

The content of this promotion has not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000. Reliance on this promotion for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all the property or other assets invested.

# DIATECH ONCOLOGY LIMITED

Your cancer is **unique**.

Your **chemo plan** should be too.

The test that **customizes cancer treatment**  
to the **only person that matters...**



Correct  Chemo<sup>®</sup>

BY DIATECH ONCOLOGY

Information Memorandum  
For Investment Professionals/Intermediaries

**The content of this promotion has not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000. Reliance on this promotion for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all the property or other assets invested.**

---

**INFORMATION MEMORANDUM**

**REGARDING**

**DiaTech Oncology Limited**

(A company formed in England with limited liability, with Company No. 9716938)

---

**DiaTech Oncology Limited  
9<sup>th</sup> Floor, The Royal Liver Building,  
Pier Head,  
Liverpool L3 1JH,  
United Kingdom**

**A participation in an investment of this nature carries a high degree of risk, Your attention is directed, in particular, to the Risk Factors set out in Part 2 of this document.**

**TABLE OF CONTENTS**

IMPORTANT INFORMATION	1
DEFINITIONS	7
THE PARTIES AND ADVISERS	13
PART 1 – THE INVESTMENT OPPORTUNITY	15
PART 2 – RISKS	28
PART 3 – THE COMPANY AND THE US PARENT, THE BUSINESS PLAN AND THE INTELLECTUAL PROPERTY	31
PART 4 – THE LICENSE AND DEVELOPMENT AGREEMENT	73
PART 5 – RPS TERMS	76
PART 6 – SUBSCRIPTION AGREEMENT	85

**APPENDICES**

APPENDIX I – BIOGRAPHIES	93
APPENDIX II – DIATECH, LLC PATENT PORTFOLIO	97
APPENDIX III – VALUATION REPORT	98

## IMPORTANT INFORMATION

**NOT FOR DISTRIBUTION IN OR INTO AUSTRALIA, CANADA, JAPAN, THE UNITED STATES OR TO U.S. PERSONS OR OTHERWISE THAN TO PERSONS TO WHOM IT CAN LAWFULLY BE DISTRIBUTED.**

**In certain jurisdictions the distribution of this Information Memorandum may be restricted by law and, accordingly, recipients of this Information Memorandum must satisfy themselves that they are able to receive this Information Memorandum without contravention of any unfulfilled prospectus or registration requirements or other legal restrictions in the jurisdiction in which they reside or conduct business or to which they are subject.**

DiaTech Oncology Limited reserves the right to modify or cancel this offer to subscribe for the Shares (as defined below) at any time, to approve or disapprove each prospective Investor, and to accept or to reject any subscriptions in whole or in part in the Company's sole discretion.

## IMPORTANT DISCLAIMER

**The Company and its advisers have sought to minimise risk wherever appropriate. However, the Shares offered hereby are speculative and any investment in the Shares involves a high degree of risk. Prospective Investors must be prepared to bear the economic risks of any investment in the Shares including the possible complete loss of their investment. The Shares are unsecured, shall not be listed on any investment exchange, and are by their nature illiquid securities. Your attention is directed, in particular, to the Risk Factors highlighted in Part 2 of this document.**

The information and opinions in this Information Memorandum, which do not purport to be comprehensive, have been prepared on the basis of information which has been supplied by DiaTech Oncology Limited and has not been independently verified by any other party. Such information and opinions necessarily incorporate specific assumptions and estimates (which may not be accurate) as well as factual matters. To the maximum extent permitted by applicable law and regulation, no representation or warranty, express or implied, is or will be made and no liability whatsoever is or will be accepted by DiaTech Oncology Limited or any other party or any of their respective directors, partners, consultants, advisors, officers, employees or agents for any direct, indirect, or consequential loss or damage suffered by any person, however arising, in connection with the contents of, or omissions in, this document.

Statistical data and other factual statements concerning the pharmaceutical industry, and the oncology sector specifically, and historic economic performance in this Information Memorandum have been obtained from publicly available sources. Other market data used throughout this Information Memorandum is based on the good faith estimates made by the Company's management, which estimates are based on their review of internal surveys, independent industry publications, and other publicly available information. The consultant, Sibelius LLC (details of which can be found at the end of this section "Parties and their Advisers") has provided material assistance to the Company sourcing and verifying market and industry data. While such sources are believed by the Company to be reliable, none of Sibelius, the Company and their respective officers, employees or affiliates assume any responsibility for the accuracy or completeness of such information. The Company's estimates in this Information Memorandum involve risks and uncertainties and are subject to change based on various factors.

This Information Memorandum does not constitute a prospectus or an offer to sell or solicitation of an offer to buy or subscribe for the Shares in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation in such jurisdiction. This

Information Memorandum does not constitute or contain any form of commitment on the part of DiaTech Oncology Limited. Except as otherwise indicated, this Information Memorandum speaks as of the date shown on the cover hereof.

The information and statements of opinion in this document are based on the information held by the Company on the date of this document. Such information and / or opinions may change and such changes may be significant. There is no intention to update such information or statements of opinions. Neither the delivery of this Information Memorandum nor any offer or issue or sale of any of the Shares shall, under any circumstances, create any implication that there has been no change in the affairs of the Company or in the information or statements of opinion contained herein after the date shown on the first page of this document or that there is no other information which may be material or significant to a prospective subscriber or purchaser of Shares.

No person has been authorised to give any information other than that contained in this Information Memorandum, or to make any representations in connection with the offering of the Shares, and, if given or made, such other information or representations must not be relied upon as having been authorised by the Company. The Company disclaims any and all omissions from this Information Memorandum or any other written or oral communication transmitted or made available to any recipient hereof.

The merits or suitability of the Shares or any transaction described in these materials to a particular person's situation must be independently determined by such person. Any such determination should involve, inter alia, an assessment of the legal, tax, accounting, regulatory, financial, credit and other related aspects of the Shares or such transaction as they apply to any such person.

**If you are in any doubt as to the suitability of an investment in the Shares, details of which are given in this Information Memorandum, you should consult your own, suitably-qualified, independent professional investment advisor.**

You are referred to the forms of Subscription Agreement in Part 6 of this Information Memorandum. The Subscription Agreement in Part 6 relates to an application for the allotment and issue of Shares. You will be required to have your application accepted by the Company before making any investment in the Shares referred to herein and the Minimum Subscription Level shall need to have been achieved before any application for the allotment and issue of Shares is unconditionally accepted.

### **Forward Looking Statements**

Certain statements in this Information Memorandum constitute or may be deemed to constitute, "forward-looking statements". Such forward-looking statements involve revenue projections, known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the Company, MiCK Assays, or industry results, to differ materially from any future results, performance or achievement implied by such forward-looking statements.

Statements in this Information Memorandum that are forward-looking are based on the Company's current beliefs regarding a large number of factors affecting its business. Actual results may differ materially from expected results. The words "believe", "expect," "anticipate," "intend" and other similar expressions generally identify forward-looking statements. Prospective Investors are cautioned not to place undue reliance on these forward-looking statements, which only speak as of their dates and are not statements of fact. There can be no assurance that (i) the Company has correctly measured or identified all of the factors affecting its business or the extent of their likely impact; (ii) the publicly available information

with respect to these factors on which the Company's analysis is based is complete or accurate; (iii) the Company's analysis is correct; (iv) the Company's strategy, which is based in part on this analysis, will be successful; or (v) the Trials or MiCK Assays will be successful or have the capabilities currently hoped for. Forward-looking statements involve numerous risks and uncertainties and the actual results may differ materially and adversely from the possible results anticipated in this document.

### Distribution of Information Memorandum in the UK

The Shares are not being offered to the public and members of the public are not eligible to take part in this subscription for Shares. In particular, Shares in it may not be offered to more than 150 persons. This document may only be distributed with the consent of the Company and in accordance with all applicable laws and regulations. If you are not a person to whom this document has been provided by the Company or with the written consent of the Company or to whom the Shares may not properly be offered, then you may not apply for Shares and must return or destroy this document.

In the United Kingdom this Information Memorandum is for distribution to persons who meet the following criteria: (i) investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "**Order**"); (ii) high net worth persons and entities and other persons to whom it may be lawfully communicated falling within Article 48 to Article 50A (inclusive) of the Order; or (iii) persons to whom these materials may otherwise be directed without contravention of section 21 of the Financial Services and Markets Act 2000 (all such persons being referred to as "**relevant persons**"). This Information Memorandum must not be acted on or relied on by persons who are not relevant persons. Persons distributing this Information Memorandum must satisfy themselves that it is lawful to do so. Any investment or investment activity to which this Information Memorandum relates is only available to relevant persons and will be engaged in only with relevant persons.

### Distribution in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "**Relevant Member State**"), no offer or sale of the Shares to the public may be made, except under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a "qualified investor", as defined in the Prospectus Directive; or
- (b) to fewer than 100, or, if the Relevant Member State has implemented the relevant provisions of the 2010 PD Amending Directive, 150, natural or legal persons (other than "qualified investors" as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the Company for any such offer or sale; or
- (c) in any other circumstances which do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive.

Any person within the European Economic Area making or intending to apply for Shares may only do so in circumstances in which no obligation arises for the Company to produce a prospectus for such offer.

For the purposes of this provision, the expression an "offer of Shares to the public" in relation to any Shares in any Relevant Member State means the communication in any form and by

any means, presenting sufficient information on the terms of the offer and the Shares to be offered, so as to enable a prospective Investor to decide to purchase or subscribe for the Shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Member State. The expression “Prospectus Directive” means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in the applicable Relevant Member State and the expression “2010 PD Amending Directive” means Directive 2010/73/EU.

Other legal restrictions may prevent the distribution of this document in a Relevant Member State.

**No distribution in United States, Australia, Canada or Japan or any jurisdiction outside of the European Economic Area**

This Information Memorandum and/or the Shares have not been registered under any applicable securities laws or regulations. Accordingly, this document is, and the persons receiving it confirm that it is, issued and being distributed only to persons who are of a kind to whom this document may lawfully be issued under any applicable securities legislation and/or any other applicable laws and regulations in the relevant country, territory or jurisdiction.

In particular, the Shares have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the “**1933 Act**”), or with any securities regulatory authority of any state or other jurisdiction of the United States. The Information Memorandum is not intended for distribution and may not be distributed in the United States or to U.S. Persons as defined in Regulation S under the 1933 Act and for the avoidance of doubt the Shares may not otherwise be offered, sold or delivered within the United States.

This Information Memorandum is not intended for distribution and may not be distributed in the United States, Australia, Canada or Japan or any jurisdiction outside of the European Economic Area without the prior consent in writing of the DiaTech Oncology Limited.

**Confidentiality Undertaking**

In order to receive this Information Memorandum, the recipient (and any professional advisors retained by the recipient) hereby undertakes and agrees to keep confidential, without limitation in time, the contents of this Information Memorandum and any information made available in connection with further enquiries made by the recipient or such advisers. This document and the information contained within it must not be reproduced, redistributed or passed on to any other person or published, in whole or in part, for any purpose without the prior written consent of the Company.

Any person, by accepting delivery of this Information Memorandum, agrees that, save as required by law or regulation, it shall promptly return to the Company or destroy this Information Memorandum and any other documents or information furnished and all copies of any analyses, compilations, studies or other documents prepared by the prospective Investor or its employees or representatives and containing or reflecting or derived from any information in this Information Memorandum or such other information, if the prospective Investor elects not to subscribe for any of the Shares offered or if the Company’s offer to subscribe for Shares is terminated or withdrawn.

## **Data Protection**

Any details or information relating to Investors submitted to DiaTech Oncology Limited will be retained under the provisions of the Data Protection Act 1998. Investors' details will be used principally for communicating with Investors and paying any Dividends to Investors, as well as for any regulatory purposes.

## **United Kingdom Taxation**

The following is a general summary of certain UK tax considerations relating to the repayment or redemption of the Redeemable Preference Shares or the Priority Preference Shares or the disposal of the Priority Preference Shares or Warrants by persons who are resident (and in the case of individuals, domiciled) in the UK for tax purposes. This summary is based on current UK law and published HMRC practice, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect, or to different interpretation. This summary is for general information purposes only, does not constitute advice, and does not address all of the tax considerations that may be relevant to Investors in light of their particular circumstances or to Investors subject to special treatment under UK law. In particular this summary does not apply to the following:

- (a) Investors who will not be the absolute beneficial owners of the Redeemable Preference Shares, Priority Preference Shares or Warrants;
- (b) Investors who do not hold the Redeemable Preference Shares, Priority Preference Shares or Warrants as capital assets;
- (c) special classes of Investor such as dealers and tax-exempt Investors;
- (d) Investors that are insurance companies, pension funds, collective investment schemes or persons connected with the Company; or
- (e) Investors that control or hold, either alone or together with one or more associated or connected persons, directly or indirectly, a 10 per cent. or greater interest in the Company.

An Investor's liability to UK taxation of chargeable gains, income tax or corporation tax in respect of the redemption or repayment of the Redeemable Preference Shares, Priority Preference Shares or Warrants will depend on their individual circumstances and the circumstances of the redemption or repayment.

A Trading Dividend declared by the Company and paid in respect of the Redeemable Preference Shares is likely to be treated as dividend income and not as a capital receipt.

A Liquidity Event Distribution declared by the Company and paid in respect of the Redeemable Preference Shares or the Priority Preference Shares may be treated as dividend income or as a capital receipt on redemption or partial redemption (depending upon the circumstances and timing of payment). This will include any Liquidity Event Distribution declared on the Priority Preference Shares which is required to be used in exercising the Warrants and subscribing for Warrant RPS Shares. An Investor's liability to UK income tax, capital gains tax or corporation tax in respect of such Liquidity Event Distribution will depend on their individual circumstances. An Investor shall be entitled to waive any right to a Liquidity Event Distribution on some or all of their Priority Preference Shares if receipt of such Liquidity Event Distribution, exercise of Warrants and the subsequent subscription for Warrant Redeemable Preference Shares shall give rise to a tax charge without receipt by the relevant Investor of an aggregate cash payment to cover such charge to tax. The Company shall not issue any notice nor provide



any advice in this respect to Investors and Investors are advised to take their own independent advice as to the taxation consequences of any subscription for Shares and any redemption or partial redemption of those shares.

No UK ad valorem stamp duty or SDRT should be payable by an Investor as a result of being issued any Redeemable Preference Shares, Priority Preference Shares or Warrants, as a result of this offer.

**The Company provides no advice as to the tax consequences of any subscription for or acquisition of Shares. Investors are urged to take their own independent tax advice in connection with any proposed investment in the Redeemable Preference Shares, Priority Preference Shares or Warrants. If you are in any doubt as to your taxation position, you should also consult an appropriately qualified independent professional tax adviser immediately.**

### **Governing Law**

English law governs the issue, communication and terms of this Information Memorandum and any disputes arising in relation to any of them will be subject to the exclusive jurisdiction of the English courts.

By agreeing to receive this Information Memorandum and/or applying for any Shares you agree to be bound by the foregoing limitations.

**IMPORTANT: Please consider the risks identified in Part 2 of this Information Memorandum.**

## **DEFINITIONS**

The following definitions are used in this Information Memorandum:

“Advisors”	means the professional advisors retained from time to time by the Company to assist and advise upon the execution of the Business Plan;
“Articles of Association”	means the articles of association of the Company as amended by the Company from time to time;
“Business Plan”	means the Company’s detailed description and assessment at the date of this Information Memorandum of cancer (the disease), MiCK and TIRA Assays, other diagnostic assays currently available for diagnosing the disease that might compete with MiCK and/or TIRA Assays, the potential markets for MiCK Assays and TIRA Assays and the Financial Projections;
“Capstone”	means Capstone Life Sciences LLP, a limited liability partnership registered in England and Wales with company number OC 398935
“Company”	means DiaTech Oncology Limited, being a private limited liability company registered in England and Wales (company no. 9716938);
“Development Plan”	means the development plan and time line for the development, approval, exploitation and commercialisation of the MiCK and TIRA IP, based on the Business Plan, which the Company will draft and adopt in accordance with the terms of the LDA with a view to the practical implementation of the Business Plan;
“DiaTech Oncology LLC”	means DiaTech Oncology LLC, a limited liability corporation registered in Delaware with CIK number 0001561995, being the entity from which all of the business and assets of the Licensor (including the MiCK and TIRA IP) were acquired on 16 <sup>th</sup> October 2015 and which entity it is anticipated shall be wound up in the months following the date of this Information Memorandum;
“DiaTech, LLC” or “Licensor”	means DiaTech, LLC., being a company registered in Delaware (company no. 61-1771921) incorporated on 2 <sup>nd</sup> October 2015 with its principal executive office located at 405 Duke Drive, Suite 240, Franklin, TN 37067;

“DiaTech Holdings Inc” or “US Parent”	means DiaTech Holdings, Inc., being a company registered in Delaware (file number 5808500) incorporated on 8 <sup>th</sup> September 2015 with its principal registered office at principal executive office is located at 405 Duke Drive, Suite 240, Franklin, TN 37067;
“Executive Directors”	means those directors responsible for the day to day running of the Company to implement the business model and strategy of the Company from time to time;
“FDA”	means the U.S. Food and Drug Administration;
“Financial Projections”	means the Company's projected costs to develop and commercialise MiCK and TIRA Assays and then exploit them and the projected royalty revenues that might be generated from their successful exploitation as set out in the Business Plan;
“Funding Trajectory”	means the minimum rate of fund raising projected by Keyholder;
“Fundraising Target”	means £85 million in Subscription Commitments;
“IP Option”	the option for the Company to acquire absolute title to the MiCK and TIRA IP included in the LDA;
“Investor”	means a subscriber of Redeemable Preference Shares;
“Keyholder”	means Keyholder Investments Limited (Registration Number 154022) whose address is 1 <sup>st</sup> Floor, 4 DEKK House, De Zippora Street, Provident Industrial Estate, PO Box 505, Mahe, Seychelles, and who are supplying promotional, marketing, introductory and administrative services to the Company through the Services Agreement;
“Keyholder Fee”	means the distribution fee of 42.5 per cent. of the Subscription Commitments, payable to Keyholder under the Services Agreement;
“LDA”	means the exclusive MiCK and TIRA IP licence and development agreement and IP Option between DiaTech, LLC (as licensor) and the Company (as licensee), the terms of which are summarised in Part 3;
“Liquidity Event”	means: (i) a sale of the rights under the LDA (which may include the sale of the MiCK and TIRA IP acquired under the IP Option) to a third party; or (ii) a sale of ordinary shares in the issued equity share

capital of the Company to a third party; or (iii) a single or series of linked transactions the result of which is the redemption in full of not less than one quarter of the Redeemable Preference Shares (including for the avoidance of doubt the Warrant RPS Shares); or (iv) a winding up of the Company resulting in a distribution of its assets amongst its Shareholders;

“Liquidity Event Distributions”

means any distribution in cash (whether or not such distribution is to be withheld and set off against the exercise of the Warrants) by the Company declared by the directors of the Company as a result of the happening of a Liquidity Event in respect of the Redeemable Preference Shares and or the Priority Preference Shares in accordance with the RPS Terms and applicable law and which distribution shall be counted towards the redemption amount (if any) payable on such Shares under and in accordance with the Articles;

“Long Stop Date”

29 February 2016, or such other later date as the Company may notify in writing to Prospective Investors, and which shall be no later than 31 March 2016;

“Management”

means the senior management team of the US Parent and Licensor and the executive directors of the Company as at the date of this Information Memorandum

“MiCK”

means Micro-culture Kinetic, in the context of an assay.

