

Registration of a Charge

Company Name: 4D PHARMA RESEARCH LIMITED

Company Number: SC336222

Received for filing in Electronic Format on the: 29/07/2022

Date of creation: 14/07/2022

Charge code: SC33 6222 0005

Persons entitled: 4D PHARMA PLC

DAVID JOHN PIKE AND JAMES RICHARD CLARK AS JOINT

ADMINISTRATORS

Brief description: FOR DETAILS OF LAND, SHIP, AIRCRAFT OR INTELLECTUAL PROPERTY

Details of Charge

CHARGED PLEASE REFER TO THE INSTRUMENT

Contains floating charge(s) (floating charge covers all the property or

undertaking of the company).

Contains negative pledge.

Authentication of Form

This form was authorised by: a person with an interest in the registration of the charge.

Authentication of Instrument

Certification statement: I CERTIFY THAT SAVE FOR MATERIAL REDACTED PURSUANT

TO S.859G OF THE COMPANIES ACT 2006 THE ELECTRONIC COPY INSTRUMENT DELIVERED AS PART OF THIS APPLICATION FOR REGISTRATION IS A CORRECT COPY OF THE ORIGINAL

INSTRUMENT.

Certified by: ALEXANDER STEVENSON



CERTIFICATE OF THE REGISTRATION OF A CHARGE

Company number: 336222

Charge code: SC33 6222 0005

The Registrar of Companies for Scotland hereby certifies that a charge dated 14th July 2022 and created by 4D PHARMA RESEARCH LIMITED was delivered pursuant to Chapter A1 Part 25 of the Companies Act 2006 on 29th July 2022 .

Given at Companies House, Edinburgh on 2nd August 2022

The above information was communicated by electronic means and authenticated by the Registrar of Companies under section 1115 of the Companies Act 2006





DATED 14 JULY 2022

- (1) 4D PHARMA RESEARCH LIMITED as Company
- (2) 4D PHARMA PLC (in administration) as Lender
- (3) DAVID JOHN PIKE AND JAMES RICHARD CLARK as Joint Administrators

SECOND-RANKING DEBENTURE



TABLE OF CONTENTS

Page

1.	DEFINITIONS AND INTERPRETATION	1
2.	PAYMENT OF SECURED OBLIGATIONS AND RANKING	4
3.	FIXED CHARGES, ASSIGNMENTS AND FLOATING CHARGE	4
4.	CRYSTALLISATION OF FLOATING CHARGE	5
5.	PERFECTION OF SECURITY	6
6.	FURTHER ASSURANCE	6
7.	NEGATIVE PLEDGE AND DISPOSALS	7
8.	INVESTMENTS	8
9.	ACCOUNTS	8
10.	MONETARY CLAIMS	9
11.	INSURANCES	9
12.	REAL PROPERTY	10
13.	GENERAL UNDERTAKINGS	11
14.	ENFORCEMENT OF SECURITY	12
15.	EXTENSION AND VARIATION OF THE LAW OF PROPERTY ACT 1925	13
16.	APPOINTMENT OF RECEIVER OR ADMINISTRATOR	13
17.	POWERS OF RECEIVER	14
18.	APPLICATION OF MONIES	14
19.	PROTECTION OF PURCHASERS	15
20.	POWER OF ATTORNEY	15
21.	EFFECTIVENESS OF SECURITY	15
22.	RELEASE OF SECURITY	16
23.	SET-OFF	17
24.	SUBSEQUENT SECURITY INTERESTS	17
25.	CURRENCY INDEMNITY	17
26.	ASSIGNMENT	18
27.	NOTICES	18
28.	EXPENSES, STAMP TAXES AND INDEMNITY	18
29.	DISCRETION AND DELEGATION	18
30.	PERPETUITY PERIOD	19
31.	PERPETUITY PERIOD	19
32.	GOVERNING LAW	19
33.	JURISDICTION	19
34.	MISCELLANEOUS	20

TABLE OF CONTENTS

(continued)

Page	
21	SCHEDULE 1 FORM OF NOTICE OF CHARGE OF ACCOUNT







DATED 2022

PARTIES

- (1) 4D PHARMA RESEARCH LIMITED, a limited company registered in Scotland (with company number SC336222) whose registered office is at Life Science Innovation Building, Cornhill Road, Aberdeen, AB25 2ZS (the "Company") in favour of
- 4D PHARMA PLC (in administration), a public limited company registered in England and Wales (with company number 08840579) whose registered office is at C/O Interpath Advisory, 4th Floor Tailors Corner Thirsk Row, Leeds, LS1 4DP, acting by the Joint Administrators (the "Lender"); and
- (3) DAVID JOHN PIKE AND JAMES RICHARD CLARK, as joint administrators of the Lender, each of Interpath Advisory (without personal liability), 4th Floor Tailors Corner Thirsk Row Leeds LS1 4DP in their capacity as joint administrators of (the "Joint Administrators").

OPERATIVE PROVISIONS

1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions**

In this Debenture:

"Account" means any account opened or maintained by the Company with the Lender or any other person (and any replacement account or subdivision or subaccount of that account), the debt or debts represented thereby and all Related Rights.

"Charged Account" means the current account held with with account number and sort code

"Charged Property" means all the assets and undertaking of the Company which from time to time are the subject of the security created or expressed to be created in favour of the Lender by or pursuant to this Debenture.

"Collateral Rights" means all rights, powers and remedies of the Lender provided by or pursuant to this Debenture or by law.

"Facility Agreement" means the shareholder revolving credit facility agreement dated on or around the date of this Debenture made between the Company as borrower and the Lender as lender, as amended, varied, novated or supplemented from time to time.

"First Ranking Security" means:

- (a) the English law debenture entered into between the Lender as parent, the Company as Scottish sub and Oxford Finance Luxembourg S.à r.l. as collateral agent (the "First Ranking Lender"), dated 29 July 2021; and
- (b) the Scots law security agreement entered into between the Company as chargor and the First Ranking Lender as collateral agent, dated 29 July 2021.

"Insurance Policy" means any policy of insurance in which the Company may from time to time have an interest.

