PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HANSPETER ROTTENSTEINER	06/12/2021
WERNER HOELLRIEGL	06/12/2021

RECEIVING PARTY DATA

Name:	TAKEDA PHARMACEUTICAL COMPANY LIMITED	
Street Address:	1-1, DOSHOMACHI 4-CHOME, CHUO-KU, OSAKA-SHI	
City:	OSAKA	
State/Country:	JAPAN	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17296944

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER:	008073-5202-US
NAME OF SUBMITTER:	BARBARA DE ALFARO
SIGNATURE:	/Barbara de Alfaro/
DATE SIGNED:	08/02/2023

Total Attachments: 3

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PATENT 508045799 REEL: 064471 FRAME: 0646



Serial No. 17/296,944

Filed: May 25, 2021

Attorney Docket No. 008073-5202-US

For good and valuable considerations, the receipt and sufficiency whereof are hereby acknowledged, we hereby assign to TAKEDA PHARMACEUTICAL COMPANY LIMITED, a corporation of Japan, having a principal place of business at Osaka, Japan, its successors, legal representatives and assigns (hereinafter jointly referred to as "assignee") the entire right, title and interest throughout the world, to the extent not previously assigned to assignee, in our invention or improvements in

GENE THERAPY OF HEMOPHILIA A USING VIRAL VECTORS ENCODING RECOMBINANT FVIII VARIANTS WITH INCREASED EXPRESSION

and, effective as of the date of filling, in the above listed application(s) for Letters Patent therefor, executed by each of us individually, and any and all other patent applications in any and all countries which have been or may hereafter be filed, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of any country which may be obtained on any of the said applications, and in any reissue or extension thereof and any applications that claim priority thereto, including any regional and national stage applications.

We hereby authorize and request the patent offices of all countries to issue to the said assignee all patents that may issue on said invention or improvements. We hereby authorize and request the attorneys of record in said application to insert in this assignment the date and serial number and docket number of said applications when officially known.

We warrant ourselves to be the owners of the interest herein assigned and to have the right to make this assignment; and further warrant that there are no outstanding prior assignments, licenses, or other rights to any person or entity other than the assignee in the interest herein assigned.

For said considerations we hereby agree, upon the request and at the expense of said assignee, its successors, legal representatives and assigns, to execute any and all divisional, continuation, and renewal applications for said invention or improvements, and any necessary oath or supplemental oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, including any regional and national stage applications that claim priority thereto, that said assignee, its successors, legal representatives and assigns may deem necessary or expedient, and for the said considerations we further agree, upon the request of said assignee, its successors, legal representatives and assigns, in the event of said application or any continuation or division thereof, or Letters Patent issued thereon, or any reissue or application for the reissue thereof becoming involved in interference, to cooperate to the best of our ability with said assignee, its successors, legal representatives and assigns in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof.

We further agree to perform, upon such request, any and all affirmative acts, including but not limited to execution of any and all documents deemed necessary or expedient by the said assignee or its successors, legal representatives or assigns, to obtain Letters Patent, and vest all rights therein hereby conveyed in the said assignee, its successors, legal representatives and assigns whereby said Letters Patent will be held and enjoyed by the said assignee, its successors, legal representatives and assigns to the end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made, and for the said considerations we hereby also assign to said assignee, its successors, legal representatives and assigns the entire right, title and interest in said invention or improvements for any and all foreign countries and the right of priority for patent and utility model applications in all countries arising under any applicable international convention for the protection of industrial property and/or any internal priority legislation of such countries, and we further agree upon the request of said assignee, its successors, legal representatives and assigns to execute any and all documents that shall be required to be executed in connection with any and all applications for foreign Letters Patent therefor, including the prosecution thereof, and to execute any and all documents in said assignee.

WITNESS our hand.

DB2/ 41706067.1



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GENE THERAPY OF HEMOPHILIA A USING VIRAL VECTORS ENCODING RECOMBINANT FVIII VARIANTS WITH INCREASED EXPRESSION

nventor: <u>Hanspeter Rottensteiner</u>	Inventor: <u>Werner Hoellriegl</u>
Date: 06.17.2021	Date: 06. 12. 2021
Date: 06.12.2021 Signature: 461 / 1.1.	Signature: Works Hand
Witness Name: Dr. Patrice Douillard	Witness Name: Dr. Patrice Douillard
Date: 06-12-2021	Date: 06.12.2021
Signature:	Signature:



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Assignee: Takeda Pharmaceutical Company

Limited

Date: ____July 13, 2023

Signature:

Witness Name: Mattheu Gang

Date: July 13, 2023

Signature:

DB2/ 41706067.1

RECORDED: 08/02/2023

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