“MiCK Assay”

means an assay which delivers actionable data on the cellular susceptibility (or resistance) of individual patient cancer(s) to chemotherapeutic drugs with a view to enabling the treating oncologist to target patient-specific chemotherapy.

“Minimum Subscription Level”

means £0.25 million in Subscription Commitments which is the minimum amount of Subscription Commitments required to proceed with the first round funding;

“MiCK and TIRA IP”

the Patents and Know-How and all other intellectual property of DiaTech, LLC in MiCK Assays and TIRA Assays and related technology and which are the subject of the IP Option;

“Patents and Know-how”

means the patents and know-how exclusively available to the Company pursuant to the LDA for the commercial exploitation of MiCK Assays and TIRA Assays, and as set out in Part 3;

“Priority Preference Shares” and “PPS”	means the unsecured, non-voting priority preference shares of £0.000001 each to be issued by the Company and each attached and stapled to a Redeemable Preference Share (not Warrant RPS Share) in accordance with the RPS Terms;
“Priority Preference Shareholder”	means a holder of Priority Preference Shares;
“Priority Preference Share Payment”	means a payment of Liquidity Event Distributions in respect of Priority Preference Shares (such payments being made only in units of £1.00, with maximum aggregate Priority Preference Share Payment of £4.00 per Priority Preference Share);
“Prospective Investor”	means a person who has received this Information Memorandum and may become an Investor should they decide to subscribe for Redeemable Preference Shares;
Redemption Amount	the amount required to fully redeem a Redeemable Preference Share (which shall be £1.70 at its date of issue) or a Priority Preference Share (which shall be £4 at its date of issue) from time to time including accounting for any partial redemption that may be made from time to time;
“Redeemable Preference Shares” and “RPS”)	means the unsecured, non-voting redeemable preference shares of £0.000001 each to be issued by the Company in accordance with the RPS Terms;
“RPS Subscription Price”	means for the Redeemable Preference Shares £1 per Share;
“RPS Terms”	means the terms of the Redeemable Preference Shares and Priority Preference Shares included in the Articles of Association, and as summarised in Part 4;
“Services Agreement”	means the services agreement entered into between the Company and Keyholder setting out the terms under which Keyholder is engaged by the Company to promote and market the Shares as set out in this Information Memorandum and to introduce Prospective Investors and/or independent financial advisers and to provide administration services to the Company, and the fees to be paid by the Company therefore;
“Shares”	means the Priority Preference Shares and the Redeemable Preference Shares (together with any Warrant RPS Shares issued upon exercise of Warrants);

“Sibelius”	means Sibelius LLC a domestic limited liability company registered in the state of New Jersey, USA under registration number 0600180793
“Subscription Agreement”	means the subscription agreement for the Shares to be entered into between the Company and each Investor in the form set out in Part 6 and including the application form forming part of such agreement;
“Subscription Commitment”	means the initial aggregate subscription price payable by an Investor in respect of that Investor’s Redeemable Preference Shares;
“TIRA Assays”	means an assay which delivers actionable data on tumor responsiveness to Immunotherapy through the analysis of tumor invading T-cells isolated from tumor tissue;
“Trading Dividend”	a distribution in cash by the Company declared by the directors of the Company in accordance with the Articles and the Companies Acts otherwise than in circumstances arising as a result of a Liquidity Event and made in respect of the Shares from the Company’s distributable profits and which Trading Dividend shall not, for the avoidance of doubt, be counted towards the redemption amount (if any) payable on such Shares under and in accordance with the Articles and/or as set out in the RPS Terms;
“Trial(s)”	means the trials to establish the efficacy of MiCK and TIRA Assays and to get product approvals for marketing the MiCK and TIRA Assays as a new diagnostic tool in the US, EU and elsewhere;
“U.S.” or “United States”	means the United States of America;
“Valuation”	means the fair market valuation of the Company carried out by Valuation Consulting LLP. A copy of the Valuation report, including the assumptions and basis on which it is made and contained in this Information Memorandum, is at Appendix III;
“Warrants”	means the warrants whose rights are incorporated into each Priority Preference Share under the terms of the Articles, giving the holder the right to subscribe for further Redeemable Preference Shares of £0.000001 each with an exercise price of £1.00 each in accordance with the RPS Terms;
“Warrant Exercise Price”	means the exercise price of £1.00 per Warrant Share payable on exercise of the Warrants;

“Warrant RPS Shares” means the redeemable preference shares of £0.000001 each issued by the Company on exercise of the Warrants.

“£” means pounds sterling, and “\$” means U.S. dollars.

A fixed exchange rate of £1.00 = \$1.50 has been used to manage references from one currency to the other in this Information Memorandum, the Business Plan and the Financial Projections.

## THE PARTIES AND ADVISERS

**DiaTech Oncology Limited** is a subsidiary of DiaTech Holdings, Inc., and is the Company. It holds the rights to develop the MiCK and TIRA IP pursuant to an LDA entered into with DiaTech, LLC.

**DiaTech Holdings Inc.** is a Delaware Company. It is the parent company of DiaTech Oncology Limited and of DiaTech, LLC.

**DiaTech, LLC** is a Delaware Limited Liability Company and is a subsidiary of DiaTech Holdings, Inc. It has entered into the LDA under which it has licenced the MiCK and TIRA IP to the Company. It is anticipated that the Company shall contract with DiaTech, LLC to execute a substantial amount of the Development Plan.

As set out below, a number of further individuals and organizations have contributed to the preparation of this Information Memorandum, and have and will continue to provide support and consultancy services to the Company and receive fees.

**Sibelius LLC** acts for start-up pharmaceutical and related companies to provide structures suitable for introducing them to sources of capital and to assist them in the preparation of documents as required to enable them to obtain funding, and once obtained, to assist them in managing their development until they are sold or their products are commercialized. It is owned by Dr Ian Ferrier, a director of the Company, but otherwise unconnected to the US Parent and Licensor. Sibelius is to receive a success fee in the event of the successful raising of funds into the Company, and a further success fee upon the happening of a successful liquidity event (**Liquidity Event Success Fee**), further details of each of which are set out in Part 2. The Liquidity Event Success Fee will be a liability of DiaTech Holdings, Inc. (in part in its capacity as the owner of the Ordinary Shares in the Company and in part in its capacity as the owner of 100% of the interests in DiaTech, LLC, the legal owner of the Patents and Know-How which are to be exclusively licensed to the Company under the LDA and which may be acquired by the Company under the IP Option). Both such fees have been agreed to be shared by Sibelius amongst Kelvin King, Capstone Life Sciences and Keyholder Investments Limited, collaborators of Sibelius in relation to the fund raising and the business described in this Information Memorandum.

It is important to note that Sibelius acted as advisers to the US Parent in its preparation of its Business Plan from which the Business Plan set out in Part IV of this Information Memorandum was derived. Valuation Consulting have based their valuation, inter alia, upon the information, assumptions, analysis and projections contained in the Business Plan.

**Valuation Consulting LLP** is an independent valuer of, amongst other assets, shares in private companies, with particular expertise in the intellectual property field. Valuation Consulting LLP was commissioned to provide the arm's length Valuation of the business of the Company. It has been remunerated by way of a fee of £75,000, as disclosed in Part 3 ("Use of Funds") of this Information Memorandum.

Valuation Consulting LLP (formerly Valuation Consulting Limited) was founded, inter alia, by **Kelvin King**. Kelvin King was instrumental in bringing together the elements to construct the RPS Terms and to bring together the funding team. Mr King shall be entitled to a part of the success fees payable to Sibelius LLC upon a Liquidity Event. Mr King has not taken any part in producing the Valuation, which is the product of other partners of Valuation Consulting LLP. Mr King is Senior Partner of Valuation Consulting LLP.

**Capstone Life Sciences LLP** is a partnership between Dr Ian Ferrier and Laurence Cohen. Mr Cohen is a solicitor and until his retirement in December 2014, was a partner in



Latham & Watkins LLP, and a former world wide co-chair of their Intellectual Property Group. Whilst at Latham & Watkins LLP, Mr Cohen was the lead partner advising on developing the RPS Terms. Capstone has continued to provide facilitation services for the Company and Sibelius in relation to this financing, including drafting of documentation. Capstone is not a law firm. Mr Cohen has been offered and will accept a position as an Independent Director of the Company after the launch of this Information Memorandum. Capstone will be entitled to a share of the success fees payable to Sibelius and also a fee of £50,000 from the Company for the facilitation work as set out in Part 3 ("Use of Funds") of this Information Memorandum.

**Keyholder Investments Limited** ("Keyholder") is a Seychelles company whose processing services are provided by its agent, Keyholder Funding Limited, a UK company. Keyholder has a funding distribution network to which it will promote the investment opportunity set out in this Information Memorandum, which it will do on the terms of a Services Supply Agreement with the Company. Keyholder is not an authorised person for the purposes of United Kingdom financial regulations with respect to the promotion or arrangement of investments. The financial terms of the Services Supply Agreement are set out in Part 3 of this Information Memorandum. Keyholder will not be entitled to any part of the fee payable to Sibelius LLC in relation to the raising of funds, but, subject to reaching certain targets, will be entitled to a share of the Liquidity Event Success Fee payable to Sibelius LLC.

**Brabners LLP** is a law firm based in Liverpool in the United Kingdom. Brabners have been instructed by the Company to advise it in relation to the issue of this Information Memorandum and the fundraising, corporate structure and contractual arrangements anticipated in this Information Memorandum. Brabners will receive a fixed fee of £100,000 from the Company payable out of funds raised.

On or about 29<sup>th</sup> October 2015, **KPMG LLP**, a leading provider of professional services, were appointed as statutory auditor of DiaTech Oncology Limited.

## **General**

Prospective Investors should not treat the contents of this Information Memorandum as advice relating to legal, taxation or investment matters. If you have any queries regarding these matters or otherwise concerning the contents of this Information Memorandum you must consult your legal adviser, accountant and/or financial adviser.

The parties and advisors above have been engaged by the Company or DiaTech Holdings, Inc. or DiaTech, LLC (or any of them) and are not engaged to provide advice to Prospective Investors.

## PART 1

### THE INVESTMENT OPPORTUNITY

#### The Company's business

The Company, under the LDA, holds an exclusive right to a broad technology and intellectual property license (and the option to acquire the said intellectual property) from the Licensor, DiaTech, LLC, relating to a technology platform, the Micro-culture Kinetic (MiCK) platform, a platform technology that determines the functional (apoptotic) response of tumor cells to cytotoxic (anti-cancer) drugs. The uniqueness of this platform is that it provides a direct, real-time determination of tumor cell response (and likely treatment response) to cytotoxic (chemotherapy) drug treatment by measuring programmed cell death (apoptosis) as it happens in living cancer cells harvested from patients. The Company's platform represents a very important, transformational change in the selection and use of cytotoxic drugs that promises to materially improve treatment outcomes in a very broad range of cancers. It is unlike any other system in place or in development.

Approximately 85% of cancer patients receive cytotoxic chemotherapy as a keystone in the treatment of cancer. The selection of cytotoxic drugs used in cancer treatment continues to be based on treatment protocols developed as a result of large, multi-centered studies that retrospectively analyze outcomes as a function of treatment received by patients in blinded controlled studies. This approach was necessitated by the stark reality that no predictive or "response-directing" diagnostic technologies were available, a circumstance that, to an overwhelming degree, remains unaltered at this time. The ability to predict tumor response to cytotoxic (Chemo) treatment represents a very significant, treatment limiting, unmet need that the MiCK platform addresses, and represents an important and potentially game-changing attribute of MiCK.

The provision of patient-specific treatment selection based on validated tumor responsiveness, the core defining business mission of the Company, is fully aligned with rapidly evolving clinical and market trends in Oncology, a trend that is increasingly shifting treatment selection from protocolized to personalized (rational) treatment. The Technical Product Profile (TPP) of MiCK is that the platform delivers "clinically relevant and actionable data on the cellular susceptibility (or resistance) of individual patient cancer(s) to chemotherapeutic drugs, thereby providing the ability to target patient-specific chemotherapy and improve treatment outcomes". In cell-culture models, and proof-of-concept clinical studies, this TPP has been repeatedly demonstrated. Consequently, the Company's MiCK platform promises to substantially accelerate the movement toward "rational therapy selection" that favorably impacts near-term oncology treatment triage and outcomes.

The MiCK platform and intellectual property was developed by DiaTech Oncology, LLC and acquired in October 2015 by the Licensor, together with another early stage technology called the TIRA platform (described further below). The entire business and assets of DiaTech Oncology, LLC were acquired by DiaTech, LLC on 16<sup>th</sup> October 2015 in return for shares in DiaTech, LLC (which shares have been in turn acquired by DiaTech Holdings, Inc.). The Licensor was set up with the purpose of making that acquisition and at that date had no other assets or business interests. The Licensor retains the same Management as DiaTech Oncology, LLC. It is anticipated that DiaTech Oncology, LLC shall be wound up in the months following the date of this Information Memorandum.

Over the past six years the DiaTech Oncology, LLC has successfully industrialized the MiCK platform so that it can: 1) reliably and reproducibly process multiple samples a day, 2) deploy

a robust computer algorithm that “translates” laboratory findings into clinically meaningful data, 3) complete multiple controlled clinical studies to support regulatory approval and wide-scale clinical acceptance, and 4) position the MiCK platform to routinely and reproducibly provide actionable information to physicians that will guide them to select optimum treatment for their patients. Investing approximately \$42 million, the DiaTech Oncology, LLC has created a state-of-the-art commercial laboratory facility at its headquarters in Nashville, a satellite full-service commercial laboratory facility in Montreal PQ Canada, and hired critical senior management to lead the business.

Under the terms of the LDA, but subject to raising the Minimum Subscription Level, DiaTech, LLC has licensed, on an exclusive basis, the use of the Patents and Know-How relating to MiCK and TIRA Assays to the Company and has granted the IP Option. This provides the Company with an exclusive licence to develop, commercialise and then exploit the intellectual property relating to MiCK Assays. All consideration payable under the licence is deferred and is payable only on the happening of a Liquidity Event as set out in more detail in Part 3.

Pursuant to the LDA, the Company will promulgate a Development Plan based on the Business Plan which will set the milestones and timeline for the development of MiCK Assays and TIRA Assays and the MiCK and TIRA IP, against the projected budget and expenditures. The Development Plan will set out the part of the development work to be conducted by the Company, and the part of the development work to be conducted by the Licensor, and/or other parties and affiliates of the Company. The funding for the Development Plan will come from the Company, and be executed by the executives of the Company under a level of oversight by the Independent Directors of the Company. The Company has the longer of 90 days from the effective date of the LDA or 30 days from time it is notified that the Minimum Subscription has been received to submit the Development Plan to DiaTech, LLC in its capacity of Licensor of the MiCK and TIRA IP. The Independent Directors can, in their discretion, bring in new executives (not as directors of the Company) to manage the Development Plan if issues arise with the management of the Development Plan otherwise than as a result of a failure to raise sufficient funds to meet the budget.

Under the LDA, the Company shall seek to develop and commercialise the MiCK and TIRA IP. To transition from “esoteric” provider of information to experimental oncology, to the full commercial deployment of MiCK, the Company will execute a series of tumor-specific, randomized, statistically-powered, controlled clinical studies in support of regulatory approval; trials that will provide unequivocal “proofs” that patient outcomes are improved as a consequence of cytotoxic drug treatment selection based on MiCK. To execute this, the Company will deploy clinical development and commercialization functions in the US, and expand such to include a European laboratory, clinical development and commercialization capabilities in support of EMA approval and commercial launch in the EU. Further, the Company will develop alliance and license arrangements with established Life Sciences organizations to support commercialization and distribution in “rest of world” (ROW) markets including Japan, Australia, New Zealand and the “BRIC” (Brazil, Russia, India and China) markets.

Under the LDA, a significant proportion of this development activity will be undertaken by the Licensor under contract with the Company. The regulatory framework and requirements for approval are set out in more detail in Part 3 of this Information Memorandum.