"Intellectual Property" means any patents, trade marks, service marks, designs, business names, copyrights, design rights, moral rights, inventions, confidential information, knowhow and other intellectual property rights and interests, whether registered or unregistered, the benefit of all applications and rights to use such assets and all Related Rights.

"Investments" means:

- (a) any stocks, shares, debentures, securities and certificates of deposit;
- (b) all interests in collective investment schemes; and
- (c) all warrants, options and other rights to subscribe or acquire any of the investments described in (a) and (b),

in each case whether held directly by or to the order of the Company or by any trustee, nominee, fiduciary or clearance system on its behalf and all Related Rights (including all rights against any such trustee, nominee, fiduciary or clearance system).

"Monetary Claims" means any book and other debts and monetary claims owing to the Company and any proceeds of such debts and claims (including any claims or sums of money deriving from or in relation to any Intellectual Property, any Investment, the proceeds of any Insurance Policy, any court order or judgment, any contract or agreement to which the Company is a party (and any other assets, property, rights or undertaking of the Company).

"Notice of Assignment" means a notice of assignment in such form as may be specified by the Lender.

"Party" means a party to this Debenture.

"Real Property" means:

- (d) any freehold, leasehold or immovable property; and
- (e) any buildings, fixtures, fittings, fixed plant or machinery from time to time situated on or forming part of such freehold or leasehold property,

and includes all Related Rights.

"Receiver" means a receiver or receiver and manager or, where permitted by law, an administrative receiver of the whole or any part of the Charged Property and that term will include any appointee made under a joint and/or several appointment.

"Related Rights" means, in relation to any asset:

- (a) the proceeds of sale of any part of that asset;
- (b) all rights under any licence, agreement for sale or agreement for lease in respect of that asset;
- (c) all rights, powers, benefits, claims, contracts, warranties, remedies, security, guarantees, indemnities or covenants for title in respect of that asset; and

(d) any monies and proceeds paid or payable in respect of that asset.

"Secured Obligations" means all obligations due, owing or incurred to any Secured Party by the Company under or pursuant to any Finance Document, whether present or future, actual or contingent (and whether incurred by the Company alone or jointly, and whether as principal or surety or in some other capacity) together with all interest and other amounts accruing thereon.

"Secured Parties" means the Lender, any Receiver or Delegate, from time to time party to the Facility Agreement.

"Tangible Moveable Property" means any plant, machinery, office equipment, computers, vehicles and other chattels (excluding any for the time being forming part of the Company's stock in trade or work in progress) and all Related Rights.

1.2 Construction

In this Debenture:

- (A) terms defined in the Facility Agreement shall, unless defined in this Debenture, have the same meaning in this Debenture;
- (B) the rules of interpretation contained in clauses 1.2 (*Construction*) to 1.4 (*Third Party rights*) of the Facility Agreement shall apply to the construction of this Debenture;
- (C) section 1 of the Trustee Act 2000 shall not apply to the duties of the Lender in relation to the trusts created by this deed or any other Finance Document;
- (D) any reference to the "Lender", the "Company", the "Secured Parties" shall be construed so as to include its or their (and any subsequent) successors and any permitted transferees in accordance with their respective interests; and
- (E) references in this Debenture to any Clause or Schedule shall be to a clause or schedule contained in this Debenture.

1.3 Third Party Rights

A person who is not a party to this Debenture has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce or to enjoy the benefit of any term of this Debenture.

1.4 Disposition of Property

The terms of the other Finance Documents and of any side letters between the Parties in relation to the Finance Documents are incorporated into each Finance Document to the extent required for any purported disposition of the Real Property contained in any Finance Document to be a valid disposition in accordance with Section 2(1) of the Law of Property (Miscellaneous Provisions) Act 1989.

2. PAYMENT OF SECURED OBLIGATIONS AND RANKING

2.1 Covenant to Pay

The Company covenants with the Lender as security trustee for the Secured Parties that it shall on demand of the Lender discharge the Secured Obligations when they fall due for payment

2.2 Interest on Demands

If the Borrower fails to pay any sum on the due date for payment of that sum that Chargor shall pay interest on any such sum (before and after any judgment and to the extent interest at a default rate is not otherwise being paid on such sum) from the date of demand until the date of payment calculated on a daily basis at the rate determined in accordance with the provisions of clause 4 (*Interest*) of the Facility Agreement.

2.3 Ranking

- (A) Each of the Parties hereto (on its own behalf and on behalf of each other person if any, on whose behalf it is entering into this Debenture) acknowledges the existence of the First Ranking Security.
- (B) The Parties hereto agree that the Security granted by this Agreement shall rank junior and is subordinated to the First Ranking Security in all respects.
- (C) This Debenture shall not in any way prejudice the rights held by the First Ranking Lender under the First Ranking Security.
- (D) No prior security held by the First Ranking Lender over any assets charged under this Debenture will merge into Security constituted by this Debenture.

3. FIXED CHARGES, ASSIGNMENTS AND FLOATING CHARGE

3.1 Fixed Charges

The Company charges with full title guarantee (subject to the First Ranking Security) in favour of the Lender as security trustee for the Secured Parties for the payment and discharge of the Secured Obligations, all the Company's right, title and interest from time to time (both present and future) in and to each of the following assets (subject to obtaining any necessary consent to such mortgage or fixed charge from any third party):

- (A) by way of second legal mortgage, the Real Property;
- (B) by way of second fixed charge:
 - (1) if not effectively mortgaged under sub-Clause (A) above, the Real Property;
 - (2) the Tangible Moveable Property;
 - (3) the Accounts;
 - (4) the Intellectual Property;
 - (5) any goodwill and rights in relation to the uncalled capital of the Company;

- (6) the Investments; and
- (7) all Monetary Claims and all Related Rights other than any claims which are otherwise subject to a fixed charge or assignment (at law or in equity) pursuant to this Debenture.

3.2 Floating Charge

- (A) The Company with full title guarantee charges in favour of the Lender as security trustee for the Secured Parties for the payment and discharge of the Secured Obligations by way of second floating charge all present and future assets and undertaking of the Company.
- (B) The floating charge created by paragraph (A) above shall be deferred in point of priority to all fixed security validly and effectively created by the Company under the Finance Documents in favour of the Lender as security trustee for the Secured Parties as security for the Secured Obligations.
- (C) Paragraph 14 of Schedule B1 to the Insolvency Act 1986 applies to the floating charge created pursuant to this Clause 3.2 (*Floating Charge*).

