated Intellectual Property Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

AKEBIA THERAPEUTICS, INC.

as Grantor

By:

Name: John P. Builler Title: President and Chief

Executive Officer

KERYX BIOPHARMACEUTICALS, INC.

as Grantor

By:

Name: John P. Butler Title: Director

Signature Page to Amended and Restated Intellectual Property Security Agreement

ACCEPTED AND AGREED as of the date first above written:

BIOPHARMA CREDIT PLC, as Collateral Agent

By: Pharmakon Advisors, LP, its Investment Manager

By: Pharmakon Management I, LLC,

its General Partner

By

Name: Fedro Gonzalez de Cosio

Title: Managing Member

AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT SCHEDULE I

Intellectual Property

1. REGISTERED PATENTS, PATENT APPLICATIONS AND PATENT LICENSES

Patent:	Application	Filing Date	Patent Number	Issue Date	Status (High-	All Assignees/	Title
							FERRIC ORGANIC
							COMPOUNDS, USES
P2000111S1	11/206 981	2/18/2004	7 767 851	8/3/2010	In Force	Riotech Inc	OF MAKING SAME
	`		,				FERRIC ORGANIC
							COMPOUNDS, USES
						Panion & BF	THEREOF AND METHODS
P20001US10	16/589,905	10/1/2019			Pending	Biotech Inc.	OF MAKING SAME
							FERRIC ORGANIC
							COMPOUNDS, USES
				12/25/201		Panion & BF	THEREOF AND METHODS
P20001US2	12/711,679	2/18/2004	8,338,642	2	In Force	Biotech Inc.	OF MAKING SAME
							FERRIC ORGANIC
							COMPOUNDS, USES
				12/17/201		Panion & BF	THEREOF AND METHODS
P20001US3	13/672,900	2/18/2004	8,609,896	3	In Force	Biotech Inc.	OF MAKING SAME
							FERRIC ORGANIC
							COMPOUNDS, USES
						Panion & BF	THEREOF AND METHODS
P20001US4	14/011,291	2/18/2004	8,754,258	6/17/2014	In Force	Biotech Inc.	OF MAKING SAME
							FERRIC ORGANIC
							COMPOUNDS, USES
						Panion & BF	THEREOF AND METHODS
P20001US5	14/011,325	2/18/2004	8,901,349	12/2/2014	In Force	Biotech Inc.	OF MAKING SAME

P20002US5	P20002US4	P20002US3	P20002US2	P20002US1	P20001US8	P20001US7	P20001US6
14/701,933	14/306,756	13/661,558	13/289,048	12/064,058	15/143,987	14/502,774	14/011,357
8/18/2006	8/18/2006	8/18/2006	8/18/2006	8/18/2006	2/18/2004	2/18/2004	2/18/2004
9,757,416	9,050,316	8,754,257	8,299,298	8,093,423	9,913,821	9,328,133	8,846,976
9/12/2017	6/9/2015	6/17/2014	10/30/201	1/10/2012	3/14/2018	5/3/2016	9/30/2014
In Force	In Force	In Force	In Force	In Force	In Force	In Force	In Force
Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.	Panion & BF Biotech Inc.
PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES	PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME

THE TREATMENT OF AND THE REDUCTION OF MORTALITY AND MORBIDITY RELATED TO ADVERSE CARDIAC	Keryx Biopharmaceuticals,	Pending			12/11/201	16/216,772	P20009US2
USE OF FERRIC CITRATE IN THE TREATMENT OF CHRONIC KIDNEY DISEASE PATIENTS	Keryx Biopharmaceuticals, Inc.	Pending			10/8/2018	16/154,268	P20008US5
FERRIC CITRATE DOSAGE FORMS	Keryx Biopharmaceuticals, Inc.	Pending			4/5/2019	16/376,907	P20007US4
FERRIC CITRATE DOSAGE FORMS	Keryx Biopharmaceuticals, Inc.	In Force	5/28/2019	10,300,039	5/19/2016	15/159,008	P20007US3
FERRIC CITRATE DOSAGE FORMS	Keryx Biopharmaceuticals, Inc.	In Force	7/12/2016	9,387,191	7/21/2010	13/255,326	P20007US1
METHOD OF TREATING CHRONIC KIDNEY DISEASE	Panion & BF Biotech Inc.	Pending			1/26/2007	15/814,767	P20006US2
METHOD OF REVERSING, PREVENTING OR STABILIZING SOFT TISSUE CALCIFICATION	Panion & BF Biotech Inc.	In Force	9/5/2017	9,750,715	1/26/2007	12/162,558	P20005US1
PHARMACEUTICAL-GRADE FERRIC CITRATE	Panion & BF Biotech Inc.	In Force	6/7/2005	6,903,235	10/8/2003	10/682,045	P20004US
METHOD FOR TREATING RENAL FAILURE	HSU, Chen Hsing	In Force	5/19/1998	5,753,706	2/3/1997	08/794,328	P20003US1
PHARMACEUTICAL-GRADE FERRIC ORGANIC COMPOUNDS, USES THEREOF AND METHODS OF MAKING SAME	Panion & BF Biotech Inc.	Pending			8/18/2006	16/352,455	P20002US7
THEREOF AND METHODS OF MAKING SAME							