Together, the Company, the Licensor and the US Parent intend to be a market leader in the provision of “Treatment-Directing Diagnostic Data” in support of improved cancer treatment outcomes. In so doing, the Company will participate in a rapidly growing market segment (currently estimated at \$15B in annual sales, a CAGR of 9.7%. and projected to exceed \$25B by 2020), and in so doing, create very substantial shareholder value. In support of these

objectives, and over and above MiCK, the Company has launched the development of its T-Cell Immunotherapeutic Response Assay (TIRA) platform, a platform that promises to determine tumor responsiveness to Immunotherapy through the analysis of tumor invading T-cells isolated from tumor tissue. TIRA naturally aligns to the Company's MiCK platform in that T-cells are separated from tumor tissue that is harvested and used in MiCK. In the near future, also utilizing tissue harvested for MiCK, the Company will embark on its Tumor Antigen Identification (TAI) platform, a platform that will further guide immunotherapy based on the isolation of tumor-specific antigens "stripped" from harvested tumor cells. The LDA includes all existing intellectual property with respect to the TIRA and TAI assay platforms and methodology.

The Company is well positioned to execute the Business Plan through major value inflection and cash flow positive operations by 2020. The Company shall be materially reliant upon the Licensor in delivering the Business Plan. The Licensor is financially stable, with an opening balance sheet that includes at the date of this Information Memorandum approximately \$4 million in cash (as well as fixed assets within its group companies including 2 functioning laboratories designed to deliver the MiCK Assays), with debt limited to minimal operating liabilities associated with day to day operations. The Business Plan calls for a rapid and substantial increase in cash burn in early 2016 to support expansion of development and organizational initiatives, followed by a ramp up of commercial activities in 2017.

Projected operating expense totals \$124 Million in aggregate through to Quarter 4 of 2019. These expenditures are partially offset by early revenues that will be driven by pharmaceutical and other life sciences collaborations projected to deliver a cumulative total of \$38 Million by the end of 2019. Additionally, Management projects utilization of cash already on hand, UK-based tax credits on R&D spend, and other fee refunds related to the Company's financing program, though these will be dependent upon what operating structures can be utilized effectively by the Company and the Licensor in delivering the Development Plan under the LDA. After accounting for these additional offsetting items, projected to total \$16 Million, net funding required to achieve regulatory approval and launch of the Company's lead products (2019) is projected at approximately \$70 Million.

Revenues are projected to continue to increase steadily and significantly following initial product launches in 2019. P&L projections indicate cash flow positive operations beginning in 2020 with the Company progressing towards high margins (>75% Gross and >35% Net or EBITDA) in line with comparable companies. Management anticipates a substantial increase in Company valuation by this time (2019-2020) through the successful completion of development and regulatory programs and market launch of its lead MiCK and TIRA products.

The US Parent recognizes that multiple approaches will be required to fully address the objectives of providing physicians with data-based guidance to drive rational treatment selection in cancer. To this end, the US Parent will aggressively advance the acquisition and development of additional diagnostic platforms directed at oncology as part of its business mission to become a major provider of treatment-directing diagnostic data to clinicians, and substantial contributor to improvement in Cancer treatment outcomes.

In addition, and in support of its strategic and revenue objectives, the US Parent will engage in collaborations with qualified and strategically aligned pharmaceutical, clinical, provider and payer organizations and institutions that will be selected on the basis of their ability to broaden the clinical exposure to its products-in-development (including the MiCK and TIRA Assays), contribute to physician and institutional acceptance, and accelerate the commercialization of its products. Such activity by the US Parent is anticipated to accelerate commercialization and exploitation of the MiCK and TIRA IP, to increase the profile of the DiaTech Group in the

marketplace and increase the opportunities for exit or the refinance of the Company and redemption of the RPS and PPS Shares.

### **Redeemable Preference Shares to be issued by the Company**

The Company is seeking to raise capital to support the costs required to develop the Patents and Know-how, and to undertake the further Trials necessary to obtain regulatory approval to market and sell the MiCK Assays and TIRA Assays as diagnostic products. The Company is seeking Investors to subscribe for Shares in the Company.

The Shares comprise:

- (i) **Redeemable Preference Shares;**
- (ii) the Redeemable Preference Shares will be allotted with a corresponding number of **Priority Preference Shares;**
- (iii) any Dividends (in amounts of £1 and multiples thereof) declared (and not waived) against the Priority Preference Shares result in Warrants in a corresponding amount being exercised and the Dividends are applied by the Company against the resulting subscription for the **Warrant RPS Shares** in accordance with the Schedule to the Articles.

The Redeemable Preference Shares (including the Warrant RPS Shares) shall each have a capped total return from Liquidity Event Distributions of £1.70 per share, after which they shall automatically be treated as redeemed in full and cancelled.

The Company intends to be in a position whereby it can issue the Redeemable Preference Shares and the Priority Preference Shares in an uncertificated form and such shares shall be registered and held and may be transferred in uncertificated form on the CREST® platform (or such other platform as the Company may determine that meets the requirements of all relevant regulations relating to the issue, holding and transfer of shares in uncertificated form).

### **Trading Dividends**

Profits arising from the exploitation of the MiCK and TIRA IP are to be aggregated between the Licensor and the Company. This aggregation will apply to all profits of the Licensor in exploiting the MiCK and TIRA IP under arrangements agreed between the Licensor (including its subsidiaries) and the Company that are in excess of what would be a reasonable market rate of return for undertaking the commercialisation, marketing and exploitation of the MiCK and TIRA IP that is being undertaken by the Licensor ("**Trading Profits of Exploitation**").

In the event that there is at any time: (i) a lawful distribution by way of dividend of distributable profits of the Company (otherwise than in the circumstances of a Liquidity Event); or (ii) the Licensor (or one of its subsidiaries) is in receipt of Trading Profits of Exploitation which it is not otherwise obliged to account to the Company for, then the Directors of the Company shall be obliged as and when there are distributable reserves of the Company, to declare dividends on the RPS Shares and on the Ordinary Shares such that the share of the profits available for distribution and distributed to the Shareholders (otherwise than in the circumstances of a Liquidity Event) and the Trading Profits of Exploitation, shall over time be split between the RPS Shareholders as one class and the ordinary shareholders (as to Trading Dividends) and Licensor (as to Trading Profits of Exploitation) as the other class so that 30% of such profits to be distributed are distributed to the RPS Shareholders *pari passu* and the remaining 70% shall be retained Trading Profits of Exploitation of the Licensor (and its subsidiaries) or distributed to the ordinary shareholders *pari passu*. It should be noted that if no Trading

Profits of Exploitation are made by the Licensor (or any of its subsidiaries) and no profits available for distribution are distributed by the directors of the Company, the Directors of the Company shall be under no obligation to declare a dividend with respect thereto.

### **Liquidity Event Distributions**

In the event of: (i) a lawful distribution by way of Liquidity Event Distribution on the happening of a Liquidity Event; or (ii) a return of capital on a liquidation, reduction of capital or otherwise, the assets of the Company available for distribution among the shareholders shall be applied in the following manner and order of priority:

#### **First Tranche**

- (i) The first tranche shall equal 1.6667 times the Subscription Commitments invested by all of the Investors.

The first tranche shall be distributed as to 60% to the Redeemable Preference Shares then in issue pari passu so that as a maximum they then receive an amount equal to their RPS Subscription Price as a partial redemption. The remaining 40% shall be distributed to the Priority Preference Shares then in issue pari passu, as a Priority Preference Share Payment, subject to a minimum distribution per Priority Preference Share of £1 and multiples thereof as a partial redemption of such Priority Preference Shares.

Any Priority Preference Share Payment proposed in respect of the PPS Shares may be waived by any individual PPS Shareholder in an amount in respect of any Priority Preference Share equal to its full Redemption Amount and any such waiver of a dividend on the Priority Preference Shares shall trigger deferred consideration to be payable to the Licensor under the LDA in the same amount as the Liquidity Event Distribution waived in the event that the Option under the LDA is exercised. A waiver of Priority Preference Share Payment with respect to a Priority Preference Share shall result in a lapse of all Warrants attached to that Priority Preference Share.

All Priority Preference Share Payments declared shall be applied in the exercise of Warrants and subscription for Warrant RPS Shares in an equal amount to the Priority Preference Share Payment and allotted to the Investors.

#### **Second Tranche**

- (ii) Following the first tranche, the second tranche shall equal such amount of distributable profits as shall be required to be distributed to the holders of the Priority Preference Shares their full Redemption Amount having been paid and in all of the Warrants being exercised such that the Priority Preference Payments are all applied in the subscription for Warrant RPS Shares on behalf of the Investors, which shall mean that all Priority Preference Shares have been redeemed in full and all Warrant RPS Shares have been issued by the Company

Any Priority Preference Share Payment proposed in respect of the PPS Shares may be waived by any individual PPS Shareholder in an amount in respect of any Priority Preference Share equal to its full Redemption Amount and any such waiver of a dividend on the Priority Preference Shares shall trigger deferred consideration to be payable to the Licensor under the LDA in the same amount as the Liquidity Event Distribution waived in the event that the Option under the LDA is exercised. A waiver of a Priority Preference Share Payment with respect to a Priority Preference Share shall result in a lapse of all Warrants attached to that Priority Preference Share.

All Priority Preference Share Payments declared shall be applied in the exercise of Warrants and subscription for Warrant RPS Shares in an equal amount to the Priority Preference Share Payment and allotted to the Investors.

Following the second tranche, distributions shall have been declared in favour of Investors in an amount equal to 5 times the Subscription Commitments invested by all Investors, but four fifths of such amount shall have been re-invested in the Company in subscription for Warrant RPS Shares, unless the relevant Investor has waived his right to such Priority Preference Share Payments.

### Third Tranche

(iii) Thereafter, as the Third Tranche:

- a. If the Option has been exercised under the LDA, the aggregate value of all Priority Preference Share Payments waived by the Investors in respect of their Priority Preference Shares shall be applied in payment of deferred consideration under the LDA and paid to the Licensor (DiaTech, LLC) and an amount equal to the aggregate value of all the subscriptions for Warrant RPS Shares arising as a result of the exercise of Warrants shall be distributed to the holders of the ordinary shares; or
- b. If the Option has not been exercised, an amount equal to the aggregate value of all the subscriptions for Warrant RPS Shares arising as a result of the exercise of Warrants plus an amount equal to the aggregate value of all Priority Preference Share Payments waived by the Investors in respect of their Priority Preference Shares shall be distributed to the holders of the ordinary shares.

It should be noted that, in accordance with the RPS Terms, the Company shall be entitled to make such distributions out of funds received from the subscription for Warrant RPS Shares, to the ordinary shareholders prior to the redemption of all the Priority Preference Shares, and to create distributable profits for distribution through capitalisation and reduction of the share premium reserves of the Company.

### Fourth Tranche

(iv) The Fourth Tranche shall equal 12.5 times the Subscription Commitments of the Investors invested in the Company (including the Keyholder Fee but not, for the avoidance of doubt, including subscriptions for Warrant RPS).

Under the LDA, 40 per cent. of all profit generated (or the proceeds of sale) and otherwise distributable as the Fourth Tranche has been reserved and shall be paid to the Licensor, DiaTech, LLC, who at the date hereof is a subsidiary of the holder of the ordinary shares. This payment is part of the deferred consideration for the exercise of the IP Option. The entitlement of the Licensor should be treated as an expense of the Company and is not a profit distribution, but instead a reduction in profits.

The deferred consideration under the LDA is subject to a maximum aggregate value which is to be agreed at the time of exercise of the Option, between the Company and the Licensor, as the fair market value of the IP at the date of the LDA. Should the aforementioned 40% (when aggregated with any payment of deferred consideration triggered in Tranches one, two or three above) exceed such market value, no more deferred consideration shall be payable and the remainder of such 40% shall remain in profit and be distributed to the holders of ordinary shares by way of a dividend.

The remaining 60% of all profit generated (or the proceeds of sale) and otherwise distributable as the Fourth Tranche shall all be distributed (by way of redemption or partial redemption) to the holders of Redeemable Preference Shares (including for this purpose the Warrant RPS Shares) pari passu subject to a maximum distribution per Share (including the distributions made to such Shares out of tranche 1) of £1.70 at which time they shall be redeemed in full.

#### Fifth Tranche

- (v) The Fifth Tranche is all monies available for distribution to the shareholders of the Company or payable under the LDA to the Licensor after payment out in full of the Fourth Tranche above.

Under the LDA, from the time that the fifth tranche would be distributed if available for distribution, 100% of the monies that would otherwise be profits of the Company shall be paid to the Licensor, DiaTech, LLC, who at the date hereof is a subsidiary of the holder of the ordinary shares. This payment is the remaining part of the deferred consideration for the grant of the LDA license or, depending on the timing of the payment, the commercialization of the MiCK and TIRA IP, or for the exercise of the IP Option. The entitlement to deferred consideration of the Licensor is anticipated to be treated as an expense of the Company and would therefore not be a profit distribution, but would instead act to reduce the profits available for distribution.

The deferred consideration under the LDA is subject to a maximum to be agreed at the time of exercise of the Option, between the Company and the Licensor, as the fair market value of the MiCK and TIRA IP at the date of the LDA. Should the aforementioned 100% (when aggregated with any payment of deferred consideration triggered in Tranches one, two, three or four above) exceed such market value, no more deferred consideration shall be payable and any remaining monies available for distribution shall be available for distribution to the holders of ordinary shares by way of a dividend.

After the fourth tranche has been distributed, all the Redeemable Preference Shares (including the Warrant RPS Shares) shall have been redeemed in full and shall be cancelled. Any profits of the Company not paid out under the LDA in respect of the Fifth Tranche shall be distributed to the holders of the ordinary shares.

In the event that the aggregate of all Liquidity Events does not provide sufficient proceeds to proceed to distribute under the Fourth Tranche above, it may be in the interests of certain PPS Shareholders, depending on their own situation, to waive their Priority Preference Share Payments in relation to PPS Shares. Please refer to paragraph 7 of Part 2 (Risks) below. The Board is obliged to accept any such waiver. If any PPS Shareholder were to waive their Priority Preference Share Payment payable on any PPS Share, the waived distribution shall trigger deferred consideration due under the LDA upon exercise of the Option and in the absence of the exercise of the Option shall fall to be distributed to the ordinary shareholders and shall be counted towards the Third Tranche payments payable in respect of the ordinary shares under the Third Tranche above.

An Investor who waives entitlement to receive Priority Preference Share Payments in respect of any Priority Preference Share held by it shall do so irrevocably in the full Redemption Amount of such Priority Preference Share and the waived amount in respect of each Priority Preference Share shall be deemed to be and shall be treated to be a reduction in the redemption value of the Priority Preference Share to nil, such that that Priority Preference



Share shall be deemed to be redeemed in full and shall be cancelled. Any Warrant exercisable in respect of such Priority Preference Share shall immediately expire.

The approval of the Independent Directors is required for any Liquidity Event Distribution to be made in circumstances where an event has occurred which could, with the passing of time and/or the satisfaction of certain conditions be a Liquidity Event but where, at the date of the Liquidity Event Distribution, there has not been a Liquidity Event. Such Liquidity Event Distribution can be made by the Directors where there is justification for making such a Liquidity Event Distribution that balances the interest of the RPS Shareholders, the PPS Shareholders and the Ordinary Shareholders and the risk implications to any or all of them in making such Liquidity Event Distribution in such circumstances.

The Shares will not have any guaranteed Trading Dividend, Liquidity Event Distribution or redemption rights in the event that revenue from the exploitation of MiCK Assays and/or TIRA Assays or any other revenue received by the Company which may be distributed) is insufficient to create sufficient distributable profits to pay Trading Dividends or Liquidity Event Distributions.

The Redeemable Preference Shares will not be ordinary shares in the share capital of the Company, and shall carry no voting rights or controls over the Company save for: (i) the right to payment of Trading Dividends and Liquidity Event Distributions under their terms of issuance and subject to the availability of distributable reserves and/or the happening of a Liquidity Event; and (ii) the right to appoint a majority of Independent Directors upon a change of control of the Licensor and/or the US Parent. The RPS Terms are set out in further detail in Part 4 of the Information Memorandum.

### **Investment Objective and the Funds to Achieve it**

The Company's ultimate objective is to maximise the value of the MiCK and TIRA IP to achieve a successful Liquidity Event at the optimal opportunity.

This is subject to successful Trials of MiCK Assays and TIRA Assays. If the Trials move forward successfully, the likelihood of the envisaged Liquidity Event increases. The Company seeks and needs the Subscription Commitments from Investors to fund development and Trials of MiCK Assays and TIRA Assays and the ancillary costs associated with the same. In the event that having raised the full budget of \$70 million (net) as set out in the Business Plan, the Directors are of the view that further sums need to be raised to complete the Development Plan to a Liquidity Event, the Company may issue further RPS shares (not having priority to the RPS Shares), or use other funding methodologies.

To the extent the Company obtains additional external funding, either from MiCK Assay and/or TIRA Assay sales, royalty payments, and/or further equity or debt financing, this will first be used to continue with the Trials and to pay for the development of the MiCK and TIRA IP and any improvements thereto, and to pay management and advisers engaged in the business of the Company. Depending on the level of any future funding and the approval of the Independent Directors this may also be used to partially redeem the Redeemable Preference Shares if the external funding is in fact a Liquidity Event.

### **Subscription Commitments**

The Company is seeking to raise at least £0.25 million and not more than £85 million in Subscription Commitments.

Subscription Commitments will result in 57.5 per cent. of such Subscription Commitments being immediately available to the Company, less the fees payable to Sibelius as outlined

further below in this Part 1. The other 42.5 per cent. of subscription monies received by the Company shall be used in order to pay the Keyholder Fee in connection with the fundraising, and as set out in further detail in the section entitled *Use of Funds* below in this Part 1 of the Information Memorandum.

It is expected that the Company's policy shall be to accept Subscription Commitments of a minimum of £100,000 per Investor, and only from high net worth individuals, companies and trusts and such institutional investors as have professional experience in matters relating to investments of the kind to which it relates and certify that they fall within a relevant provision of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005. No 'offer of transferable securities to the public' shall be made for the purposes of the Financial Services and Markets Act 2000.