4. CRYSTALLISATION OF FLOATING CHARGE

4.1 Crystallisation: By Notice

The Lender may at any time by notice in writing to the Company convert the floating charge created by Clause 3.2 (*Floating Charge*) with immediate effect into a fixed charge as regards any property or assets specified in the notice if:

- (A) an Event of Default has occurred; or
- (B) the Lender considers that any of the Charged Property may be in jeopardy or in danger of being seized or sold pursuant to any form of legal process; or
- (C) the Lender considers that it is necessary or desirable in order to protect the priority of the security.

4.2 Crystallisation: Automatic

Notwithstanding Clause 4.1 (*Crystallisation: By Notice*) and without prejudice to any law which may have a similar effect, the floating charge will automatically be converted (without notice) with immediate effect into a fixed charge as regards all the assets subject to the floating charge if:

- (A) the Company creates or attempts to create any security (other than any security permitted under the terms of the First Ranking Security) over any of the Charged Property; or
- (B) any person levies or attempts to levy any distress, execution or other process against any of the Charged Property; or
- (C) a resolution is passed or an order is made for the winding-up, dissolution, administration or re-organisation of the Company or an administrator is appointed to the Company; or

(D) any person (who is entitled to do so) gives notice of its intention to appoint an administrator to the Company or files such a notice with the court.

5. PERFECTION OF SECURITY

5.1 Notices of Charge

- (A) The Company shall if requested by the Lender from time to time promptly deliver to the Lender (or procure delivery of) notices of charge (in form and substance satisfactory to the Lender) duly executed by, or on behalf of, the Company and acknowledged by each of the banks or financial institutions with which any of the Accounts are opened or maintained.
- (B) The Company shall deliver as soon as reasonably practicable from the date of this Debenture hereof notices of charge, substantially in the form as set out in Schedule 1 (Form of Notice of Charge of Account), in respect of the Charged Account and shall use all reasonable endeavours to procure that each notice is acknowledged by the account bank specified by the Lender (such acknowledgement to be in substantially the form set out in Schedule 1 (Form of Notice of Charge of Account), or in such form as may be reasonably specified by the Lender).

5.2 Real Property: Delivery of Documents of Title

The Company shall upon the execution of this Debenture, and upon the acquisition by the Company of any interest in any freehold, leasehold or other immovable property, deliver (or procure delivery) to the Lender of, and the Lender shall be entitled to hold and retain, all deeds, certificates and other documents constituting or evidencing title relating to such property.

5.3 Registration of Intellectual Property

The Company shall, if requested by the Lender, execute all such documents and do all acts that the Lender may reasonably require to record the interest of the Lender in any registers relating to any registered Intellectual Property.

6. FURTHER ASSURANCE

6.1 Further Assurance: General

- (A) The covenant set out in Section 2(1)(b) of the Law of Property (Miscellaneous Provisions) Act 1994 shall extend to include the obligations set out in Clause 6.1(B) below.
- (B) The Company shall promptly at its own cost do all such acts or execute all such documents (including assignments, transfers, mortgages, charges, notices and instructions) as the Lender may reasonably specify (and in such form as the Lender may reasonably require in favour of the Lender or its nominee(s)):
 - (1) to perfect the security created or intended to be created in respect of the Charged Property (which may include the execution by the Company of a mortgage, charge or assignment over all or any of the assets constituting, or intended to constitute, Charged Property) or for the exercise of the Collateral Rights;

- (2) to confer on the Lender security over any property and assets of the Company located in any jurisdiction outside England and Wales equivalent or similar to the security intended to be conferred by or pursuant to this Debenture; and/or
- (3) to facilitate the realisation of the Charged Property.

6.2 Necessary Action

The Company shall take all such action as is available to it (including making all filings and registrations) as may be necessary or desirable for the purpose of the creation, perfection, protection or maintenance of any security conferred or intended to be conferred on the Lender by or pursuant to this Debenture.

6.3 Consents

The Company shall use all reasonable endeavours to obtain (in form and content satisfactory to the Lender) as soon as possible any consents necessary to enable the assets of the Company to be the subject of an effective fixed charge or assignment pursuant to Clause 3 (Fixed Charges, Assignments and Floating Charge) and, immediately upon obtaining any such consent, the asset concerned shall become subject to such security and the Company shall promptly deliver a copy of each consent to the Lender.

6.4 Implied Covenants for Title

The obligations of the Company under this Debenture shall be in addition to the covenants for title deemed to be included in this Debenture by virtue of Part 1 of the Law of Property (Miscellaneous Provisions) Act 1994.

7. NEGATIVE PLEDGE AND DISPOSALS

7.1 Negative Pledge

The Company undertakes that it shall not, at any time during the subsistence of this Debenture, create or permit to subsist any security over all or any part of the Charged Property other than security permitted pursuant to the Facility Agreement and, if such security is created, that it is at all times ranking below and subordinated to the First Ranking Security.

7.2 No Disposal of Interests

The Company undertakes that it shall not (and shall not agree to) at any time during the subsistence of this Debenture, except as permitted pursuant to the Facility Agreement or by this Clause 7:

- (A) dispose of (or execute any conveyance, transfer, lease or assignment of, or other right to use or occupy) all or any part of the Charged Property;
- (B) create any legal or equitable estate or other interest in, or over, or otherwise relating to, all or any part of the Charged Property;
- (C) (1) grant or vary, or accept any surrender, or cancellation or disposal of, any lease, tenancy, licence, consent or other right to occupy in relation to any of the Charged Property or (2) allow any person any right to use or occupy or to become entitled to assert any proprietary interest in, or right over, the Charged Property, which may, in

each case, adversely affect the value of any of the Charged Property or the ability of the Lender to exercise any of the Collateral Rights; or

(D) assign or otherwise dispose of any interest in any Account.

8. INVESTMENTS

8.1 Investments: Payment of Calls

The Company shall pay when due all calls or other payments which may be or become due in respect of any of the Investments and in any case of default by the Company in such payment, the Lender may, if it thinks fit, make such payment on behalf of the Company in which case any sums paid by the Lender shall be reimbursed by the Company to the Lender on demand and shall carry interest from the date of payment by the Lender until reimbursed at the rate and in accordance with Clause Error! Reference source not found. (Interest on Demands).