FERRIC CITRATE	Japan Tobacco, Inc.	Pending			6/12/2019	16/438,694	
TABLET CONTAINING							
OXIDE	Japan Tobacco, Inc.	Pending			3/3/2017	15/449,132	
BETA-IRON HYDROXIDE							
SUBSTANTIALLY FREE OF							
IRON (III) CITRATE,							
OXIDE	Japan Tobacco, Inc.	Issued	4/18/2017	9,624,155	2/19/2014	14/184,062	
BETA-IRON HYDROXIDE							
SUBSTANTIALLY FREE OF							
IRON (III) CITRATE,							
FOR THE SAME	Inc.	Pending			9	16/719,570	P20011US7
MANUFACTURE AND USES	Biopharmaceuticals,				12/18/201		
CITRATE, METHODS OF	Keryx						
HIGH PURITY FERRIC							
FOR THE SAME	Inc.	application)			5/7/2019	16/405,599	P20011US6
MANUFACTURE AND USES	Biopharmaceuticals,	P20011US7					
CITRATE, METHODS OF	Keryx	filing					
HIGH PURITY FERRIC		(in favor of					
		Abandoned					
DEFICIENCY ANEMIA	Inc.	Pending			3/3/2016	15/553,348	P20010US1
THE TREATMENT OF IRON-	Biopharmaceuticals,						
USE OF FERRIC CITRATE IN	Keryx						
KIDNEY DISEASE PATIENTS							
EVENTS IN CHRONIC							

2. TRADEMARK REGISTRATIONS¹

			Γ.
	Trademark		A
	ad		AURYXIA
	en		$ \mathcal{A} $
	8		$ \mathbf{x} $
	☆`		\
	\sim		
	Ő.		١'n.
	Country		ξ.
	Į		Δ.
			Sta
			ig.
			0
			f,
			<u> </u>
			<u>a</u>
	S		$ _{\nabla}$
	8		66
	Status		SI
			[<u>c</u>
			<u>g</u>
			United States of America Registered 86/390,566 Sep 10, 2014 4956680
	≱		8
	9		3
	Application # Date Filed F		8
	ati		35
	on		2
	#		
			7.
)a		Š
	ਨ		<u> </u>
	Ξ		ļ
	Ø		2
			2
			<u> </u>
	π		4
	Regist		25
	Si		16
	stration		8
	5∵		
	n		
	-44°		
	π		z
	œ		[<u>a</u>
	<u>S</u>		
	B.		ļ,
	10		10, 201
	n l		<u> </u>
	Da		5
	to		
			
9	ς	묫줐	ĮΪ
Š	7	3 3	$ \cdot\rangle$
2		אַ אַ אַ	
		∄	
		30	
		2	
			
		<u>3</u>	
		/1	
	1. 40.1	yx xharmaceuticals	

certificate. ¹ NTD: Any trademarks which are not part of the Collateral have been removed, but these are still referenced in the perfection

IP LICENSES

 $\dot{\mathfrak{s}}$

- ь. 5. Second Amended and Restated License Agreement between the Borrower and Panion & BF Biotech, Inc., dated April 17, 2019.
- Amended and Restated Sublicense Agreement between Keryx and Japan Tobacco and TORII Pharmaceutical Co., Ltd., dated June 8,
- ? First Amendment to Amended and Restated Sublicense Agreement between Keryx and Japan Tobacco and TORII Pharmaceutical Co., Ltd., dated June 12, 2013.

TRADEMARK REEL: 006906 FRAME: 0781

RECORDED: 04/02/2020