The Long Stop Date is the closing date for payment of Subscription Commitments in the event that the Minimum Subscription Level has not then been reached. The Company may but is not required to extend the Long Stop Date, and in such circumstances Investors shall have the right to withdraw their Subscription Commitments within 21 days of receipt of written notice of such an extension by the Company. In accordance with the terms of the Subscription Agreement, Subscription Commitments shall be refundable to Investors in the event that by the Long Stop Date the Company does not receive sufficient subscriptions to proceed with the first round funding so as to meet the Minimum Subscription Level.

### **Permitted Transfers**

The Shares are freely transferable.

Investors should be aware that (i) the Company makes no representations and warranties to any transferee in the event of the transfer of any Shares held by an Investor; and (ii) Investors may be required to bear the financial risks of this investment for an indefinite period of time.

Each Warrant is incorporated within the terms attaching to each Priority Preference Share subscribed for by an Investor. Each Warrant is non-detachable from such Priority Preference Shares.

### **Use of Funds**

As noted in the section entitled *Subscription Commitments* above, 42.5 per cent. of the Subscription Commitments for the Redeemable Preference Shares will be paid to Keyholder immediately (once the Minimum Subscription Level is achieved) as the Keyholder Fee (as described more fully in the section entitled Keyholder and Sibelius Fee below). Of the remaining 57.5 per cent. of the Subscription Commitments received, 5 per cent will be paid to Sibelius as a fee for the services it has provided to the Company and the US Parent in developing the investment proposition included in this Information Memorandum (as described more fully in the section entitled Keyholder and Sibelius Fee below); and the remaining 54.625% of the Subscription Commitments shall be available to the Company to use for the execution of its Business Plan.

These funds retained by the Company shall be principally used to pay for patent maintenance, for product development, to start Trials and to pay the scientific advisors and the ongoing costs of the Executive Directors, management and Advisors, with the aim of driving MiCK Assay and TIRA Assay products towards value inflection points and regulatory approval. However, £225,000 (approximately \$337,500) of the Subscription Commitments available to the Company shall be used immediately in order to pay fixed fees to Advisors and other costs in connection with the fundraising, and future infrastructure costs not immediately referable to the research and Development Plan costs. These will be paid in their respective proportions

at the rate of 25% of the Subscription Commitments actually paid to the Company. Assuming the Minimum Subscription Level is raised, these fees are summarised below:

- |                                       |          |
|---------------------------------------|----------|
| • Brabners; Legal Advice              | £100,000 |
| • Capstone: Documentation and Liaison | £50,000  |
| • Valuation Consulting fee            | £75,000  |

The Company will pay these fees by instalments to assist in the management of its cash flow.

It should be noted that a substantial part of the Development Plan shall be delivered by the Licensor by agreement and/or under contract with the Company. The Licensor shall charge for the services it delivers the Company, which charge shall be negotiated with the Company (under the review of the Independent Directors) and is anticipated to include a margin at a level commensurate with the provision of such services in the diagnostics and pharmaceutical global industry.

### **The Funding Trajectory**

Funding for the Company is being sourced over a period of time by Keyholder, in accordance with the Funding Trajectory, which represents the minimum rate anticipated by Keyholder at which funds will be made available by Investors. The Company's Funding Trajectory has taken the budget (from the Business Plan) into account and the Development Plan will take into account the Funding Trajectory. The cash flow requirements for the Company are projected to be less than the rate at which funds should be received over the period of the fundraising. In the event of a diminution in or excess of cash flow into the Company at any time from the fund raising, or a change in the circumstances surrounding the development of MiCK and/or TIRA Assays, the Company may adjust its Development Plan accordingly. The Services Agreement permits the Company to request Keyholder to change the rate of funding in the Funding Trajectory and to adjust it to the requirements of the Company from time to time.

### **Keyholder and Sibelius Fee**

42.5 per cent. of the initial Subscription Commitments for the Redeemable Preference Shares (8.5% of the Subscription Commitments plus the subscription price for the Warrant RPS Shares after exercise of all Warrants) shall be allocated to the Keyholder Fee payable to Keyholder pursuant to the Services Agreement. The Keyholder Fee is anticipated to be applied by Keyholder within its distribution network as follows: consultancy 15%; marketing 10%; and professional fees and costs 17.5%. The structure of the Shares comprising Redeemable Preference Shares, Priority Preference Shares and Warrant RPS Shares has been developed in consultation with Keyholder. The Company has entered into the Services Agreement with Keyholder, whereby Keyholder shall seek to promote this Information Memorandum to suitably qualified potential Investors directly and using its network of financial intermediaries. After a Prospective Investor has delivered their Subscription Agreement to the Company and the Company has accepted their application and subscription for Shares, Keyholder is also required to assist the Company in certain elements of the administration of the fund raising pursuant to the Services Agreement. The Keyholder Fee is payable to Keyholder pursuant to the terms of the Services Agreement with the Company.

Prospective Investors may have the right to request information from their financial intermediary regarding any commission or other payment made to their financial intermediary by Keyholder in connection with their Subscription Commitments.

Under the terms of the supplementary agreement between Sibelius, DiaTech Holdings, Inc. and the Company dated on or about the date hereof, the Company shall be obliged to pay a fee to Sibelius of 5 per cent of the total Subscription Commitments after deducting the Keyholder Fee, which equals 2.875% of the Subscription Commitments. This fee is payable for the services provided by Sibelius to the Company and the Parent Company in developing this investment opportunity as set out in this Information Memorandum. In addition, Sibelius is to be paid a fee calculated against any monies paid out to the ordinary shareholders which fee is a liability of the US Parent (the ordinary shareholder). This fee shall equal various agreed percentages of the first, second, third, fourth and fifth tranches described above in so far as such tranches are paid out to the US Parent and/or the Licensor. The Company shall be obliged to pay this success fee on behalf of the US Parent and/or the Licensor out of the said monies that are to be paid to the US Parent and/or the Licensor. This fee is shared by Sibelius with Capstone, Keyholder and Kelvin King.

Save as set out in this Part 1, there are no other success fees payable by the Company or DiaTech Holdings, Inc. or DiaTech, LLC either on the raising of funds as set out in this Information Memorandum or on the happening of any Liquidity Event.

### **Success Fees Payable to Keyholder by Investors**

Keyholder may charge a fee to each Investor arising from a Liquidity Event in respect of any payment made to an Investor or his successor in title of up to 5% of any sum received by the Investor under and pursuant to the Fourth Tranche. In default of any other agreement reached between Keyholder and the relevant Investor, this fee will be 5%.

### **Valuation**

The Company and its US Parent obtained a Valuation of the current “fair market value” of the business and assets identified in the Business Plan from Valuation Consulting LLP– a professional valuation consultancy familiar with valuing similar pre-revenue intellectual property focused private companies.

**Important:** The Valuation uses industry accepted and practised methods and calculation models to achieve the Valuation results; however, the Valuation is provided by the Company for information purposes only and Investors should not assume that the Company or the Redeemable Preference Shares reflect the value ascribed in the Valuation, and no warranty or representation is given by the Company or Valuation Consulting LLP to any person, including any Investor or Prospective Investor in respect of the Valuation or the information contained in the Valuation Report and no reliance can be claimed by any such person, including any such Investor or Prospective Investor upon the Valuation or the information contained in the Valuation Report in any decision or action taken by them with respect to the matters set out in this Information Memorandum.

**Important:** Whilst the Valuation is in respect of the current “fair market value” of the Company, the Valuation is based upon a number of important assumptions (as set out in the Valuation Report) including a successful fundraise, the successful future Trials of MiCK Assays and TIRA Assays, and the future sales/royalties arising from the commercial sale and exploitation of MiCK Assays and TIRA Assays by the Company and any marketing/sales partners as projected.

The basis of valuation that Valuation Consulting have chosen to use (for the reasons that they have set out in their Valuation Report) is an income based approach. As they state in their report (on page 29 of the report) *“the underlying premise of an income based methodology is that the value of an asset can be measured by the present value of the net economic benefit to be received over the life of that asset”*. Valuation Consulting have applied a discounted cash

flow methodology against the projected cash flows of the business and then considered how the results compare against using a multiple of income or profit.

A 20% discount against all the projected post tax income of the business has been applied, to account for the commercial risks for the business in executing the Business Plan. In addition, a further annual cumulative discount rate of 20% has been applied to arrive at the net present value of the Company's probability adjusted income stream.

Taking the discounted and probability adjusted income for the years 2015 to 2035 (applying a growth rate of 2% for the years beyond the projections in the Business Plan), the aggregated risk adjusted net present value of that projected income is \$986 million (£657 million at the Conversion Rate). Against this value, the aggregate subscription price of the Redeemable Preference Shares anticipated to be offered by the Company is £85 million.

Management are of the view that, given the discount rates applied and the multiples reviewed in the Valuation Report, the projections in the Business Plan support an achievable value upon a liquidity event (assuming the business Plan is fully executed) that would result in the full redemption of all Redeemable Preference Shares (including the Warrant RPS Shares).

## **Reporting**

The Company will furnish annual financial reports to all Investors. Investors will also receive a half-yearly summary report of the Company progress and financial status.

On or about 29<sup>th</sup> October 2015, KPMG LLP, a leading provider of professional services, was appointed as statutory auditor of DiaTech Oncology Limited.

The Company intends to work with financial and governance advisors to procure from them independent third party assurance services. Their scope may include but will not be limited to a review of governance procedures of the Company, the controls in operation in relation to the use of the funds which have been provided by this investment and any other procedures identified which may be required to give independent assurance over the expenditure incurred in accordance with the Business Plan and the Development Plan.

## **Important information**

**Recipients of this Information Memorandum should note that any investment in the Shares is speculative and involves substantial risk, and may expose Investors to losing the entire amount of their Subscription Commitments invested. Prospective Investors should obtain professional independent advice before making an investment decision relating to the Shares, and only do so if they are able to bear the risks associated with such an investment.**

## **A summary of risks identified have been set out in Part 2**

Investors are required to enter into a confidentiality undertaking for the benefit of the Company and its affiliates in the form set out in the Subscription Agreement.

Subscription Commitments will not be accepted until such time as the Company has received and is satisfied with all the information and documentation requested to verify the identity of the potential Investor as may be required.

## PART 2

### CERTAIN IDENTIFIED RISKS

1. Recipients of this Information Memorandum should note that any investment in the Shares is speculative and involves substantial risk, and may expose Investors to losing the entire amount of their Subscription Commitment invested.
2. Prospective Investors should obtain professional advice before making an investment decision relating to the Shares, and only do so if they are able to bear the risks associated with such an investment.
3. By their very nature, Trials and their outcome are uncertain and carry inherent risk and no positive outcome can be guaranteed.
4. The MiCK and TIRA Assays are in development and development will need to be advanced to clinical trials that lead to regulatory approval and to full commercialisation, and profitability, before profits can be made directly from their exploitation. During this process:
  - a. the development of MiCK Assays and/or the TIRA Assays may fail;
  - b. the Trials may be wholly or partially unsuccessful in terms of the anticipated outcomes or because of unexpected outcomes;
  - c. the regulatory approval in the US, EU and/or other jurisdictions of the MiCK Assay and/or the TIRA Assay may not be secured;
  - d. a buyer for the MiCK and TIRA IP or the shares of the Company may not be secured;
  - e. a new, or presently unknown, competitor product may be developed, approved and/or marketed.

The Company can make no guarantee or warranty as to the successful outcome of the development, Trials, commercialisation, exploitation or sale of the MiCK and TIRA IP or that any return can be harvested from them. It should be noted that risk of failure in clinical trials is inversely related to the degree of development and advancement of clinical programs, which is itself dependent upon the level of funds raised.

5. After the Minimum Subscription Level of £250,000 has been achieved, each Investor's funds will be released to the Company as the funds are received and will be applied as set out in this Information Memorandum, including in the payment of the Keyholder and Sibelius Fees and other fees of the Company. There can be no guarantee that further funds will be raised after any Investor has subscribed for Shares. There is a risk (which would decrease the higher the level of funds raised from time to time) that the Company will not achieve a value creating Liquidity Event, in which case the Investor may not recoup their investment in whole, in part, or at all.
6. The Fundraising Target may prove to be insufficient for the Company to reach a Liquidity Event. In that event further funding may be required that may be dilutive on the level of redemption of the Redeemable Preference Shares and the Warrant RPS Shares.

7. If Liquidity Event Distributions are declared and paid on the Priority Preference Shares, which occurs in the First Tranche and the Second Tranche of the Waterfall (but not the Fourth and Fifth Tranches), all of those Liquidity Event Distributions are applied in the payment of subscription monies for Warrant RPS Shares on exercise of the Warrants. The Investor (if subject to UK income and capital gains taxation) is likely to be taxed on the Liquidity Event Distributions received against the Priority Preference Shares as if it was cash in the Investors hands, even though all of such proceeds would have been applied in exercising Warrants. Protections have been included in the documentation, but Investors will need to manage the risk, including by applying such protections. The protections are:
  - a. trading profits arising through the commercialisation of the MiCK and TIRA IP if distributed outside the remit of a Liquidity Event, will not count towards the redemption of the Redeemable Preference Shares or the Priority Preference Shares
  - b. Liquidity Event Distributions are not to be paid until all the proceeds of the Liquidity Event are received by the Company, unless the independent directors of the Company approve
  - c. a PPS shareholder is entitled waive a PPS Liquidity Event Distribution so that the taxable proceeds are not deemed to be received and the Warrant with respect to such distribution shall lapse.
8. If the Company is subject to insolvency proceedings, the LDA shall terminate. Should the Company fail to deliver its Business Plan, it is therefore important that a sale of the MiCK and TIRA IP is achieved before insolvency proceedings are commenced.
9. The Company may be unable to successfully defend its intellectual property against third party challenges; or if there are changes in either the patent laws or in the interpretation of patent laws, this may diminish the value of the Company's intellectual property.
10. There are two United States Patents licensed to the Licensors and in respect of which it is subject to certain obligations, including obligations to pay royalties in certain circumstances. These Patents have not been included in the LDA on the understanding that they are not a material requirement for the development and commercialisation of the MiCK and TIRA IP. The Company has no right over the intellectual property protected by those patents. The Licensors have acquired a license which covers its prospective commercial activities and is required to take any actions under the Development Plan that need to be undertaken under that license.
11. The MiCK and TIRA IP consists of certain protected intellectual property rights, including patents, and a substantial amount of know how. The know how resides in the processes and procedures of the Company (including its Quality Assurance and Quality Control Systems, Lab Systems and Lab "Notebooks"). The know how also exists in the minds of certain individuals employed by the Licensors (and its subsidiaries) and the Company does not have any control over their employment or retention. However, the Licensors and DiaTech Oncology, LLC before it, have spent considerable development time in creating technology based systems and processes to manage that which is the subject of know how, reducing the risk of losing it when losing an employee and increasing the ability of the Company to retain and protect the know how.

12. There is no public market for any of the Company's issued securities. Investors may therefore be unable to liquidate an investment in the Company.
13. The Company's financial projections with respect to the Company's operations are based upon numerous assumptions. Some of the assumptions may not materialize and unanticipated events and circumstances may occur.
14. Fluctuations in the exchange rates, particularly the rate between the US\$ and £Sterling, will have an impact upon the costs of executing the Development Plan and the value of the income generated by the exploitation of the MiCK and TIRA IP.

The above identified risks must not be considered to be a comprehensive list of the risks associated with an investment in Shares as set out in this Information Memorandum. Prospective Investors should identify all risks associated with such an investment and take into account their own circumstances.



## PART 3

### A. THE COMPANY AND THE US PARENT

The technology platform the subject of this Information Memorandum, is the Micro-culture Kinetic (MiCK) platform, a platform technology that determines the functional (apoptotic) response of tumor cells to cytotoxic (anti-cancer) drugs. The MiCK Assay Platform and related MiCK IP was developed by DiaTech Oncology, LLC.

The entire business and assets of DiaTech Oncology, LLC were acquired by DiaTech, LLC on 16<sup>th</sup> October 2015 in return for shares in DiaTech, LLC (which shares were in turn acquired by DiaTech Holdings, Inc.). DiaTech, LLC, the Licensor, was set up with the purpose of making that acquisition and at that date had no other assets or business interests. The Licensor is the wholly owned subsidiary of DiaTech Holdings, Inc, the US Parent. The US Parent and the Licensor retain the same senior management as DiaTech Oncology, LLC. It is anticipated that DiaTech Oncology, LLC shall be wound up in the months following the date of this Information Memorandum. The primary reason for undertaking this corporate transaction was that a corporation as ultimate parent is the more commonly used structural vehicle for the raising of capital and the exploitation of intellectual property, rather than retaining ultimate ownership in an LLC structure.

The Company was incorporated as a wholly owned subsidiary of DiaTech Oncology, LLC and by reason of the above reorganization, ownership was transferred to the US Parent, the parent company of the Licensor. The Company and the Licensor will together develop the MiCK IP towards a Liquidity Event. In order to define this relationship, the Company, under the LDA, has been granted an exclusive right to a broad technology and intellectual property license relating to the MiCK platform (and the option to acquire the said intellectual property) from the Licensor.

Under the terms of the LDA, but subject to raising the Minimum Subscription Level, DiaTech, LLC has licensed, on an exclusive basis, the use of the Patents and Know-How relating to MiCK and also the TIRA Assays (as described below) to the Company and has granted the IP Option. This provides the Company with an exclusive licence to develop, commercialise and then exploit the intellectual property relating to MiCK and TIRA Assays. All consideration payable under the licence is deferred and is payable only on the happening of a Liquidity Event as set out in more detail later in this Part 3.