8.2 Investments: Delivery of Documents of Title

The Company shall promptly on the request of the Lender, deliver (or procure delivery) to the Lender, and the Lender shall be entitled to retain, all of the Investments and any certificates and other documents of title representing the Investments to which the Company (or its nominee(s)) is or becomes entitled together with any other document which the Lender may reasonably request (in such form and executed as the Lender may reasonably require) with a view to perfecting or improving its security over the Investments or to registering any Investment in its name or the name of any nominee(s).

8.3 Investments: Exercise of Rights

The Company shall not exercise any of its rights and powers in relation to any of the Investments in any manner which, in the opinion of the Lender, would prejudice the value of, or the ability of the Lender to realise, the security created by this Debenture.

9. ACCOUNTS

9.1 Accounts: Notification and Variation

The Company, during the subsistence of this Debenture:

- (A) shall promptly deliver to the Lender on the date of this Debenture (and, if any change occurs thereafter, on the date of such change), details of each Account maintained by it with any bank or financial institution (other than with the Lender); and
- (B) shall not, without the Lender's prior written consent, permit or agree to any variation of the rights attaching to any Account or close any Account.

9.2 Accounts: Operation Before Event of Default

The Company shall prior to the occurrence of an Event of Default be entitled to receive, withdraw or otherwise transfer any credit balance from time to time on any Account.

9.3 Accounts: Operation After Event of Default

After the occurrence of an Event of Default the Company shall not be entitled to receive, withdraw or otherwise transfer any credit balance from time to time on any Account except with the prior consent of the Lender.

9.4 Accounts: Application of Monies

The Lender shall, upon or at any time after the occurrence of an Event of Default, be entitled without notice to apply, transfer or set-off any or all of the credit balances from time to time on any Account in or towards the payment or other satisfaction of all or part of the Secured Obligations in accordance with Clause 18 (Application of Monies).

10. MONETARY CLAIMS

10.1 Dealing with Monetary Claims

The Company shall not at any time during the subsistence of the Debenture, without the prior written consent of the Lender:

- (A) deal with the Monetary Claims except by getting in and realising them in a prudent manner (on behalf of the Lender) and paying the proceeds of those Monetary Claims into an account as the Lender may require (and such proceeds shall be held upon trust by the Company for the Lender on behalf of the Secured Parties prior to such payment in);
- (B) factor or discount any of the Monetary Claims or enter into any agreement for such factoring or discounting; or
- (C) be entitled to withdraw or otherwise transfer the proceeds of the realisation of any Monetary Claims standing to the credit of any Account.

11. INSURANCES

11.1 Insurance: Undertakings

The Company shall at all times during the subsistence of this Debenture:

- (A) if required by the Lender, cause each insurance policy or policies relating to the Charged Property to contain (in form and substance satisfactory to the Lender) an endorsement naming the Lender as sole loss payee in respect of all claims until such time as the Lender notifies the insurer(s) to the contrary;
- (B) promptly pay all premiums and other monies payable under all its Insurance Policies and promptly upon request, produce to the Lender a copy of each policy and evidence (reasonably acceptable to the Lender) of the payment of such sums; and
- (C) if required by the Lender (but subject to the provisions of any lease of the Charged Property), deposit all Insurance Policies relating to the Charged Property with the Lender.

11.2 Insurance: Default

If the Company defaults in complying with Clause 11.1 (*Insurance: Undertakings*), the Lender may effect or renew any such insurance on such terms, in such name(s) and in such amount(s) as it reasonably considers appropriate, and all monies expended by the Lender in

doing so shall be reimbursed by the Company to the Lender on demand and shall carry interest from the date of payment by the Lender until reimbursed at the rate specified in Clause Error! Reference source not found. (Interest on Demands).

11.3 Application of Insurance Proceeds

All monies received under any Insurance Policies relating to the Charged Property shall (subject to the rights and claims of any person having prior rights to such monies), prior to the occurrence of an Event of Default, be applied in [repairing, replacing, restoring or rebuilding the property or assets damaged or destroyed after the occurrence of an Event of Default, the Company shall hold such monies upon trust for the Lender pending payment to the Lender for application in accordance with Clause 18 (Application of Monies) and the Company waives any right it may have to require that any such monies are applied in reinstatement of any part of the Charged Property.

12. REAL PROPERTY

12.1 Property: Notification

The Company shall immediately notify the Lender of any contract, conveyance, transfer or other disposition for the acquisition by the Company (or its nominee(s)) of any Real Property.

12.2 Lease Covenants

The Company shall, in relation to any lease, agreement for lease or other right to occupy to which all or any part of the Charged Property is at any time subject:

- (A) pay the rents (if the lessee) and observe and perform in all material respects the covenants, conditions and obligations imposed (if the lessee) on the lessee or, (if the lessor) on the lessor; and
- (B) not do any act or thing whereby any lease or other document which gives any right to occupy any part of the Charged Property becomes or may become subject to determination or any right of re-entry or forfeiture prior to the expiration of its term.

12.3 General Property Undertakings

The Company shall:

- (A) repair and keep in good and substantial repair and condition to the satisfaction of the Lender all the Real Property at any time forming part of the Charged Property;
- (B) not at any time without the prior written consent of the Lender sever or remove any of the fixtures forming part of the Real Property or any of the plant or machinery (other than stock in trade or work in progress) on or in the Charged Property (except for the purpose of any necessary repairs or replacement of it); and
- (C) comply with and observe and perform (1) all applicable requirements of all planning and environmental legislation, regulations and bye-laws relating to the Real Property, (2) any conditions attaching to any planning permissions relating to or affecting the Real Property and (3) any notices or other orders made by any planning, environmental or other public body in respect of all or any part of the Real Property.

12.4 Entitlement to Remedy

If the Company fails to comply with any of the undertakings contained in this Clause 12, the Lender shall be entitled (with such agents, contractors and others as it sees fit), to do such things as may in the opinion of the Lender be required to remedy such failure and all monies spent by the Lender in doing so shall be reimbursed by the Company on demand with interest from the date of payment by the Lender until reimbursed in accordance with Clause Error! Reference source not found. (Interest on Demands).

