### 505655972 09/05/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5702778

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date	
DENISE KELLY	07/22/2016	

### **RECEIVING PARTY DATA**

Name:	4D PHARMA RESEARCH LIMITED
Street Address: LIFE SCIENCES INNOVATION BUILDING	
Internal Address:	CORNHILL ROAD
City:	ABERDEEN
State/Country:	UNITED KINGDOM
Postal Code:	AB25 2ZS

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16560381

#### **CORRESPONDENCE DATA**

**Fax Number:** (650)493-6811

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: 6504939300
Email: rrsmith@wsgr.com

Correspondent Name: WILSON SONSINI GOODRICH & ROSATI

Address Line 1: 650 PAGE MILL ROAD

Address Line 4: PALO ALTO, CALIFORNIA 94304

ATTORNEY DOCKET NUMBER:	56708-707.302
NAME OF SUBMITTER:	DAVID MATA
SIGNATURE:	/David Mata/
DATE SIGNED:	09/05/2019

### **Total Attachments: 5**

source=56708-707.302 - P067638US Signed Confirmatory Assignment (from parent)#page1.tif source=56708-707.302 - P067638US Signed Confirmatory Assignment (from parent)#page2.tif source=56708-707.302 - P067638US Signed Confirmatory Assignment (from parent)#page3.tif source=56708-707.302 - P067638US Signed Confirmatory Assignment (from parent)#page4.tif source=56708-707.302 - P067638US Signed Confirmatory Assignment (from parent)#page5.tif

PATENT 505655972 REEL: 050279 FRAME: 0603

#### CONFIRMATORY PATENT ASSIGNMENT DEED

#### PARTIES:

- (1) DENISE KELLY of 112 Anderson Drive, Aberdeen, AB15 6BW, United Kingdom (formerly c/o GT Biologics Ltd., c/o Rowett Research Institute, Greenburn Road, Aberdeen, AB21 9SB, United Kingdom) ("INVENTOR")
- (2) 4D PHARMA RESEARCH LIMITED (formerly GT Biologics Limited) (registered in Scotland with company number SC336222) of Life Sciences Innovation Building, Cornhill Road, Aberdeen. AB25.2ZS, United Kingdom ("ASSIGNEE")

#### RECITALS:

- A. The INVENTOR is the inventor or one of the inventors in respect of the invention(s) (the "INVENTION") which is the subject of the patent application(s) identified in the Schedule (the "APPLICATION").
- B. The INVENTOR and the ASSIGNEE are the same parties who were party to an earlier agreement dated 27 March 2015 in relation to the INVENTION. As a result of that agreement, the parties confirmed that all rights in the INVENTION have been taken to be owned by the ASSIGNEE.
- C. The ASSIGNEE has filed or wishes to file a patent application(s) in respect of the INVENTION (the "APPLICATION") in its own name, which the INVENTOR accepts that the ASSIGNEE is fully entitled to do.
- D. For the avoidance of doubt and so as to confirm the ASSIGNEE's legal title to the same, the parties have agreed to execute this Agreement for the purpose of ensuring that all rights in the INVENTION (including the APPLICATION and all other intellectual property rights) are vested in the ASSIGNEE.

#### **OPERATIVE TERMS:**

In consideration of the sum of £1 (one pound sterling) paid by the ASSIGNEE to the INVENTOR (the receipt and sufficiency of which is hereby acknowledged) IT IS AGREED as follows:

#### 1. Assignment

- 1.1 The INVENTOR hereby confirms the assignment to the ASSIGNEE and the ASSIGNEE hereby confirms its acceptance of all the INVENTOR's intellectual property right title and interest in and to the APPLICATION for all designated states including without limitation:
  - (a) the APPLICATION and all patent applications and patents which may now or in the future derive or claim priority from any thereof or otherwise relate in whole or in part to the INVENTION including all divisionals, continuations, continuations-in-part, reissues, extensions, supplementary protection certificates, renewals and registrations in relation to any thereof and all and any other rights in the INVENTION (the "PATENT RIGHTS"), including the right to apply for any of the same;
  - (b) the benefit of all priority rights;
  - (c) the right to seek and obtain registrations in other countries;
  - (d) all other intellectual property rights and know-how including without limitation any copyrights and design rights (whether or not registrable) relating in any way to the INVENTION.
  - (e) the right to sue for and obtain injunctive relief, damages and all other relief in respect of any infringement or misuse (whether past present or future) of any of the rights hereby transferred.
- 1.2 The INVENTOR confirms that the ASSIGNEE has accordingly at all relevant times been the owner of all the INVENTORS' rights in the INVENTION, including being entitled to file the APPLICATION and any other applications included in the PATENT RIGHTS in the name of the ASSIGNEE or permit a third party to file any of the same in its own name and to transfer any rights in the INVENTION and/or the PATENT RIGHTS to any third party without reference to the INVENTOR.

### 2. <u>Covenants</u>

The INVENTOR covenants with the ASSIGNEE as follows:

- (a) that the INVENTOR has not done or omitted to do any act or thing whatsoever whereby any patents or other intellectual property rights relating to the INVENTION might be invalidated or otherwise prejudicially affected or the due performance of this Agreement hindered or prevented.
- (b) that the INVENTOR has not given any permission to any third party to use the INVENTION and has not otherwise assigned or granted to any third party any rights in or under the INVENTION (including the PATENT RIGHTS)
- (c) that the INVENTOR is not aware of any infringement or unauthorised use of any of the rights confirmed in, transferred or intended to be transferred to the ASSIGNEE under this Agreement.

### 3. <u>Further Assurance</u>

- 3.1 The INVENTOR undertakes at the ASSIGNEE's expense to execute any further documents and do all things which the ASSIGNEE may reasonably require in order to ensure the vesting in the ASSIGNEE (or the ASSIGNEE's successors in title or nominees as the case may be) of all property rights title and interests intended to be confirmed in, assigned transferred or granted to the ASSIGNEE hereunder (including the PATENT RIGHTS) and to give the ASSIGNEE the full benefit of this Agreement including doing all acts which may be necessary or desirable in connection with:
  - the filing and prosecution of any of the PATENT RIGHTS anywhere in the world and obtaining grant in relation thereto;
  - (b) protecting and enforcing the PATENT RIGHTS and other intellectual property rights relating to the INVENTION;
  - (c) recording any PATENT RIGHTS in the name of the ASSIGNEE or the ASSIGNEE's successors in title or nominees as sole applicant or registered proprietor as the case may be;
  - (d) assisting in the resolution of any question concerning the INVENTION or any of the PATENT RIGHTS.
- 3.2 The INVENTOR hereby authorises the officers from time to time of the ASSIGNEE and the ASSIGNEE's agents to do or authorise the doing of all such acts (including the signing of all such documents) on behalf of the INVENTOR as the ASSIGNEE may consider appropriate for the purpose of giving effect to the provisions of clause 3.1, including but not limited to the annotation of this Agreement with any reference information regarding any of the PATENT RIGHTS as may be required by any relevant Patent Office.

### 3 <u>Law</u>

This Agreement shall be governed by and construed and take effect in accordance with the laws of England and the parties hereby submit to the exclusive jurisdiction of the Courts of England.

IN WITNESS of which the parties have executed and delivered this Agreement as a Deed (in the case of the ASSIGNEE by authorised signatories) as of the date of the last signature.