Pursuant to the LDA, the Company will promulgate a Development Plan based on the Business Plan which will set the milestones and timeline for the development of MiCK Assays and TIRA Assays and the MiCK and TIRA IP, against the projected budget and expenditures. The Development Plan will set out the part of the development work to be conducted by the Company, and the part of the development work to be conducted by DiaTech, LLC, and/or other parties and affiliates of the Company. The funding for the Development Plan will come from the Company, and be executed by the executives of the Company and the Licensor under a level of oversight by the Independent Directors of the Company. An Independent Director of the Company with an executive role shall be requested by the Directors to monitor the execution of the Development Plan. The Company has the longer of 90 days from the effective date of the LDA or 30 days from the time it is notified that the Minimum Subscription has been received to submit the Development Plan to the Licensor of the MiCK and TIRA IP. The Independent Directors can, in their discretion, bring in new executives (not as directors of the Company) to manage the Development Plan if issues arise with the management of the Development Plan otherwise than as a result of a failure to raise sufficient funds to meet the budget.

Under the LDA, the Company shall seek to develop and commercialize the MiCK and TIRA IP. A substantial proportion of this development activity will be undertaken by the Licensor and its subsidiaries under contract with the Company. The regulatory framework and requirements for approval are set out in more detail below in Section D of this Part 3 of this Information Memorandum. The Company and the Licensor intend to develop structures which will enable them to take advantage of R&D and other tax credits as may be available for a development program of the kind described in this Information Memorandum.

To execute on the Development Plan, the Company will deploy clinical development and commercialization functions in the US, and with Management, expand such to include a European laboratory, clinical development and commercialization capabilities in support of EMA approval and commercial launch in the EU.

For the purposes of the Business Plan below, the Company, the Licensor and the US Parent have approached the development of the MiCK and TIRA IP as though the Company, the Licensor and the US Parent were a single entity, save where stated. As Management is common to all of the companies and they are contractually obliged to act in tandem under the LDA, the separation of the entities in the development of the Business Plan has not been considered by Management to be necessary. Management are of the view that such a separation would not result in a materially different outcome in the Business Plan or the financial projections set out below, nor would it result in any material impact on any of the Development Plan, nor on when and at what value a Liquidity Event might occur.

As set out in the Business Plan below, there is a possibility that the US Parent and/or the Licensor might acquire other businesses and diagnostic platforms that complement the MiCK Assay Platform. Such acquisitions would be separately financed, and would therefore not impinge on the prospects of the Company. One possible effect of such an acquisition might be that some of the Management and other overhead could be spread across more than one entity, lowering to a limited extent the funding requirement for the development of the MiCK and TIRA IP.

**B. Annual Reporting and Audit**

The Company will provide an annual report, including accounts, to the Investors. Each Investor shall also receive a half-yearly summary report of Company progress and financial status.

The Company may, at its sole discretion, supply other information from time to time – particularly in the case of a proposed sale of all or part of the Company or its assets to a third party. In addition, it may be beneficial to revalue the business, or part thereof, from time to time, the results of this revaluation, if it occurs, will be made available to the Investors.

On or about 29<sup>th</sup> October 2015, KPMG LLP, a leading provider of professional services, was appointed as statutory auditor of DiaTech Oncology Limited.

**C. THE BUSINESS PLAN****Summary Business Plan****EXECUTIVE SUMMARY**

The uniqueness of the MiCK Platform is that it provides a direct, real-time determination of tumor cell response (and likely treatment response) to cytotoxic (chemotherapy) drug treatment by measuring programmed cell death (apoptosis) as it happens in living cancer cells harvested from patients. The Company's platform represents a very important, transformational change in the selection and use of cytotoxic drugs that promises to materially improve treatment outcomes in a very broad range of cancers. It is unlike any other system in place or in development.

Approximately 85% of cancer patients receive cytotoxic chemotherapy as a keystone in the treatment of cancer. The selection of cytotoxic drugs used in cancer treatment continues to be based on treatment protocols developed as a result of large, multi-centered studies that retrospectively analyze outcomes as a function of treatment received by patients in blinded controlled studies. This approach was necessitated by the stark reality that no predictive or "response-directing" diagnostic technologies were available, a circumstance that, to an overwhelming degree, remains unaltered at this time. The ability to predict tumor response to cytotoxic (Chemo) treatment represents a very significant, treatment limiting, unmet need that the MiCK platform addresses, and represents an important and potentially game-changing attribute of MiCK.

The provision of patient-specific treatment selection based on validated tumor responsiveness, the core defining business mission of the Company, is fully aligned with rapidly evolving clinical and market trends in Oncology, a trend that is increasingly shifting treatment selection from protocolized to personalized (rational) treatment. The Technical Product Profile (TPP) of MiCK is that the platform rapidly delivers "clinically relevant and actionable data on the cellular susceptibility (or resistance) of individual patient cancer(s) to chemotherapeutic drugs, thereby providing the ability to target patient-specific chemotherapy and improve treatment outcomes". In cell-culture models, and proof-of-concept clinical studies, this TPP has been repeatedly demonstrated. Consequently, the Company's MiCK platform promises to substantially accelerate the movement toward "rational therapy selection" that favorably impacts near-term oncology treatment triage and outcomes.

Over the past six years the DiaTech Oncology, LLC has successfully industrialized the platform so that it can: 1) reliably and reproducibly process multiple samples a day, 2) deploy a robust computer algorithm that "translates" laboratory findings into clinically meaningful data, 3) complete multiple controlled clinical studies to support regulatory approval and wide-scale clinical acceptance, and 4) position the MiCK platform to routinely and reproducibly provide actionable information to physicians that will guide them to select optimum treatment for their patients. Investing approximately \$42 million, the DiaTech Oncology, LLC has created a state-of-the-art commercial laboratory facility at its headquarters in Nashville, a satellite full-service commercial laboratory facility in Montreal PQ Canada, and hired critical senior management to lead the business.

To transition from “esoteric” provider of information to experimental oncology, to the full commercial deployment of MiCK, the Company will execute a series of tumor-specific, randomized, statistically-powered, controlled clinical studies in support of regulatory approval; trials that will provide unequivocal “proofs” that patient outcomes are improved as a consequence of cytotoxic drug treatment selection based on MiCK.

The Company intends to maximize the value of the asset, with the US Parent intending to be a market leader in the provision of “Treatment-Directing Diagnostic Data” in support of improved cancer treatment outcomes. In so doing, the Company will participate in a rapidly growing market segment (currently estimated at \$15B in annual sales, a CAGR of 9.7% and projected to exceed \$25B by 2020), and in so doing, create very substantial shareholder value. In support of these objectives, and over and above MiCK, the Company has launched the development of its T-Cell Immunotherapeutic Response Assay (TIRA) platform, a platform that promises to determine tumor responsiveness to Immunotherapy through the analysis of tumor invading T-cells isolated from tumor tissue. TIRA naturally aligns to the Company’s MiCK platform in that T-cells are separated from tumor tissue that is harvested and used in MiCK. In the near future, also utilizing tissue harvested for MiCK, the Company will embark on its Tumor Antigen Identification (TAI) platform, a platform that will further guide immunotherapy based on the isolation of tumor-specific antigens “stripped” from harvested tumor cells.

The Company in conjunction with the Licensor under the LDA is well positioned to execute the Business Plan through major value inflection and cash flow positive operations by 2020. The Company will be materially reliant upon the US Parent and the Licensor in delivering the Business Plan. The US Parent is financially stable and the Licensor has inherited the closing balance sheet of DiaTech Oncology, LLC, with a current balance sheet that includes at the date of this Information Memorandum approximately \$4 million in cash, and additional fixed assets (including those held by its subsidiaries) including 2 functioning laboratories designed to develop and commercialize the MiCK Assays, with debt limited to minimal operating liabilities associated with day to day operations. The Business Plan calls for a rapid and substantial increase in cash burn in early 2016 to support expansion of development and organizational initiatives, followed by a ramp up of commercial activities in 2017.

Projected operating expense totals \$124 Million in aggregate through to Quarter 4 of 2019. These expenditures are partially offset by early revenues that will be driven by pharmaceutical and other life sciences collaborations projected to deliver a cumulative total of \$38 Million by the end of 2019. Additionally, Management projects utilization of cash already on hand, UK-based tax credits on R&D spend, and other fee refunds related to the Company’s financing program, though these will be dependent upon what operating structures can be utilized effectively by the Company and the Licensor in delivering the Development Plan under the LDA. After accounting for these additional offsetting items, projected to total \$16 Million, net funding required to achieve regulatory approval and launch of the Company’s lead products (2019) is projected at approximately \$70 Million.

Revenues are projected to continue to increase steadily and significantly following initial product launches in 2019. P&L projections indicate cash flow positive operations beginning in 2020 with the Company progressing towards high margins (>75% Gross and >35% Net or EBITDA) in line with comparable companies. Management anticipates a substantial increase in Company valuation by this time (2019-2020) through the successful completion of development and regulatory programs and market launch of its lead MiCK and TIRA products.

The Company and the US Parent recognize that multiple approaches will be required to fully address the objectives of providing physicians with data-based guidance to drive rational treatment selection in cancer. To this end, the Company and the US Parent will aggressively advance the acquisition and development of additional diagnostic platforms directed at oncology as part of its business mission to become a major provider of treatment-directing

diagnostic data to clinicians, and substantial contributor to improvement in Cancer treatment outcomes. These efforts will substantially and positively impact the commercial success and value of the MiCK and TIRA assets.

The Company, through its US Parent and the Licensor, will engage in collaborations with qualified and strategically aligned pharmaceutical, clinical, provider and payer organizations and institutions that will be selected on the basis of their ability to broaden the clinical exposure to its products-in-development (MiCK and TIRA Assays), contribute to physician and institutional acceptance, and accelerate the commercialization of its products and thereby enhancing its value. Such activity by the US Parent and Licensor is anticipated to accelerate commercialization and exploitation of MiCK and TIRA , to increase the profile of the assets in the marketplace and increase the opportunities for exit .

## **MiCK PLATFORM – TECHNOLOGY SUMMARY**

The fundamental enabling technology that drives the Company's core mission in oncology is its MiCK diagnostic platform. This important novel platform provides actionable and treatment-directing data relevant to patient-specific tumor pathology: it is based on the measurement and analysis of tumor cell response to cytotoxic and targeted small molecule cancer drugs. It is the only platform that directly measures tumor cellular death response (apoptosis) to drug exposure in real time.

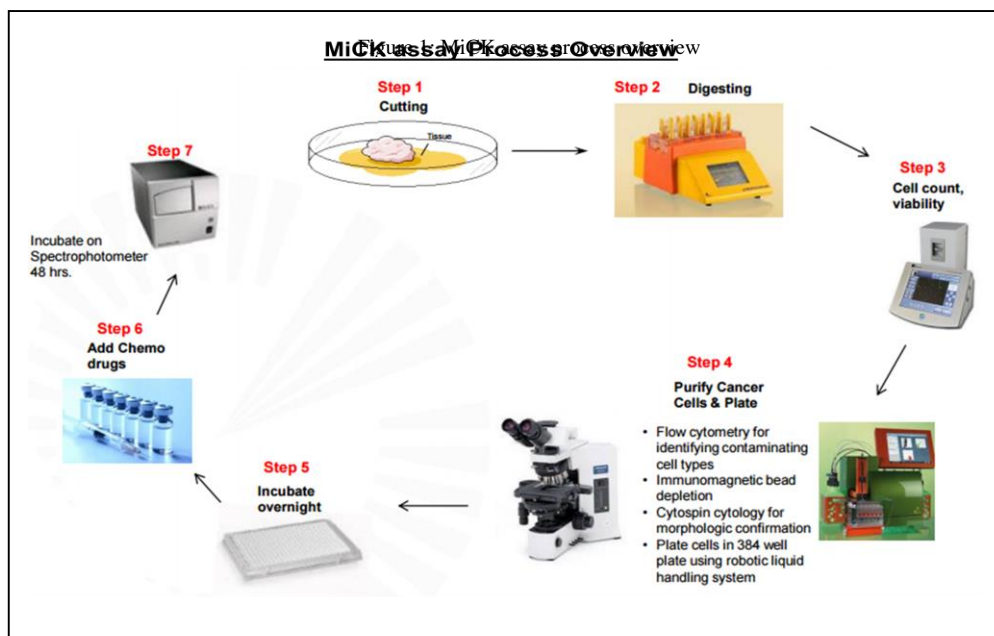
Apoptosis occurs at the natural end of a cell's existence (the body cycles billions of cells through apoptosis every day), but also as a response to physical, physiological, chemical and/or molecular damage. Incompatible re-arrangements of, and damage to, DNA, as well as the inhibition of the machinery of cell division, that act as significant triggers of cellular apoptotic response, and are the basis for chemotherapy and radiotherapy directed at cancer. Reflecting this, cellular apoptotic response to chemotherapy (and its markers) are powerful and important indicators of tumor response to drugs, and a predictor of patient response to treatment.

Apoptosis can be measured in a variety of ways. Foremost is utilizing the unique morphological changes that cells exhibit during apoptosis, such as the formation of membrane protrusions (zeiosis / "blebbing"). "Blebbing" represents a highly reliable metric that is recognizable using microscopy: it constitutes definitive proof of programmed cell death, and occurs after a "point-of-no-return" in the apoptotic sequence. It is this morphological change that the MiCK platform successfully and reproducibly measures.

The MiCK platform uses technologies proprietary to the Company and the Licensor that track cellular morphological changes, in particular membrane blebbing, as specific indicators of apoptosis. These markers are the core data sources that permit an integrated analysis of multiple occurrences of specific, single-cell responses over a pre-determined period. These continuous measurement modalities provide an automated, continuous read of apoptosis *in vitro*, that directly quantify drug-induced cell death in real-time. This data delivers a prediction of tumor response probability, or resistance, to specific cytotoxic agents.

### **Assay methodology:**

The MiCK platform relies on viable tumor cells harvested directly from patients. The ability to harvest and maintain viability of tumor material is a core and defining competency of the Company. Upon receipt of tumor tissue in the laboratory, cells are isolated utilizing immunomagnetic bead-based chromatography. Isolated and purified cells are plated on 384 micro-titer well plates followed by an incubating period to promote settlement (liquid tumors) or adherence (solid tumors). The process is summarized in Figure 1.



Following incubation, tightly defined dilutions of selected anti-cancer drugs (chemotherapy) are added to the test wells. Test plates are placed in a measuring spectrophotometer (PowerWave HT) that reads the optical density (changes in light scatter driven by changes in cell morphology) output of each well every 5 minutes for a period of 48 hours.

### **Platform Assay Analysis and KU metrics:**

By plotting Optical Density (OD) as a function of time, the extent of apoptosis and its precise timing can be determined in a cell population. More importantly, the steep slope characteristic of the apoptotic OD curve (driven by membrane “blebbing”) represents the maximum kinetic rate (V-max) of apoptosis and enables a reproducible and correlative calculation of direct apoptotic response. It is expressed in Kinetic Units (KU) using the following formula:

$$KU = (V\text{-max}_{\text{(drug treated)}} - V\text{-max}_{\text{(control)}}) \times 60 \times \text{Coefficient} \times 1000$$

...where V-max is the maximum calculated slope for treatment and controls, and the coefficient represents a pre-established measurement of the effectiveness of plating (the distribution of cells within the wells) that has been established experimentally for each cancer type, with derived threshold values serving as benchmarks for resistance (below threshold), or responsiveness (above threshold).

KU scores thus serve as a predictive metric of tumor response to a given drug.

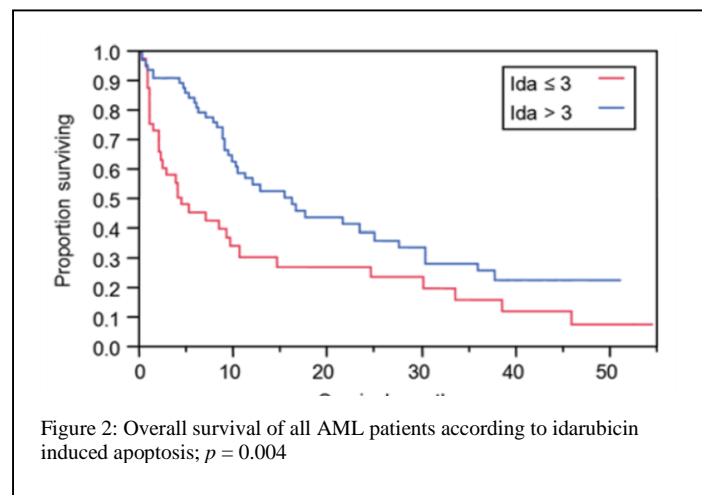


## **MiCK PLATFORM CLINICAL DATA**

The MiCK platform has been deployed in >1,000 patients, across 50 cancer types and subtypes. The MiCK platform has also been deployed in 8 clinical proof-of-concept studies that focused on correlating patient outcomes with assay-based tumor response predictions. The data generated to date in clinical studies clearly indicate that MiCK platform data successfully predicts tumor response to cytotoxic drug administration, thereby enabling actionable treatment selection and improved treatment outcomes. Below are summaries of data collected to date:

### **Clinical Data: Acute Myeloid Leukemia (AML)**

In a study published in *Leukemia and Lymphoma* (2013), the level of drug-induced apoptosis (functional profile) demonstrated by MiCK predicted outcomes following standard-of-care AML induction therapy. In this study, 109 patients with untreated AML had blood and/or bone marrow aspirate samples analyzed for idarubicin-induced (a cytotoxic drug used in AML) apoptosis using MiCK. Complete remission (CR) was significantly higher (72%) in patients with high idarubicin (cytotoxic drug) induced apoptosis (>3 KU) as compared to patients with low apoptosis scores (<3 KU) ( $p = 0.01$ ). Median overall survival of patients with idarubicin-induced apoptosis >3 KU was 16.1 months compared to 4.5 months in patients with apoptosis <3 KU ( $p = 0.004$ ) (Fig. 2). This demonstrated a clear ability to select patients on the basis of MiCK data and formed a powerful and compelling proof-of-concept result.