12.5 Leases

The Company shall not grant any lease, tenancy, contractual licence or right to occupy in respect of the whole or any part of the Real Property or otherwise part with possession of the whole or any part of the Real Property (except as permitted by the Facility Agreement).

13. GENERAL UNDERTAKINGS

13.1 Intellectual Property

The Company shall during the subsistence of this Debenture in respect of any Intellectual Property which is material to or required in connection with its business:

- (A) take all such steps and do all such acts as may be necessary to preserve and maintain the subsistence and the validity of any such Intellectual Property; and
- (B) not use or permit any such Intellectual Property to be used in any way which may materially and adversely affect its value.

13.2 Information and Access

The Company shall from time to time on request of the Lender, furnish the Lender with such information as the Lender may reasonably require about the Company's business and affairs, the Charged Property and its compliance with the terms of this Debenture and the Company shall permit the Lender, its representatives, professional advisers and contractors, free access at all reasonable times and on reasonable notice to:

- (A) inspect and take copies and extracts from the books, accounts and records of the Company; and
- (B) to view the Charged Property (without becoming liable as mortgagee in possession).

14. ENFORCEMENT OF SECURITY

14.1 Enforcement

Upon or at any time after the occurrence of an Event of Default (as long as it is continuing) or if the Company requests the Lender to exercise any of its powers under this Debenture or if a petition or application is presented for the making of an administration order in relation to the Company or if any person who is entitled to do so gives written notice of its intention to appoint an administrator of the Company or files such a notice with the court, the security created by or pursuant to this Debenture is immediately enforceable and the Lender may, without notice to the Company or prior authorisation from any court, in its absolute discretion:

- (A) enforce all or any part of that security (at the times, in the manner and on the terms it thinks fit) and take possession of and hold or dispose of all or any part of the Charged Property; and
- (B) whether or not it has appointed a Receiver, exercise all or any of the powers, authorities and discretions conferred by the Law of Property Act 1925 (as varied or extended by this Debenture) on mortgagees and by this Debenture on any Receiver or otherwise conferred by law on mortgagees or Receivers.

14.2 No Liability as Mortgagee in Possession

Neither the Lender nor any Receiver shall be liable to account as a mortgagee in possession in respect of all or any part of the Charged Property or be liable for any loss upon realisation or for any neglect, default or omission in connection with the Charged Property to which a mortgagee or mortgagee in possession might otherwise be liable.

14.3 Right of Appropriation

To the extent that any of the Charged Property constitutes "financial collateral" and this Debenture and the obligations of the Company hereunder constitute a "security financial collateral arrangement" (in each case as defined in, and for the purposes of, the Financial Collateral Arrangements (No. 2) Regulations 2003 (SI 2003 No. 3226) (the "Regulations") the Lender shall have the right to appropriate all or any part of such financial collateral in or towards discharge of the Secured Obligations. For this purpose, the parties agree that the value of such financial collateral so appropriated shall be (1) in the case of cash, the amount standing to the credit of each of the Accounts, together with any accrued but unposted interest, at the time the right of appropriation is exercised; and (2) in the case of Investments and/or Shares, the market price of such Investments and/or Shares determined by the Lender by reference to a public index or by such other process as the Lender may select, including independent valuation. In each case, the parties agree that the method of valuation provided for in this Debenture shall constitute a commercially reasonable method of valuation for the purposes of the Regulations.

14.4 Effect of Moratorium

The Lender shall not be entitled to exercise its rights under Clause 14.1 (*Enforcement*) or Clause 4 (*Crystallisation of Floating Charge*) where the right arises as a result of an Event of Default occurring solely due to any person obtaining or taking steps to obtain a moratorium pursuant to Schedule A1 of the Insolvency Act 1986.

15. EXTENSION AND VARIATION OF THE LAW OF PROPERTY ACT 1925

15.1 Extension of Powers

The power of sale or other disposal conferred on the Lender and on any Receiver by this Debenture shall operate as a variation and extension of the statutory power of sale under Section 101 of the Law of Property Act 1925 and such power shall arise (and the Secured Obligations shall be deemed due and payable for that purpose) on execution of this Debenture.

15.2 Restrictions

The restrictions contained in Sections 93 and 103 of the Law of Property Act 1925 shall not apply to this Debenture or to the exercise by the Lender of its right to consolidate all or any of the security created by or pursuant to this Debenture with any other security in existence at any time or to its power of sale, which powers may be exercised by the Lender without notice to the Company on or at any time after the occurrence of an Event of Default (which is continuing).

15.3 Power of Leasing

The statutory powers of leasing may be exercised by the Lender at any time on or after the occurrence of an Event of Default and the Lender and any Receiver may make any lease or agreement for lease, accept surrenders of leases and grant options on such terms as it shall think fit, without the need to comply with any restrictions imposed by Sections 99 and 100 of the Law of Property Act 1925.

16. APPOINTMENT OF RECEIVER OR ADMINISTRATOR

16.1 Appointment and Removal

After the occurrence of an Event of Default or if a petition or application is presented for the making of an administration order in relation to the Company or if any person who is entitled to do so gives written notice of its intention to appoint an administrator of the Company or files such a notice with the court or if requested to do so by the Company, the Lender may by deed or otherwise (acting through an authorised officer of the Lender), without prior notice to the Company:

- (A) appoint one or more persons to be a Receiver of the whole or any part of the Charged Property;
- (B) appoint two or more Receivers of separate parts of the Charged Property;
- (C) remove (so far as it is lawfully able) any Receiver so appointed;
- (D) appoint another person(s) as an additional or replacement Receiver(s); or
- (E) appoint one or more persons to be an administrator of the Company.

16.2 Capacity of Receivers

Each person appointed to be a Receiver pursuant to Clause 16.1 (Appointment and Removal) shall be:

- (A) entitled to act individually or together with any other person appointed or substituted as Receiver;
- (B) for all purposes deemed to be the agent of the Company which shall be solely responsible for his acts, defaults and liabilities and for the payment of his remuneration and no Receiver shall at any time act as agent for the Lender; and
- (C) entitled to remuneration for his services at a rate to be fixed by the Lender from time to time (without being limited to the maximum rate specified by the Law of Property Act 1925).