# SCHEDULE - THE INVENTION(s)

# 1) Assay for Screening Candidate Drugs for the Treatment of Inflammatory Diseases

Country	Application No.	Filing Date	Status
Australia	2002343063	20.11.02	Granted
Belgium	02779724.0	20.11.02	Granted
Canada	2468082	20.11.02	Granted
Switzerland	02779724.0	20.11.02	Granted
Germany	02779724.0	20.11.02	Granted
Denmark	02779724.0	20.11.02	Granted
European	02779724.0	20.11.02	Granted
Spain	02779724.0	20.11.02	Granted
Finland	02779724.0	20.11.02	Granted
France	02779724.0	20.11.02	Granted
GB	0127916.5	21.11.01	Abandoned
GB	02779724.0	20.11.02	Granted
Ireland	02779724.0	20.11.02	Granted
Italy	02779724.0	20.11.02	Granted
Japan	20030547968	20.11.02	Granted
Japan	20120196103	06.09.12	Pending
Luxembourg	02779724.0	20.11.02	Granted
Netherlands	02779724.0	20.11.02	Granted
PCT	PCT/GB2002/005255	20.11.02	Completed
Portugal	02779724.0	20.11.02	Granted
Sweden	02779724.0	20.11.02	Granted
US	10/285,224	20.11.02	Granted

# 2) Bacterial Strains Isolated from Pigs

Country	Application No.	Filing Date	Status
GB	1112091.2	14.07.11	Abandoned
PCT	PCT/GB2012/051686	13.07.12	Completed
Brazil	BR112014000835-3	13.07.12	Pending
Canada	2841576	13.07.12	Pending
China	201280044674.0	13.07.12	Pending
European	12737592.1	13.07.12	Pending
Russia	2014105461	13.07.12	Pending
US	14/232475	13.07.12	Pendina

# 3) Bacterium for use as a probiotic for nutritional and medical applications

Country	Application No.	Filing Date	Status
GB	1117313.5	07.10.11	Abandoned
PCT	PCT/GB2012/052495	08.10.12	Completed
Australia	2012320255	08 10 12	Pending
Brazil	BR112014008044-5	08.10.12	Pending
Canada	2850000	08.10.12	Pending
China	201280054515.9	08 10 12	Pending
European	12775538.7	08.10.12	Pending
Hong Kong	15100681.7	21.01.15	Pending
India	3582/DELNP/2014	08 10 12	Pending
Japan	2014-533994	08.10.12	Pending
Mexico	MX/a/2014/004220	08.10.12	Pending
Russia	2014118464	08 10 12	Pending
US	14/349907	08.10.12	Pending
US continuation	15/070,605		Pending
			· · · · · · · · · · · · · · · · · · ·

# 4) Roseburia flagellin and immune modulation

Country	Application No.	Filing Date	Status
GB	1306536 2	10.04.13	Abandoned
PCT	PCT/GB2014/051123	10.04.14	Completed
Australia	2014202021	10.04.14	Pending
Brazil	BR112015025854-9	10.04.14	Pending
Canada	2848725	10.04.14	Pending
China	201480033216.6	10.04.14	Pending
European	14717823.0	10 04 14	Pending
Hong Kong	1306536.2	10.04.14	Pending
India	9399/DELNP/2015	10.04.14	Pending
Japan	2016-507061	10.04.14	Pending
Mexico	MX/a/2015/014281	10.04.14	Pendina
Russia	2015147864	10.04.14	Pending
Turkey	2014/04161	10 04 14	Pending
US	14/249710	10.04.14	Pendina

# 5) Polypeptide and immune modulation

Country	Application No.	Filing Date	Status
GB	1423083.3	23.12.14	Abandoned
PCT	PCT/GB2015/054113	22.12.15	Pending
Argentina	20150104270	22.12.15	Pendina
Taiwan	104143467	23.12.15	Pendina
Venezuela	2015001051	22.12.15	Pending

2.	EXECUTED	and	DEL	.IVERED	as	а	DEED	by	the
	INIVENTOR.								

Signature: David Welly

Denise KELLY

Date: <u>22</u>

Witness Signature:

Witness Name: \_

Witness Address:

Burness Paull LLP Union Plaza

Union Plaza 1 Union Wynd

2016

Aberdeen AB10 1DQ

EXECUTED and DELIVERED as a DEED by the ASSIGNEE:

Signature: Au

Name: ALEXANDER JAMES STEVENSON

Title: Director

Date: 8/12/16

Witness Signature:

Witness Name: Stove A

Notary Public
Witness Address: 5 Wellington Place
Leeds LST 4AP

(6183

RECORDED: 09/05/2019