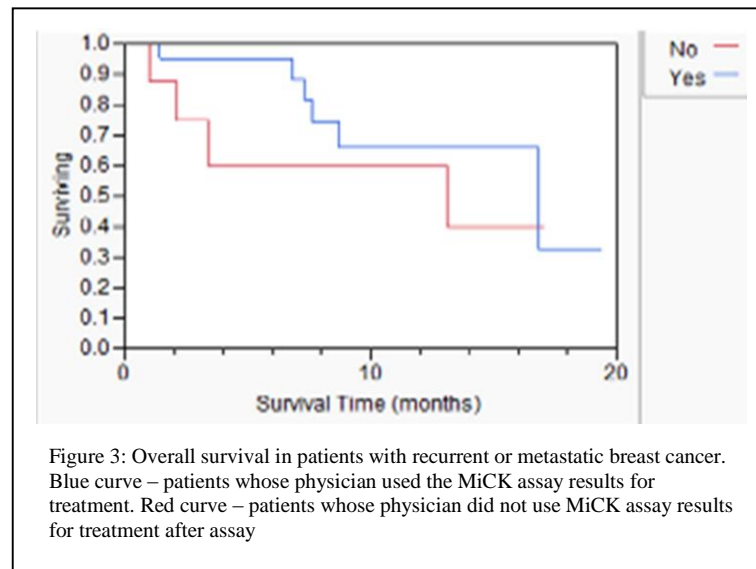


### **Clinical Data: Breast Cancer**

In an open-label, prospective, institutionally controlled clinical proof-of-concept study, 30 patients with recurrent or metastatic breast cancer who had received treatment with standard-of-care chemotherapy, had tumor samples submitted for MiCK analysis. Treating physicians were provided with MiCK assay results within 72 hours of biopsy and were permitted to use the information to inform subsequent treatment decisions.

In this study MiCK successfully characterized drug-induced apoptosis in breast cancer patients, and identified which drugs resulted in the highest level of apoptosis. As part of this study, patterns of drug activity were analyzed in triple negative breast cancer. Different drugs

from within a single class of agents were shown to result in significantly different apoptotic responses. Patients whose physicians used MiCK to inform treatment decisions had higher response rates (CR+PR) as compared to non-users (38.1% vs. 0%,  $p = 0.04$ ) with higher disease control rates (CR+PR+Stable), (81% vs 25%,  $p < 0.01$ ). Time to relapse was longer in patients whose physicians selected treatment on the basis of MiCK results vs. those that did not (7.4 months and 2.2 months, respectively;  $p < 0.01$ ) (Figure 3).

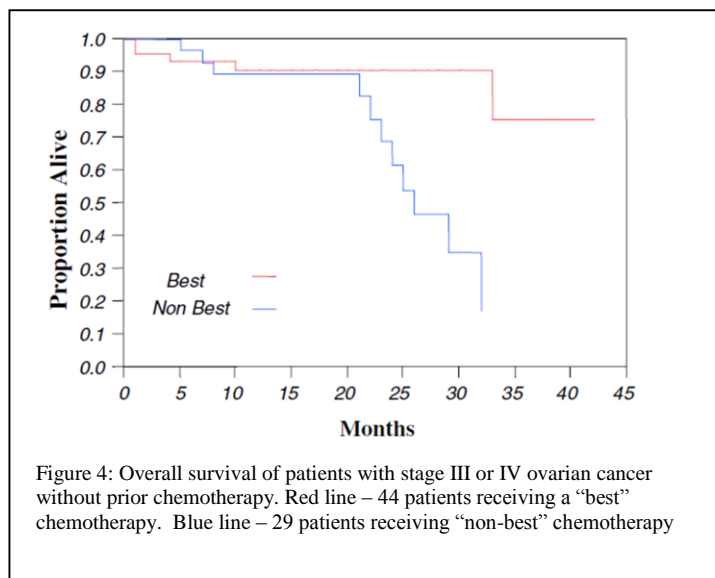


### Clinical Data: Ovarian Cancer

The utility of the MiCK platform to predict optimal therapy in patients with ovarian cancer was assessed in a blinded, prospective, multi-institutional study of 104 evaluable ovarian cancer patients treated with chemotherapy. Prior to treatment selection, tumor tissue from each patient enrolled in the study was subject to MiCK evaluation. Treating physicians were not provided with the results of MiCK analysis, leaving treatment selection to the physician, with selection generally following standard-of-care guidelines. Outcomes (response times to relapse, and survival times) were compared as a function of drug-induced apoptosis as measured by MiCK.

Overall survival in chemotherapy naive (no prior treatment) patients with Stage III or IV disease was longer if patients received chemotherapy that was identified as “best” (highest KU values) in MiCK, as compared to shorter survival in patients who received chemotherapy that was “not best” ( $p < 0.01$ ). Standard-of-care treatment with carboplatin + paclitaxel (C+P and standard of care in ovarian cancer treatment) was “not best” chemotherapy as adjudicated by MiCK in 44% of patients. Patients who received C+P that were shown to be “best” chemotherapy by MiCK had longer survival times than those receiving C+P where MiCK showed it was “not best” chemotherapy ( $p = 0.03$ ).

Relapse-free interval in primary therapy patients was longer if patients received “best” chemotherapy as identified by MiCK ( $p = 0.03$ ). Response rates (CR+PR) were higher if physicians used chemotherapy based on MiCK ( $p = 0.03$ ) (Figure 7).



# **ONCOLOGY MARKET: DATA-DRIVEN TREATMENT SELECTION**

## **Market Overview**

The global oncology market represents one of the most robust healthcare product markets in the world. It is characterized by a shifting commercial landscape and a high degree of innovation. In 2014 global oncology spending reached \$105B, with an annual growth rate of 7.6%. The market is projected to reach \$175B by 2020. Global cancer incidence, currently estimated at 14.1 million, is driving this robust market growth and is forecast to increase by 50% by 2020 (World Health Organization “WHO”).

Over the past five decades there have been significant advances in technologies dedicated to understanding and treating cancer. These developments have led to an overall improvement in patient outcomes, improvements that have largely been driven by advances in therapeutics and, to a significantly lesser extent, by diagnostics that guide the selection of optimal treatment.

The clinical and pharmaceutical approach to cancer treatment has traditionally been driven by protocols that are specific to individual tumor types and are typically defined by their anatomical organ of origin (lung cancer, colon cancer, breast cancer, etc.). Protocolized medicine, focused on primary tumor treatment, remains the mainstay of oncology treatment; however, these protocols are increasingly adopting targeted approaches that leverage patient-specific and patient-tumor-specific data to optimize therapy selection. The role for treatment-directing data is necessarily greatly increased, with technologies and products to deliver such information nascent.

The early drivers of personalized (rational) cancer treatment selection reflected the arrival of targeted pharmaceuticals that block or otherwise interfere with patient-specific, cancer-specific molecular targets (point-mutations, transduction pathway activation, etc.) as the primary target of therapeutic intervention (treatment target). Herceptin (Roche-Genentech) is a widely recognized example of such a targeted therapeutic. Herceptin targets tumors with genes that express the HER-2 marker (oncogene). In breast cancer this represents ~30% of patients who have been shown to express HER-2 and where studies have confirmed benefit from this highly targeted and specific therapeutic intervention. A large number of such highly targeted drugs have launched in the last 15 years, including Avastin, Tarceva, Nexavar, and Gleevec. In the major global markets (N. America, EU, Japan) these drugs drive an estimated ~\$50 billion market segment.

As the industry shifts to ever more customized treatment strategies that target molecular and metabolic markers, mutational status, and expression profiles of specific cancers, a market has been created for sophisticated diagnostic platforms that identify the presence and relevance of such markers, and match patients and marker expression to targeted therapies. This evolving diagnostic market is currently valued at \$15B, is enjoying rapid growth (CAGR 9.7%) as more biomarkers (and other targets) are identified and diagnostic data is required to direct treatment, and is expected to reach \$22B by 2018. Advances in enabling technologies, such as next generation sequencing (Next-Gen) and pathway activation status (expression profiling), are driving the rapid growth in this market segment and the opportunities to serve this market continue to expand as increasing numbers of drugs are developed that depend upon specific patient and tumor data to optimize therapy selection.

Oncologists, and their patients, have become increasingly comfortable with “rational” treatment regimens that rely on targeted therapy. At present, targeted therapies, including immunotherapy and tyrosine kinase-inhibitors (TKIs), drive the majority of targeted treatment. There is a parallel and important evolving trend toward targeted selection of cytotoxic (chemotherapy) agents based on the same rationale used for these widely deployed drugs. It is this latter market that MiCK uniquely addresses.

At present, the need for effective predictive/prognostic diagnostics directed at cytotoxic agents remains largely unmet. Given that ~85% of all cancer patients receive chemotherapy or other cytotoxic therapy at some point in their treatment, the need for “rational” treatment selection is well-understood yet poorly addressed. Currently, there is only one approved and adopted assay directed at customized chemotherapy (in ovarian cancer) – Chemo-FX. This reality, in large part reflects the negative oncology community experience with the majority of 1<sup>st</sup> generation “chemo-sensitivity” platforms (as opposed to chemo-response platforms). While the market for such “response platforms” is nascent (Chemo-FX 2014 revenues were \$87.5M), it is primed for rapid growth. This is the primary market focus of the Company.

The Company has selected a group of four cancers to launch its MiCK platform clinical development program. This high-intensity effort reflects the outcomes of the Company’s proofs-of-concept studies that demonstrated that patient outcomes in the selected cancers directly benefit from MiCK-directed treatment selection (rational treatment selection). The four selected cancers are characterized by significant levels of unmet need (low survival rates), large patient volumes (significant market opportunity), and a high degree of drug multiplicity (multiple drugs available for treatment with different modes of action).

(See Chart Below for Details)

<b><u>Cancer Type</u></b>	<b><u>Selection Rationale</u></b>
<b><u>Acute Myeloid Leukemia (AML)</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes with very poor survival rates for patient 60+ yrs</li> <li>• Need to identify sensitivity to justify treatment – patients often given supportive care due to risk associated with chemo and unsure response to treatment</li> <li>• Poor survival statistics (patients 60+)</li> </ul>
<b><u>Triple Neg. Breast Cancer (TNBC)</u></b>	<ul style="list-style-type: none"> <li>• Composed of 6-8 subtypes that each respond differently to chemo</li> <li>• No commercially available way to type TNBC</li> <li>• Selection of wrong chemo can make some subtypes of TNBC more aggressive</li> </ul>
<b><u>Ovarian Cancer</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes</li> <li>• Disease presents late with high risk for metastatic relapse</li> <li>• Selection of “best” chemo can significantly increase outcomes</li> <li>• Poor survival statistics for late stages</li> </ul>
<b><u>Colo-Rectal Cancer (CRC)</u></b>	<ul style="list-style-type: none"> <li>• Third most common cancer in men and women in the United States with a prevalence of ~1.1 million</li> <li>• Overall 5-year survival rates are ~65%, with survival rates significantly impacted by disease stage itself directly related to the time of detection</li> <li>• Mortality rates have also been falling on average 3.1% each year over the same period</li> </ul>
<b><u>Non-Small Cell Lung Cancer (NSCLC)</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes</li> <li>• Ability to select best treatment option early can significantly improve outcomes</li> <li>• Poor survival statistics</li> </ul>

## **Competitive Positioning**

The global market for diagnostic products directed at oncology, including traditional in-vitro assays, imaging technologies, innovative treatment-directing and molecular technologies, is currently estimated to be ~\$55 billion, with an annual CAGR of ~6.5%. Of this market, ~\$15 billion is driven by advanced diagnostics and informatics that drive treatment-directing and data-driven treatment in oncology, with a CAGR of ~9.7%. This market segment represents the most active and innovative sector of the oncology diagnostics market, and is the target market for the Company.

Companies active in this sector include large, well-established diagnostic product companies, including Roche-Diagnostics (~25%), Siemens (~13%), Abbott (~10%), Thermo-Fisher (~5%), and innovation and technology defined companies that represent the leading edge of technological advance in cancer diagnostics (Foundation Medicine, Genomic Health, Helomics, NanoString, etc.).

These technology-defined companies are focused on commercializing treatment-directing diagnostic technologies, based on platforms they have in development. These companies represent the primary competitive landscape within which the Company will build its technical, clinical and commercial franchise. These companies, including DiaTech and Prometheus-CEER Oncology (Nestle), constitute the primary drivers of innovation in a market fueled by private and public-market investment (Genomic Health ~\$850M market cap in August 2015) or through corporate investment (Roche \$1.0B investment in Foundation Medicine) and outright acquisition (Roche \$3.4B acquisition of Ventana).

The defining differentiation and competitive advantage of the Company is the unique ability of its MiCK platform to measure apoptosis (programmed cell death) in real-time in a wide range of cytotoxic drugs; a functional assay platform unavailable to oncology up to this time. The MiCK functionality delivers direct quantifiable measurement of tumor response to cytotoxic drug exposure and the promise of predictive tumor response to cytotoxic drugs in treatment. Previous attempts to determine tumor sensitivity to cytotoxic drugs have all faltered because they were not directed at apoptosis itself (rather a surrogate marker for apoptosis) and were not executed in real time, both critical to a truly functional, response-directed platform.

Competitive chemo-sensitivity assays attempt to determine tumor response at single measurement time points, generating results that are frequently highly variable given the heterogeneous and dynamic nature of cancer cells and their biology. Notable companies that utilize this approach include Rational Therapeutics and AccuTheranostics, both of which are challenged by single time point selection and lack institutional support.

As discussed in the Technology section above, the Company's MiCK platform measures apoptotic response in cells administered cytotoxic drugs every 5 min for up to 48 hours, providing an encompassing real-time assessment of tumor response that is solidly reproducible and stridently more relevant than all competitive technologies in market or under development. Universally, such competitive technologies leverage proxy measurements (endpoints) to assess tumor response to cytotoxic drugs. (For example, leading competitive company ChemoFx calculates the number of cells adherent to assay test-wells following incubation with target cytotoxic drugs as the surrogate measurement for assessing apoptosis). While experimentally correlated (adhesion is a requirement of most solid tumors for proliferation), this surrogate end-point often leads to false positive results.

Other competitive platforms (Oncotype, Nanostring) are based on genetic assays that identify specific activating mutation(s) that may pre-dispose patients to treatment failure or relapse following initial treatment. Such genetically-based platforms are utilized to identify patients that

may benefit from adjuvant therapy. These technologies can be highly effective in assessing risk of relapse and the need for additional (post-treatment failure) drug regimens; however, they are focused on identification of risk only, not the selection of treatment. While loosely in the same “market space”, these platforms are not directly competitive with the Company’s MiCK assay as they are not focused on specific/optimal drug selection based on cellular response to cytotoxic drugs response. As a rule, genetics-based platforms are limited to indicating the presence of mutations/markers, and do not inform the physician as to the status of that mutation/marker or its likely impact on treatment selection or patient outcomes.

The Company’s MiCK platform occupies a specific market segment within the overall oncology diagnostic market. Unique within this market, the MiCK platform informs oncologists as to the response probability of tumors to a panel of cytotoxic drugs (those generally used in the treatment of the specific cancer). This uniqueness is based on the biology of apoptosis, and directly measures the development of apoptotic response of tumor cells in real time. This represents a powerful and defining performance advantage for the Company.

Consequently, the MiCK Assay represents a best in class chemo-response assay that provides substantially more accurate data with substantially greater clinical utility than its direct competitors. Related technologies that utilize genetic profiling occupy a similar but not directly competitive position in the market. Management and its advisors are aware of no competitive technology that is expected to surpass or directly compete with MiCK in its current form. The Company’s business plan includes development of substantial additional IP as well as securing extensive regulatory exclusivity through the execution of clinical studies in support of FDA approval through the IDE-PMA approval route. Management is confident that MiCK is well-positioned for market success given the strength of its technical, clinical development and regulatory programs that leverage the strength of an already highly advanced and unique technology.

The Company will continually augment and expand its products and diagnostic platforms so as to be in a leadership position in providing clinicians and their patients with treatment-directing information that delivers improved treatment outcomes at lower cost.

## **RESEARCH AND DEVELOPMENT PLAN**

The Company has embarked on a major initiative to develop and commercialize its MiCK platform around two lead indications, Acute Myeloid Leukemia (AML) and Triple Negative Breast Cancer (TNBC). These targets represent liquid (AML) and solid (TNBC) targets, are directed at cancers with high unmet needs, and where the impact of MiCK has been well established through the Company's proof of concept clinical studies. The development plan focuses on these two lead targets and has been designed to maximize the probability to demonstrate clinical success, create near-term demand for MiCK driven rational selection of chemotherapy, and unimpeachable confirmation of improvement in outcomes.

The selection of these lead indications results from an encompassing prioritization analysis of tumor and patient types conducted on the Company's proof-of-concept data and biased by prior MiCK assay success. The selection was also predicated on unmet patient needs. The development plan calls for a parallel, focused, high-intensity systems development effort that will deliver improved throughput, robustness and performance characteristics of the MiCK platform (and extensive new IP), and completing the industrialization of MiCK. This will be followed by extensive and encompassing validation studies of these systems in observational clinical studies that prelude the Company's pivotal clinical studies supporting FDA (US) and EMA (EU) regulatory approval. It is projected that this plan, including the development of clinical proofs, will be completed in a 3.5-year timeframe.

### **Assay Optimization and Development**

The Company's MiCK Platform Optimization and Development program will advance down three parallel execution pathways that address: 1. Assay Process Technology; 2. Assay Analytics; and 3. Platform Evolution. The Company expects the near-term imperative objectives of these three pathways to be verified and validated by Q2 2016 (Fig. 5 below), prior to the initiation of the observational, and then pivotal, clinical program, with further work unfolding as process improvements are deployed.