16.3 Statutory Powers of Appointment

The powers of appointment of a Receiver shall be in addition to all statutory and other powers of appointment of the Lender under the Law of Property Act 1925 (as extended by this Debenture) or otherwise and such powers shall remain exercisable from time to time by the Lender in respect of any part of the Charged Property.

17. POWERS OF RECEIVER

Every Receiver shall (subject to any restrictions in the instrument appointing him but notwithstanding any winding-up or dissolution of the Company) have and be entitled to exercise, in relation to the Charged Property (and any assets of the Company which, when got in, would be Charged Property) in respect of which he was appointed, and as varied and extended by the provisions of this Debenture (in the name of or on behalf of the Company or in his own name and, in each case, at the cost of the Company):

- (A) all the powers conferred by the Law of Property Act 1925 on mortgagers and on mortgages in possession and on receivers appointed under that Act;
- (B) all the powers of an administrative receiver set out in Schedule 1 to the Insolvency Act 1986 (whether or not the Receiver is an administrative receiver);
- (C) all the powers and rights of an absolute owner and power to do or omit to do anything which the Company itself could do or omit to do; and
- (D) the power to do all things (including bringing or defending proceedings in the name or on behalf of the Company) which seem to the Receiver to be incidental or conducive to (1) any of the functions, powers, authorities or discretions conferred on or vested in him or (2) the exercise of the Collateral Rights (including realisation of all or any part of the Charged Property) or (3) bringing to his hands any assets of the Company forming part of, or which when got in would be, Charged Property.

18, APPLICATION OF MONIES

All monies received or recovered by the Lender or any Receiver pursuant to this Debenture or the powers conferred by it shall (subject to the claims of any person having prior rights thereto and by way of variation of the provisions of the Law of Property Act 1925) be applied first in the payment of the costs, charges and expenses incurred and payments made by the Receiver, the payment of his remuneration and the discharge of any liabilities incurred by the Receiver in, or incidental to, the exercise of any of his powers, and thereafter shall be applied by the Lender (notwithstanding any purported appropriation by the Company) subject to any payments required pursuant to the First Ranking Security.

19. PROTECTION OF PURCHASERS

19.1 Consideration

The receipt of the Lender or any Receiver shall be conclusive discharge to a purchaser and, in making any sale or disposal of any of the Charged Property or making any acquisition, the Lender or any Receiver may do so for such consideration, in such manner and on such terms as it thinks fit.

19.2 Protection of Purchasers

No purchaser or other person dealing with the Lender or any Receiver shall be bound to inquire whether the right of the Lender or such Receiver to exercise any of its powers has arisen or become exercisable or be concerned with any propriety or regularity on the part of the Lender or such Receiver in such dealings.

20. POWER OF ATTORNEY

20.1 Appointment and Powers

The Company by way of security irrevocably appoints the Lender and any Receiver severally to be its attorney and in its name, on its behalf and as its act and deed to execute, deliver and perfect all documents and do all things which the attorney may consider to be required or desirable for:

- (A) carrying out any obligation imposed on the Company by this Debenture or any other agreement binding on the Company to which the Lender is party (including the execution and delivery of any deeds, charges, assignments or other security and any transfers of the Charged Property); and
- (B) enabling the Lender and any Receiver to exercise, or delegate the exercise of, any of the rights, powers and authorities conferred on them by or pursuant to this Debenture or by law (including, after the occurrence of an Event of Default, the exercise of any right of a legal or beneficial owner of the Charged Property).

20.2 Ratification

The Company shall ratify and confirm all things done and all documents executed by any attorney appointed under Clause 20.1 (*Appointment and Powers*) in the exercise or purported exercise of all or any of his powers.

21. EFFECTIVENESS OF SECURITY

21.1 Continuing security

- (A) The security created by or pursuant to this Debenture shall remain in full force and effect as a continuing security for the Secured Obligations unless and until discharged by the Lender.
- (B) No part of the security from time to time intended to be constituted by the Debenture will be considered satisfied or discharged by any intermediate payment, discharge or satisfaction of the whole or any part of the Secured Obligations.

21.2 Cumulative Rights

The security created by or pursuant to this Debenture and the Collateral Rights shall be cumulative, in addition to and independent of every other security which the Lender or any Secured Party may at any time hold for the Secured Obligations or any other obligations or any rights, powers and remedies provided by law. No prior security held by the Lender (whether in its capacity as security trustee or otherwise) or any of the other Secured Parties over the whole or any part of the Charged Property shall merge into the security constituted by this Debenture.

21.3 No Prejudice

The security created by or pursuant to this Debenture and the Collateral Rights shall not be prejudiced by any unenforceability or invalidity of any other agreement or document or by any time or indulgence granted to the Company or any other person, or the Lender (whether in its capacity as security trustee or otherwise) or any of the other Secured Parties or by any variation of the terms of the trust upon which the Lender holds the security or by any other thing which might otherwise prejudice that security or any Collateral Right.

21.4 Remedies and Waivers

No failure on the part of the Lender to exercise, or any delay on its part in exercising, any Collateral Right shall operate as a waiver of that Collateral Right, nor shall any single or partial exercise of any Collateral Right preclude any further or other exercise of that or any other Collateral Right.

21.5 No Liability

None of the Lender, its nominee(s) or any Receiver shall be liable to any person by reason of (1) taking any action permitted by this Debenture or (2) any neglect or default in connection with the Charged Property or (3) taking possession of or realising all or any part of the Charged Property, except in the case of gross negligence or wilful default upon its part.

21.6 Partial Invalidity

If, at any time, any provision of this Debenture is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions of this Debenture nor of such provision under the laws of any other jurisdiction shall in any way be affected or impaired thereby and, if any part of the security intended to be created by or pursuant to this Debenture is invalid, unenforceable or ineffective for any reason, that shall not affect or impair any other part of the security.

22. RELEASE OF SECURITY

22.1 Redemption of security

Subject to Clause 22.3 (Discharge Conditional), below, upon the Secured Obligations being discharged in full and none of the Secured Parties being under any further actual or contingent obligation to make advances or provide other financial accommodation to the Company or any other person under any of the Finance Documents, the Lender shall, at the request and cost of the Company, release and cancel the security constituted by this Debenture and procure the reassignment to the Company of the property and assets assigned to the Lender pursuant to this Debenture, in each case subject to Clause 22.2 (Avoidance of Payments) and without recourse to, or any representation or warranty by, the Lender or any of its nominees.

22.2 Avoidance of Payments

If the Lender considers that any amount paid or credited to the Lender is capable of being avoided or reduced by virtue of any bankruptcy, insolvency, liquidation or similar laws the liability of the Company under this Debenture and the security constituted by this Debenture shall continue and such amount shall not be considered to have been irrevocably paid.

22.3 Discharge Conditional

Any settlement or discharge between the Company and any Secured Party shall be conditional upon no security or payment to that Secured Party by the Company or any other person being avoided, set aside, ordered to be refunded or reduced by virtue of any provision or enactment relating to insolvency and accordingly (but without limiting the other rights of that Secured Party under this Debenture) that Secured Party shall be entitled to recover from the Company the value which that Secured Party has placed on that security or the amount of any such payment as if that settlement or discharge had not occurred.

23. SET-OFF

The Company authorises the Lender (but the Lender shall not be obliged to exercise such right), after the occurrence of an Event of Default which is continuing, to set off against the Secured Obligations any amount or other obligation (contingent or otherwise) owing by the Lender to the Company and apply any credit balance to which the Company is entitled on any account with the Lender in accordance with Clause 18 (Application of Monies) (notwithstanding any specified maturity of any deposit standing to the credit of any such account).

24. SUBSEQUENT SECURITY INTERESTS

24.1 Subsequent security Interests

If the Lender (acting in its capacity as security trustee or otherwise) or any of the other Secured Parties at any time receives or is deemed to have received notice of any subsequent security affecting all or any part of the Charged Property or any assignment or transfer of the Charged Property which is prohibited by the terms of this Debenture or the Facility Agreement, all payments thereafter by or on behalf of the Company to the Lender (whether in its capacity as security trustee or otherwise) or any of the other Secured Parties shall be treated as having been credited to a new account of the Company and not as having been applied in reduction of the Secured Obligations as at the time when the Lender received such notice.

25. CURRENCY INDEMNITY

If any sum (a "Sum") owing by the Company under this Debenture or any order or judgment given or made in relation to this Debenture has to be converted from the currency (the "First Currency") in which such Sum is payable into another currency (the "Second Currency") for the purpose of:

- (A) making or filing a claim or proof against the Company;
- (B) obtaining an order or judgment in any court or other tribunal;
- (C) enforcing any order or judgment given or made in relation to this Debenture; or

(D) applying the Sum in satisfaction of any of the Secured Obligations,

the Company shall indemnify the Lender from and against any loss suffered or incurred as a result of any discrepancy between (1) the rate of exchange used for such purpose to convert such Sum from the First Currency into the Second Currency and (2) the rate or rates of exchange available to the Lender at the time of such receipt of such Sum.

26. ASSIGNMENT

The Lender may assign and transfer all or any of its rights and obligations under this Debenture. The Lender shall be entitled to disclose such information concerning the Company and this Debenture as the Lender considers appropriate to any actual or proposed direct or indirect successor or to any person to whom information may be required to be disclosed by any applicable law.

27. NOTICES

Clause 11 (Notices) of the Facility Agreement apply mutatis mutandis in this Debenture.

28. EXPENSES, STAMP TAXES AND INDEMNITY

28.1 Expenses

Each Party shall bear its own costs incurred by it in connection with the negotiation, preparation and execution of this Debenture and the completion of the transactions and perfection of the security contemplated in this Debenture.

28.2 Stamp Taxes

The Company shall pay all stamp, registration and other taxes to which this Debenture, the security contemplated in this Debenture or any judgment given in connection with it is or at any time may be subject and shall, from time to time, indemnify the Lender on demand against any liabilities, costs, claims and expenses resulting from any failure to pay or delay in paying any such tax.

28.3 Indemnity

The Company shall, notwithstanding any release or discharge of all or any part of the security, indemnify the Lender, its agents, attorneys and any Receiver against any action, proceeding, claims, losses, liabilities and costs which it may sustain as a consequence of any breach by the Company of the provisions of this Debenture, the exercise or purported exercise of any of the rights and powers conferred on them by this Debenture or otherwise relating to the Charged Property.

29. DISCRETION AND DELEGATION

29.1 Discretion

Any liberty or power which may be exercised or any determination which may be made under this Debenture by the Lender or any Receiver may, subject to the terms and conditions of the Facility Agreement, be exercised or made in its absolute and unfettered discretion without any obligation to give reasons.

29.2 Delegation

Each of the Lender and any Receiver shall have full power to delegate (either generally or specifically) the powers, authorities and discretions conferred on it by this Debenture (including the power of attorney) on such terms and conditions as it shall see fit which delegation shall not preclude either the subsequent exercise any subsequent delegation or any revocation of such power, authority or discretion by the Lender or the Receiver itself.

30. PERPETUITY PERIOD

The perpetuity period under the rule against perpetuities, if applicable to this Debenture, shall be the period of one hundred and twenty (120) years from the date of the Facility Agreement.

31. THE JOINT ADMINISTRATORS

- (A) The Joint Administrators have entered into and signed this Debenture as agents for and on behalf of the Lender and neither they nor their firm, partners or employees shall incur any personal liability whatsoever in respect of any of the obligations undertaken by the Lender, or in respect of any failure on the part of the Company to observe, perform or comply with any such obligations; or under or in relation to any associated arrangements or negotiations; or under any document or assurance made pursuant to or in connection with this Debenture other than, in each case, in respect of gross negligence, fraud or wilful misconduct.
- (B) The Joint Administrators are party to this Debenture in their personal capacities only for the purpose of receiving the benefit of the exclusions, limitations, and protections in their favour contained in this Debenture.
- (C) The provisions of this clause 31 shall continue for the benefit of the Joint Administrators, notwithstanding the fact that the Joint Administrators may cease to act as officeholder in respect of the Lender.