#### **1. MiCK Assay Process Development and Optimization:**

- **Tissue Sample Shipping Units (TSSUs):**

As the performance of MiCK is dependent upon receipt of viable cells, the Company has explored methods to maintain the highest degree of cell viability. A major identified area to improve cell viability is improved shipping. To address this objective, the Company is designing and testing TSSUs that contain all required (and sterile) media, is capable of tightly maintaining optimal transportation temperatures (~6 °C) over a 24 hour period in all ambient temperatures, and minimize sample agitation. The TSSU selected will be subjected to extensive shipping validation studies before deployment or modification. The Company has initiated this effort, and confidently expects that a new proprietary TSSU will be developed that significantly improves cellular viability to a target of 90-95%. The Company expects this effort to be completed prior to the initiation of pivotal clinical trials, and that a successful development would enhance the MiCK Assay Platform.

- **Reduction in Required Assay Biomass:**

The platform currently utilizes 384 micro-titer well plates that require plating ~20K cells per well to achieve optimal OD readings and excellence in test performance and results. The current biomass requirement defines the amount of tissue required to



complete a MiCK analysis. Reduction in required biomass is a primary objective for the Company, with significant improvements already achieved. To advance this important effort, the Company has initiated a program to develop novel micro-titer well plates (with expanded IP) with a significantly reduced OD reading area (decreasing from 1800  $\mu\text{m}$  to 400  $\mu\text{m}$ ) and a corresponding per well biomass requirement of only ~900 cells (a 20 fold reduction). Preliminary well designs that incorporate polystyrene well inserts to achieve the desired reduction in reading area, have demonstrated measured response rates in cell lines that match closely to comparator assay runs in current (large format) assay plating. The Company has extended this program and is in process to design a new (unique) well plate mold to manufacture the new well plates in a single use format.

- Cell Adhesion:

Cell adhesion, and uniformity of the cellular monolayer, is required to limit variation in OD readings. This requirement is universally true in solid tumors (breast cancer, ovarian cancer, lung cancer etc.), all of which require adhesion to grow and proliferate. Given that cytotoxic agents generally require cells to be in proliferation to act, and as cell adhesion is a pre-requisite for tumor (solid) cells to proliferate, successful cellular adhesion is a critical requirement for MiCK platform performance that enables the reliable measurement of apoptotic response to anti-cancer drug exposure. Current plating procedures achieve approximate and uniform adhesion in the great majority of circumstances. However, a very limited number of wells plate inconsistently (non-uniform layering) resulting in test failure. This program will remove this variable in the near term. Cellular adhesion in wells is not an issue in liquid tumors (e.g. AML) as these tumor cells do not require adhesion to proliferate and can be spun to place cells uniformly on the well bottom.

The Company has commenced optimization studies for cell adhesion and Management is confident that the Company can improve cell adhesion for the purposes of the MiCK Assay in solid tumors.

- Standardized Drug Stamps:

The MiCK assay currently relies on laboratory technicians to prepare concentrations of cytotoxic drugs at the time of assay, after which an automated liquid handling system (Hamilton Corp) introduces drugs individually to test wells according to assay protocols. This procedure can take up to 30 minutes to complete, and represents a choke point in the assay process which, once test volumes significantly increase (commercialization) will lead to inefficiencies and associated costs. The Company has commenced development of a standardized drug stamp device to address this issue; a device that will deliver NCCN-guideline drugs to the test wells as part of a standardized, tumor-specific, assay panel; simultaneously and repeatedly.

## 2. Improvements to, and Automation of, Assay Analytics:

In its current configuration the MiCK platform generates functional response profiles by quantifying the maximum slope of the OD curve (see technology section) generated within a specific time frame (36 time-points). While this methodology is applicable to many of the drug classes utilized in MiCK, and the software algorithm (ProApo) is capable of generating reliable and reproducible KU metrics for these, there remain instances where drugs administered to test wells generate responses that are not captured within the defined time parameters of MiCK platform assays as currently configured. As a result, every apoptotic response curve is reviewed (and amended as

required) by a staff pathologist – a process that is both time consuming and an evolving bottleneck in a high volume operation. To address this, the Company has initiated a major development initiative that will upgrade algorithm utility to normalize OD curved interpretation and improve its sensitivity. IT and Bioinformatics specialists have been consulted on this effort, and the Company will aggressively retain professionals to immediately update its ProApo program to improve the identification of “maximum slopes” (without defined time points) so as to more predictably determine KU metrics. There is a high degree of confidence that this issue will be resolved by Q-1 2016. These limitations only impact a minority of tumors.

## **Additional Platforms in Development**

### **1. T-Cell Immunotherapeutic Response Assay (TIRA Platform)**

Tumors are able to become established, and proliferate, by evading anti-tumor immune-responses and up-regulation of the immune system-suppression pathways. Immuno-therapies that inhibit immune-suppression mechanisms (such as check-point inhibitors) have shown unprecedented rates of durable clinical response in substantial numbers of diverse cancer types. Patients that are *a-priori* identified as “responders” (as determined by known markers or mutations) exhibit overall response rates as high as 75% (anti-PDL1 trials), with up to 90% disease control. Unfortunately, identifying responders remains a very significant challenge in selecting patients for immunotherapy, resulting in blended response rates remaining in the 15%-35% range depending upon the cancer. The identification and characterization of molecular and cellular “markers” in the tumor microenvironment at baseline to predict patients that are likely to respond to therapy remains a major unresolved challenge to immunotherapy selection.

To provide a clear and unambiguous indication as to whether (and which type) of immunotherapy treatment will have efficacy, the Company will harness its well-established core competencies in tissue harvesting, tissue viability maintenance, cell separation, isolation, and identification to develop and commercialize its novel TIRA platform that will predict patient response to selected immunotherapies.

Evidence increasingly indicates that a significant relationship exists between the pre-treatment tumor micro-environment and patient response. Specifically, the presence of tumor-infiltrating T-Cells (CD8-positive) within a tumor significantly correlates to positive immunotherapeutic response (such as tumor mass reduction, improved progression-free and overall survival, and disease stabilization) in numerous cancers including: lung, colorectal, ovarian, and breast cancer. This list continues to expand as clinical trials identify factors associated with positive response. The presence and degree of infiltrating T-Cells, and the type of T-Cells, is increasingly confirmed to be an effective predictor of immunotherapy response probability, and a significant opportunity (unmet need) exists to deploy a reliable platform that identifies and characterizes T-Cell populations within a tumor mass (patient biopsy sample).

The Company’s core competencies are anchored in cell-separation, isolation and identification, competencies that uniquely position it to become a leader in T-Cell quantification and characterization. To advance this growing opportunity, the Company will use its suite of proprietary cell isolation, stabilization and preparation methods to develop and deploy a novel assay platform to enumerate and characterize relevant T-Cells populations present in tumor samples (biopsy, FNA etc.), with resulting data utilized to categorize patients as likely “responders” or “non-responders” to candidate immunotherapy, and direct treatment selection.

- **TIRA Process Development:**

T-Cells are present within the majority of solid tumor samples harvested for MiCK analysis, and can be purified from separation (waste) fractions generated during routine MiCK assay preparation. Utilizing all samples that arrive, the Company will develop, optimize and validate its TIRA platform with the purpose of preparing it for initial clinical development and deployment.

The Company will initially target colorectal cancer (CRC) to lead the clinical development of its TIRA platform. Following the confirmation of clinical utility in CRC (positive results as demonstrated through the identification of responders and non-responders), the Company will expand the TIRA platform into a growing portfolio of cancers eligible for immunotherapy, including breast, ovarian, melanoma, and gastric cancers. The Company's cell separation technology, deployed as a critical component of its MiCK platform, will serve as the separation methodology to isolate T-Cells from samples, initially validating the platform from cells isolated from MiCK studies. As data is collected and outcomes are reported, the Company will develop algorithms that translate raw T-Cell counts and T-Cell type population ratios into response probability projections (responder and non-responder; immunotherapy selection and outcome prediction).

With the dramatic rise of immunotherapy in cancer treatment, the "4<sup>th</sup> pillar" of cancer treatment, the Company projects achieving early success and access to this market (within two years), securing revenues from three sources as the assay is developed and deployed:

1. Bio-Pharma collaborations - patient identification, stratification and study optimization
2. Deployment in clinical studies advanced by early adopters, and their conversion to the use of the platform
3. Commercialization as a component of the Company's cancer treatment-directing portfolio, leading to wide-spread adoption.

## **2. Tumor Antigen Identification (TAI Platform)**

Tumors exhibit unique molecular signatures on cell surfaces in the form of tumor-specific antigens. These antigens serve as targets for immunotherapy, allowing for highly-specific and directed therapeutic intervention. The number of identified tumor-specific antigens continues to increase, with their potential to act as immunologic targets in cancer therapy representing an area of profound future relevance and promise in cancer management and treatment. The utilization of tumor antigens to identify and predict patient response to immunotherapy is widely recognized within Oncology as the future for treatment expansion and profound improvement in outcomes.

The capture and identification of tumor-specific antigen "signatures" requires an ability to handle and purify tumor cells while preserving cellular surface structures and elements for analysis. These required technical skills in cell purification, stabilization, manipulation and processing are core competencies that define the Company. While this target of development is early and experimental, it represents a forward looking opportunity that leverages the core competencies and skills resident at the Company, positioning the Company to become a dominant provider of information on patient antigen composition, a likely future high value opportunity.

The Company will launch its TAI platform development program focused on identifying, isolating and harvesting tumor surface antigen composition from its flow of tumor samples (MiCK and TIRA clinical studies). The Company will compile a proprietary antigen information data base that examines and archives patterns of expression within tumor types, leading to a pre-emptive lead in this likely pivotal field of Oncology. It is anticipated that such data will be of high value in predicting response to therapy, identifying new therapeutic targets, and in generating antigen profiles used in the development of cancer treatment vaccines (Immunotherapies).

## **Clinical Development Programs**

The Companies early proof-of-concept studies have demonstrated the therapeutic relevance and importance of the MiCK platform. In order to secure wide-scale adoption of MiCK in clinical practice (Oncology), the Company will execute pivotal studies that are designed to unequivocally demonstrate clinical proof of predictive response efficacy through objective clinical trials. Reflecting this imperative, the Company will embark on an encompassing clinical trials program that will validate the utility of the MiCK platform in the clinical setting, and deliver statistically significant proofs of predictive efficacy in appropriately blinded prospective clinical studies. To this end, the Company has targeted Acute Myeloid Leukemia (AML) and Triple Negative Breast Cancer (TNBC) as lead indications (with Ovarian, Colorectal and Lung Cancer to be positioned as follow-on targets) to deliver proof of clinical efficacy and therapeutic relevance of the MiCK platform to clinical oncology. The choice of these “lead” tumors results from an encompassing prioritization analysis of tumor and patient types conducted on the initial proof-of-concept data and biased by prior MiCK platform successes. It is also predicated on compelling unmet patient needs that MiCK is designed to be able to address.

The Company will advance its MiCK platform clinical proofs program through aligned but parallel study designs:

1. **Validation and Observational Studies**

Focused on confirming the performance characteristics of the MiCK platform as modified;

2. **Clinical Proof Studies**

Focused on securing clinical proofs in support of improved outcome claims, and in support of successful IDE/PMA regulatory approval of tumor specific MiCK assays.

1. **Validation and Observational Studies**

As it advances its MiCK development and process improvement objectives, the Company will embark on a parallel clinical validation program that partners the Company with institutional collaborators to confirm MiCK performance objectives. AML and TNBC (and a limited number of other tumor) samples will be sourced from Centers of Treatment Excellence (CTE) across the US, Canada and Europe. These samples will be used to verify and validate all operational and performance aspects of the MiCK platform to identify response ranges, and tailor metrics that identify tumor functional response profiles.

The Company will proceed to conduct observational studies in AML and TNBC (~150 patient samples per tumor type). The results of these studies will be published in peer-reviewed journals. It is the Company’s objective that these observational studies serve as the foundation for its pivotal Clinical Trials Program in AML and TNBC (to be followed by other selected tumors). It is anticipated that assay validation efforts will start Q-2, 2016 and end Q-3, 2017 for AML, and start Q-3 2016 and end Q-4, 2017 for TNBC (Fig. 5).

2. **Clinical Programs**

The Company will utilize results from its validation and observational studies as adjunctive data to previous studies in support of its clinical trials program; as proofs-of-concept studies in support of its AML and TNBC study plans and IRB submissions. These studies will serve as the foundation on which multi-center, blinded, prospective clinical studies will be initiated in both indications.

- AML Trials:

Treatment naïve men and women over 60 yrs of age with histologically confirmed, persistent AML will be recruited under an IRB-approved protocol (all karyotypes will be eligible). The trials will target a minimum of 500 eligible patients with the study design randomly designating patients between two arms of the study (~250 per arm).

- Experimental arm (assay-directed treatment selection cohort)

Patients' samples will be harvested from venous blood draws or bone marrow aspirates post diagnosis but prior to initiation of induction therapy, and sent overnight to the Company's CLIA/CAP laboratory in Nashville, TN. Upon arrival, the samples will be processed according to the MiCK AML protocol (see above section *MiCK Assay Technology Platform*), and response profiles determined from a pre-selected (and IRB approved) panel of drugs targeting AML. Results of each assay will be made available within 72 hours of sample arrival to the treating physician who will administer the drugs that yielded the greatest functional response profile in the MiCK assay (all drugs tested will be representative of NCCN-guideline induction therapy choices).

- Control arm

Patients designated to the control arm of the study will follow exactly the same protocol as the experimental arm with the exception that the treating physician will not see the MiCK assay results and will administer therapy (standard of care or other) based on the judgment of the oncologist and the protocols currently deployed as standard of care within the institution.

- TNBC Trials:

Patients that have been diagnosed with Triple Negative Breast Cancer will be eligible for inclusion in the trial, with all subtypes eligible and included. Eligible patients will have received  $\leq 2$  prior chemotherapy treatment regimens and experienced persistent, recurrent or progressive TNBC as documented by their treating physician. Other eligibility requirements include  $\geq 18$  years of age, adequate health to receive chemotherapy, and viable tissue available for use with the MiCK assay (biopsies, aspirates, cores). The trial will target an enrollment of 500 patients and will be split between two arms (assay-directed results vs. standard of care).

- Experimental arm (assay-directed treatment)

Tumor samples will be harvested from patients (all sample harvesting methodologies will be considered, provided adequate tissue can be obtained), and sent overnight to the Company's CLIA/CAP laboratory in Nashville, TN. Upon arrival, the samples will be processed according to the MiCK TNBC protocol (see above section *MiCK Assay Technology Platform*), and response profiles determined to each of the prospectively-specified protocol treatments in the pre-determined drug panel (~24 drugs). Results of each assay will be made available within 72 hours of sample arrival to the treating physician who will administer the drugs that yielded the greatest functional response profile in the patient's MiCK assay (all drugs tested will be representative of NCCN-guideline options).

- Control arm

The control arm will follow exactly the same protocol of the experimental arm with the exception that the treating physician will not see the MiCK results and will administer therapy (standard of care or other) based on the judgment of the oncologist. Patient responses to selected treatment in each arm of the trial will be tracked, and clinically relevant endpoints determined. Selected endpoints will include progression free survival (PFS) and overall survival (OS). Patient responses will be compared between those that received “best predicted” therapy and those that received standard of care, or oncologist judged best care, when such treatment was not predicted as best therapy.

The Company expects to enroll first patients in Q-3 and Q-4 2017 for AML and TNBC, respectively. Pivotal trial results are projected to be available in Q-1 (AML) and Q-2 (TNBC) 2019, with commercial launch anticipated by Q-4 2019 (Fig 4).

- Follow-on Indications:

The Company will add additional MiCK tumor studies using a staggered start approach to initiate clinical trials in additional selected tumors. Such studies will include Ovarian Cancer, Colorectal Cancer (CRC), and Non-Small Cell Lung Cancer (NSCLC) and beyond. The Company projects the start of clinical studies for each selected target cancer to follow successful verification and validation of the protocol for all follow-on tumors. Ovarian Cancer and CRC are currently slated to be the third and fourth clinical programs, with both targeting a simultaneous start date in Q-1 of 2018, with subsequent indications starting ~ 4 months later.

- TIRA Platform:

The Company will deploy its TIRA clinical program directed at colorectal cancer (CRC) in conjunction with its MiCK-CRC trials. The parallel launch of both programs is designed to leverage relationships with KoL's, association with centers of excellence, and CRO support around CRC trials to benefit trial design, patient recruitment, and sample harvesting efforts. Although execution of MiCK-CRC and TIRA-CRC will be closely aligned, the trials will be managed as separate and distinct studies representing the need for the TIRA-CRC to demonstrate efficacy in predicting response in patients eligible for immunotherapy as its primary endpoint.

The development of the TIRA platform will be initiated in Q-2 2016, targeting all available solid tumors for the purpose of establishing proof of concept and platform optimization. Validation studies directed at CRC are expected to start Q-4 2017, allowing the full clinical program in CRC to begin Q-4 2018. Pivotal results are anticipated by Q-4 2019 with TIRA commercial launch following in Q-1 2020.