32. GOVERNING LAW

This Debenture and any non-contractual obligations arising out of or in connection with it are governed by English law.

33. JURISDICTION

33.1 English Courts

The courts of England have exclusive jurisdiction to settle any dispute (a "Dispute") arising out of, or connected with this Debenture (including a dispute regarding the existence, validity or termination of this Debenture or the consequences of its nullity and any non-contractual obligations arising out of or in connection with this Debenture).

33.2 Convenient Forum

The parties agree that the courts of England are the most appropriate and convenient courts to settle Disputes between them and, accordingly, that they will not argue to the contrary.

33.3 Exclusive Jurisdiction

This Clause 33 (Jurisdiction) is for the benefit of the Lender only. As a result and notwithstanding Clause 33.1 (English Courts), it does not prevent the Lender from taking

proceedings relating to a Dispute in any other courts with jurisdiction. To the extent allowed by law the Lender may take concurrent proceedings in any number of jurisdictions.

34. MISCELLANEOUS

- (A) This Debenture may be executed in any number of counterparts, but is not effective until each Party has executed at least one counterpart. Each counterpart, once executed, is deemed to form part of and will together constitute this Debenture.
- (B) The Parties agree that this Debenture may be signed either by wet ink, manuscript signature or by electronic signature (whatever form the electronic signature takes) and that any such method of signature shall be treated as the relevant party's conclusive intention to be bound by this Debenture.

THIS DEBENTURE has been signed on behalf of the Lender and executed as a deed by the Company and is delivered by it on the date specified above.

SCHEDULE 1

Form of Notice of Charge of Account

To: [Name and address of account bank]

Date: [***]

Re: Account Number [•] (the "Account").

We refer to the Account opened by us with you and hereby give notice that, under a second ranking debenture dated [•] (the "Deed") and entered into by us in favour of 4D Pharma Plc (in administration) (as "Lender", as defined in the Deed), we have charged, by way of second fixed charge, all our rights in any credit balances on the Account and the indebtedness represented by the Account.

We hereby instruct and authorise you as follows (notwithstanding any previous instructions to the contrary):

- (C) to disclose to the Lender any information relating to the Account required by it from time to time; and
- (D) on and from your receipt of a notice from the Lender stating that the security over the Account has become enforceable:
 - (1) (to comply with the terms of any written instructions (including any requests for payment from the Account) received by you from the Lender from time to time (although, pending receipt of any such notice, you should continue to deal with us in relation to all matters relating to the Account); and
 - (2) to hold all amounts standing to the credit of the Account to the order of the Lender.

The instructions and authorisations which are contained in this notice shall remain in full force and effect until the Lender gives you notice in writing revoking them.

You may comply with the instructions in this notice without any further permission from us and without any enquiry by you as to the justification for or validity of any request, notice or instruction. In the event of any conflict between communications received from us and from the Lender, you shall treat the communication from the Lender as prevailing over the communication from us.

This notice is governed by English law.

Please acknowledge receipt of this notice and confirm your agreement to it, by executing and returning an original copy of the Form of Acknowledgement attached to this notice to the Lender at 4D Pharma plc, C/O Interpath Advisory, 4th Floor Tailors Corner Thirsk Row, Leeds, LS1 4DP, marked for the attention of David Pike, James Clark and Thomas Swiers or by email to

4D PHARMA RESEARCH LIMITED
For and on behalf of
Yours faithfully,

Acknowledgement of Notice of Charge of Account

To: 4D PHARMA PLC (in administration) (the "Lender")						
Date: [***]						
We acknowledge receipt of a notice dated [] (the "Notice") (a copy of which is attached to this letter) from [] (the "Chargor"). Words and expressions defined in the Notice shall have the same meanings in this letter.						
At the request of the Chargor, we confirm that:						
(E) we accept the instructions and authorisations in the Notice and undertake to accordance with their terms;	act in					
(F) following notification from the Lender that the security over the Account has become enforceable, we shall not release payments or permit withdrawals from the Accoun- save as specified in writing by the Lender;						
(G) we have not received notice of any previous assignment, charge, trust, claim or other third party interest or action affecting the Account and if, we receive any such notice, we shall immediately notify the Lender;						
(H) we have not claimed or exercised any rights of counter-claim, set-off or combin of accounts or other equities in respect of the Account, no such rights or equities arisen in our favour and we shall not assert or seek to exercise any such right equities in the future without the prior written consent of the Lender;	s have					
(I) we will not amend or vary any rights attaching to the Account without the consent of the Lender.	prior					
This letter is governed by English law.						
Yours faithfully,						
For and an habit of						
For and on behalf of						
[ACCOUNT BANK]						

Witness occupation:

EXECUTION PAGES

EXECUTED and DELIVERED as a deed By 4D PHARMA RESEARCH LIMITED acting by Alex Stevenson In the presence of: DocuSigned by: BDDFA2EA09E24E7... Witness Witness name: Victoria Fletcher Witness address:

Executive Assistant

The Lender

EXECUTED and DELIVERED as a deed

By 4D PHARMA PLC

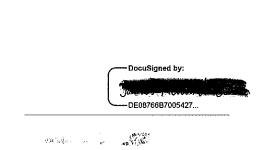
(IN ADMINISTRATION)

acting by

James Richard Clarlone of its

joint administrators as agent without personal
liability under the powers
conferred on them by

Schedule 1 of
the Insolvency Act 1986



ď.

In the presence of:



Witness

Thomas Swiers

Witness address:

Witness name:

c/o Interpath Advisory, 4th Floor, Tailors Corner, Thirsk Row, Leeds, LS1 4DP

Witness occupation:

Chartered Accountant

.,

The Joint Administrators

JOINT ADMINISTRATORS (as administrator)

Signed by	James Richard Clark)		
acting on bel	half of the Joint Administrators)		
without pers	onal liability and solely)	DocuSigned by:	
for the purpo	ose of receiving the benefit)		
of those prov	visions in this Agreement)	DE08766B7005427	
in their favor	ır	ì		

In the presence of:



Witness

Witness name:

Thomas Swiers

Witness address:

c/o Interpath Advisory, 4th Floor, Tailors Corner, Thirsk Row, Leeds, LS1 4DP

Witness occupation:

Chartered Accountant