## Development Plan Timeline:

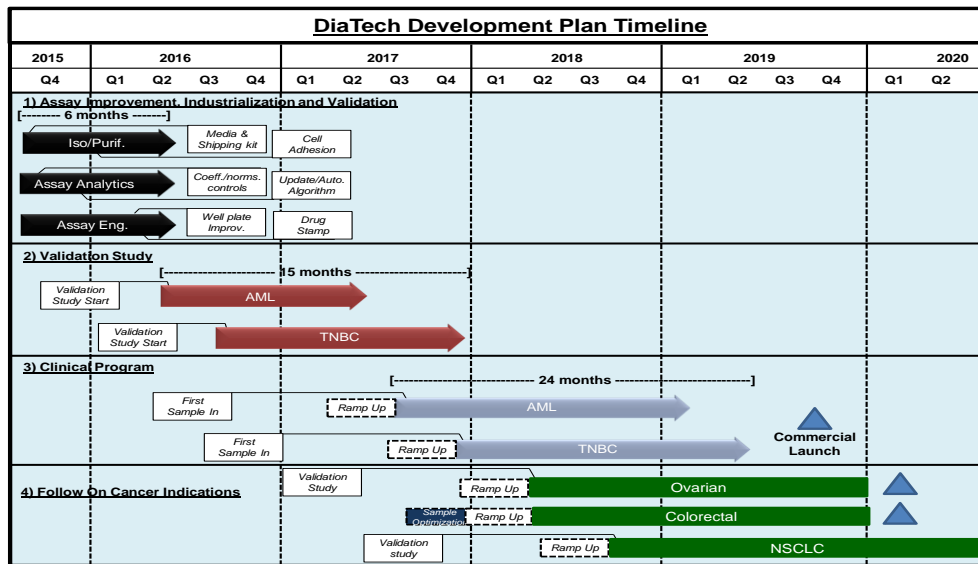


Figure 5: Proposed time line overview for assay development and optimization, validation studies, and clinical programs



## **FINANCIAL SUMMARY**

### **Overview**

The Company is focused on the rapid expansion of clinical, operational, organizational, and commercial initiatives targeting development of a world-class life sciences organization that will establish a leadership position in the treatment-directing advanced diagnostics market. This leadership position is projected to deliver substantial revenues of ~\$200 Million by 2021 and exceeding \$1 Billion by 2024.

Near term financial projections reflect an aggressive ramp-up of production and operating expenditures beginning in early 2016, with a steady rate of increase through completion of lead development programs and commercialization in lead indications in 2019. Projected operating expense totals \$124 Million through the end of 2019. These expenditures are projected to be partially offset by early revenues driven by Pharmaceutical and other Life Sciences collaborations output with the Company, revenues that are projected to deliver a cumulative total of \$38 Million by the end of Q-4 2019. Additionally, Management projects utilization of cash already on hand, UK-based tax credits on R&D spend, and other fee refunds related to the Company's financing program, though these will be dependent upon what operating structures can be utilized effectively by the Company and the Licensor in delivering the Development Plan under the LDA. After accounting for these additional offsetting items, projected to total \$16 Million, net funding required to achieve regulatory approval and launch of the Company's lead products (2019) is projected at approximately \$70 Million.

Revenues are expected to ramp-up steadily and significantly following initial approvals and market launch in the EU and US of the Company's lead MiCK and TIRA products. The Company's P&L projections indicate cash flow positive operations beginning in 2020, with the Company progressing towards high margin (>75% Gross and >35% Net or EBITDA) through 2024, in line with comparable companies. Management anticipates a substantial increase in Company valuation in the timeframe proximate to successful completion of development, regulatory approval and market launch of MiCK and TIRA in initial tumor targets.

The business plan includes development and deployment of sales, marketing, logistical and other supporting capabilities to facilitate commercialization of MiCK and TIRA. To facilitate this commercialization, the Company will deploy clinical development and commercialization functions in the US, and expand such to include a European laboratory, clinical development and commercialization capabilities in support of EMA approval and commercial launch in the EU. Further, the Company will develop alliance and license arrangements with established Life Sciences organizations to support commercialization and distribution in "rest of world" (ROW) markets including Japan, Australia, New Zealand and the "BRIC" (Brazil, Russia, India and China) markets.

Management anticipates however, that "exit opportunities", either through the Public Markets or through acquisition, will surface at the time of regulatory approval and launch of the Company's lead products, both sufficient to provide substantial investment return for shareholders.

Review of valuation indicators for comparable companies in molecular and advanced oncology and other high-impact diagnostics, as well as industry M&A metrics, revenue multiples, and the intrinsic NPV of future cash-flow projections, support valuation ranges from 3.5x to 5.5x revenue for established companies with revenues reflecting peak (or approaching peak) penetration rates. Given revenue projections post-2021, Management anticipates Company valuation and exit options sufficient to provide highly attractive returns for investors.

The US Parent is also targeting to acquire other diagnostic platforms. This will be financed independently, but, if this occurs, it is anticipated that it will impact favorably on the Company, because of the ability to share some Management and overhead costs and the commercial attractiveness of a broader technology base.

## **Revenue Projections**

The MiCK platform addresses substantial unmet needs across multiple cancer types and for the majority of cancer patients, given that ~85% of cancer treatment is chemotherapy based. The ability to target chemotherapy selection will drive major improvements in clinical outcomes as individual patient treatment selection increasingly coincides/correlates with improved clinical outcomes and measureable therapeutic and pharmaco-economic benefit.

This critical contribution to rational treatment selection puts the Company and its MiCK platform at the forefront of treatment directing diagnostic data focused at targeting therapy, particularly cancer therapy, and at the leading edge of personalized medicine. It places the Company in the same category as other highly innovative Life Sciences and Diagnostics Companies that are driving innovation in this sector. These “comparable” companies have achieved high valuations ahead of rapid revenue growth based upon a demonstrated ability to meaningfully improve clinical outcomes that matter most for patients, including OS (overall survival), PFS (progression free survival) and CRR (complete response rate).

Companies, including Helomics and Genomic Health, have introduced technologies (ChemoFX and OncotypeDX, respectively) with very substantial corresponding clinical value to that promised by the Company (MiCK), and have in turn achieved rapid revenue growth with CAGR's exceeding 35% and revenue levels quickly achieving tens and hundreds of millions of dollars (see *Appendix 1*). Leading the way in chemotherapy-targeting, both Helomics and Genomic Health provide comprehensive and personalized healthcare platforms that predict patient response and benefit (respectively) to targeted drugs, therein addressing significant unmet needs for many cancer patients.

The Company will commercialize its platforms in the U.S. and EU markets based on proof sets that will be generated in targeted cancers through the Company's pivotal clinical trials program, with first commercial product launch projected for 2019. Initial indications and commercial launches target high unmet-need patient populations in AML and TNBC. Follow-on indications target additional (similarly) high unmet-need cancers (Ovarian, Lung, Colorectal, Renal, etc.) where proof of concept and initial development has indicated likely MiCK and TIRA platform effectiveness.

The Company will develop follow-on platforms that, in a similar fashion to MiCK, will assist physicians in the identification of patients likely to respond to immunotherapy treatment options. The Company's TIRA and TAI assay technologies target the large and rapidly growing immunotherapy market, and are being developed in conjunction with its MiCK clinical development and regulatory programs. TIRA represents the Company's lead immunotherapy platform with initial launch in Colorectal Cancer planned for 2020.

The Company plans commercial launch of TIRA in Triple Negative Breast Cancer, Ovarian Cancer and NSCLC. Commercial launch of TIRA in these cancers corresponds with MiCK launch timeframes given the parallel track development programs and regulatory filings the Company will advance. Management has projected that TIRA commercial launch in TNBC will lag MiCK by one year, given the timeframe projected for TIRA development. The Company will embark on its platform development and clinical programs for TIRA and TAI platforms to enable immunotherapy drug trial programs by assisting in identifying patients that are most likely to respond to immunotherapy treatment (patient enrichment).

The recent substantial expansion of checkpoint inhibitors and other immunotherapy therapies represents one of the most important and substantial trends in oncology therapeutic

development, with major clinical and market success in very recent years. These drugs have had very profound and positive impact on clinical outcomes for patients that are responders, but to date there has been little progress in the development of diagnostics that identify patients likely to respond. As described above, the Company is well-positioned to fill this gap.

Revenue projections and related financial analysis of the Company operations going forward include the launch of the TIRA platform, which is an important aspect of the Company's strategic plan, and include:

- The price per TIRA Assay is projected to be lower than that of MiCK, given a less complex set of outputs/results.
- Projected pricing (post discounting) in early years is projected at \$1,500 per TIRA Assay (vs. \$3,500 for MiCK) and
- Incremental revenues for TIRA are based upon market penetration projections that ramp up to approximately 75% of MiCK penetration estimates (which equates to 15% peak penetration for TIRA vs. peak of 20% for MiCK).

Note that the Company's TAI platform is projected to require a longer development timeframe than that which has been constructed for this business plan. The Company anticipates that commercial launch of TAI will lag MiCK and TIRA, and has not included TAI in its current revenue projections.

Analysis of high value life sciences and oncology technologies, products and services, including pharmaceuticals and diagnostics, indicates that effective products that address substantial unmet clinical needs achieve average market penetration rates of 20% - 25%, reached over a three to five year timeframe. In market circumstances with limited competitive or substitute offerings, these penetration rates are higher. Given the substantial clinical benefit associated with MiCK and TIRA in very high need cancers, Management projections of 20% peak penetration in four to five years are conservative.

The Company has taken a very conservative stance in estimating its EU market opportunity, projecting revenues (per cancer type) at 50% of North American revenues despite a total population (in the EU) of 1.4x North America, higher incidence and prevalence (per 1,000 population) of cancer in the EU, and an EU GDP that exceeds that of North America. This very conservative position reflects a continuing uncertainty as to healthcare pricing and access in the EU.

#### AML Market Segment and Value Proposition:

AML is characterized as a very high unmet needs cancer with high mortality and five year survival rates of 5.2% (age adjusted for 60+ yrs). The prevalence of AML (total diagnosed patients alive at any given time) is only 1.5 times the annual incidence of the disease, reflecting the paucity of effective therapeutic options. The Company has targeted AML as its lead cancer indication for MiCK (but not for TIRA or TAI) given the urgency of need for these patients and the demonstrated effectiveness of the MiCK platform in AML. Management projects that initial clinical usage will call for one assay (unit) per patient, and that this number will increase as physicians prescribe follow-on testing as patients fail primary treatment and move on to secondary treatments and beyond. Disease incidence (annual) in North America and the EU is 41,000 with a prevalence (number living with the disease) of approximately 61,000.

Market launch, and market projections at launch, target the entire patient prevalence (North America and the EU) by 2019. U.S. Penetration rates are projected to peak in 2023/2024 (20%) with annual revenues of ~\$50 Million, and at ~\$25 million in the EU given significantly greater pricing constraints. EU launch is projected to occur ~6 months to 1 year earlier than

in North America, given a (relatively) abbreviated CE Mark regulatory pathway (as compared to the U.S. IDE/PMA approval route). The Company does not intend to develop TIRA or TAI for AML as immunotherapy development programs and technology platforms currently only target solid tumors.

Triple Negative Breast Cancer Market Segment and Value Proposition:

While treatment options have dramatically improved outcomes in overall breast cancer, this is not the case for Triple Negative Breast Cancer (TNBC) where treatment options remain limited and outcomes remain poor. Treatment options in TNBC are entirely based on chemotherapy (cytotoxic) drugs with no targeted drugs or immunotherapy projected to launch in the near to mid-term. Disease incidence of TNBC in North America is ~48,000 with prevalence at ~270,000 (~55,000 and 310,000 EU respectively).

All diagnosed (incident and prevalent) patients are included as target populations, with primary commercial efforts focused on newly diagnosed later stage patients who will derive the highest benefit from optimization of initial treatment selection. Management conservatively projects market penetration of 20% over 4-5 years. Commercial efforts will target recurrent patients that have proceeded beyond first line therapy. Outcomes for these patients are particularly poor with 5-year survival rates of ~22% (as compared to 94% in non-TNBC breast cancer). Management conservatively projects market penetration of 10% for these patients as initial targeting of therapeutics will focus on first-line treatment selection. Additional penetration of the remaining incident population is anticipated and is considered an upside scenario for this market segment.

As with AML, Management projects initial clinical usage at one assay (unit) per patient, and that this will increase as physicians prescribe follow-on testing as patients fail on primary treatment and move on to secondary treatment and beyond.

MiCK revenues are projected to surpass \$200 Million in the North American market by 2024 given high patient volumes and the urgent need for improved therapeutic selection and patient outcomes. A similar situation exists in the EU with revenue projections of ~\$100 Million (~50% of North America).

Management plans the launch of TIRA into this market segment, and projects utilization largely tied to MiCK patient populations as the TIRA platform will be performed on the same tumor tissue sample extracted for MiCK. Target penetration rates for TIRA are projected to peak at 15% (vs. 20% for MiCK) as 100% correlation rarely occurs, and incremental revenues related to TIRA are projected to reach \$40 Million in North America by 2025.

Colorectal Cancer Market Segment and Value Proposition:

Colorectal Cancer (CRC) is a cancer characterized by very high patient numbers (168,000 North American incidence, ~210,00 EU Incidence) and poor outcomes for patients diagnosed at later stages of disease. Stages II, III and IV represent 60% of patients, with patients facing poor prognosis and Stage IV 5-year survival of only 12%. The Company is developing MiCK and TIRA for CRC and projects substantial clinical value for patients through optimal first line and follow-on treatment selection, including cytotoxic, transduction pathway and immunotherapy options. CRC represents the lead indication for TIRA and will serve as the first indication launched commercially in 2020.

Management projects market penetration rates that are in line with lead indications (AML and TNBC) reflecting the equivalently high level of unmet need and corresponding substantial value provided to treatment outcomes by MiCK and TIRA in this market segment. North American revenues for MiCK are projected to surpass \$160 Million by 2025 with peak market penetration of 20%, and ~\$80 Million in the EU. TIRA sales are projected to provide an additional \$60+ Million in North America by 2025, and ~\$30 Million in the EU.

Follow On Indications:

The MiCK platform has been extensively evaluated in multiple additional cancer types and the Company, in close consultation with its Clinical and Scientific Advisory Boards (CAB & SAB) is in the process of evaluating and selecting follow-on cancer targets. Ovarian cancer and non-small cell lung cancer (NSCLC) have been selected for business planning purposes given the following attributes of both cancers: 1. Very high unmet needs closely aligned with MiCK platform value proposition. 2. Large and growing patient populations. 3. Significant multiplicity of drugs used. 4. High percentage of patients treated with chemotherapy (Cytotoxic) regimens that benefit from rational treatment selection. 5. Very poor outcomes for all but early diagnosed patients (Stage I&II).

In most instances, patients with ovarian cancer are treated with chemotherapy, with the exception of early stage (stage I) patients who are eligible for curative surgical excision. These patients represent less than 35% of annual incidence, and less than 50% of disease prevalence at any time, reflecting the high mortality rates associated with later stage disease. As such, all later stage incident (~65%) and prevalent patients are included in the Company's target patient populations. Initial patient targeting will focus on newly diagnosed later stage patients who will derive the greatest benefit given the opportunity to utilize MiCK data to optimize first-line therapy selection.

Utilization is projected to rapidly extend into later stage prevalent populations. The launch of TIRA into the ovarian cancer market reflects the high mortality associated with later stage disease diagnosis. Management projects launch of MiCK and TIRA products in 2021 with one assay per patient initially, and approaching two assays per patients over the course of 4-5 years. North American revenue projections for MiCK in ovarian cancer are projected to exceed \$75 Million by 2025, with an additional ~\$37.5 Million from the EU. TIRA revenue projections are projected to be ~ \$15 Million by 2025 in North America with an incremental \$7 Million in the EU.

Non-Small Cell Lung Cancer (NSCLC) is a key follow-on indication for which both MiCK and TIRA platforms will be developed by the Company. NSCLC is a cancer characterized by very high patient numbers and poor outcomes. Survival rates remain dismally low reflecting the late diagnosis of disease despite the entrance of multiple new targeted therapies and the approval of PD-1 checkpoint inhibitor nivolumab (Opdivo) in March of 2015. The incremental clinical benefits achieved are important and substantial, but are "relative" given that overall survival (OS) extensions are currently measured in single digit months. Later stage patients face particularly dire prognosis with limited effective therapeutic options, rapid disease progression and 5-year survival rates of 26% (Stage II and III) and 4% (Stage IV).

In NSCLC, all patients except Stage 1, are included in the Company's target patient populations for MiCK and TIRA. (Stage 1 treatment protocols call for surgical resection and/or radiation therapy). In most cases, Chemotherapy (Cytotoxic drugs) is only indicated upon disease relapse. Given the high level of unmet clinical need for Stage II to Stage IV disease, the substantial value associated with optimal treatment selection (first line and beyond) is projected to drive rapid penetration in this market segment.

North American launch in NSCLC is projected for 2022, with European launch preceding North America by ~6-9 months. North American revenues are projected to exceed \$300 Million within 4 years of launch, with an additional ~50% revenue contribution from the EU (\$150 Million) where incidence is higher than that of North America (smoking, industrial pollution, etc.). TIRA launch is also projected in 2022, with incremental revenue contribution of \$50+ Million by 2025 in North America, and \$25 Million in the EU. Management projects that initial clinical use will call for one test unit per patient initially, and further projects that this number

will approach two tests per patient as physicians prescribe follow-on testing as patients fail on primary treatment and move on to secondary treatments and beyond.

Additional cancers are included in the projection model for plan outer years (2023 and beyond) and are generally projected at patient and penetration levels similar to ovarian cancer and AML (Renal, Hepatocellular, Pancreatic, Sarcomas, etc). As noted below, the clinical plan calls for two follow on indication development programs commencing in 2017 and 2018 with market launch projected ~4 years post study commencement. Additional cancers will be developed and launched in follow on years at a projected rate of ~two cancers per year.

Prior to the projected 2019 regulatory approval and major market launch in the Company's lead target tumor indications, the Company will aggressively pursue and service revenue-generating BioPharma research and drug development collaborations. The Company will target a limited number of collaborations with major Pharmaceutical Companies, initiating these activities in 2016, and projects a gradual ramp up in collaboration numbers to twelve (MiCK) and ten (TIRA) by 2021. Targeted BioPharma companies are well known to the Company and its advisors. Projected revenues from these endeavors are relatively nominal (compared to those associated with commercial use in targeted tumor types), but serve to partially offset investment funding requirements through 2020.

The following table summarizes the projected market penetration and revenues by cancer in the Major Markets (North America including U.S. and Canada, and EU):

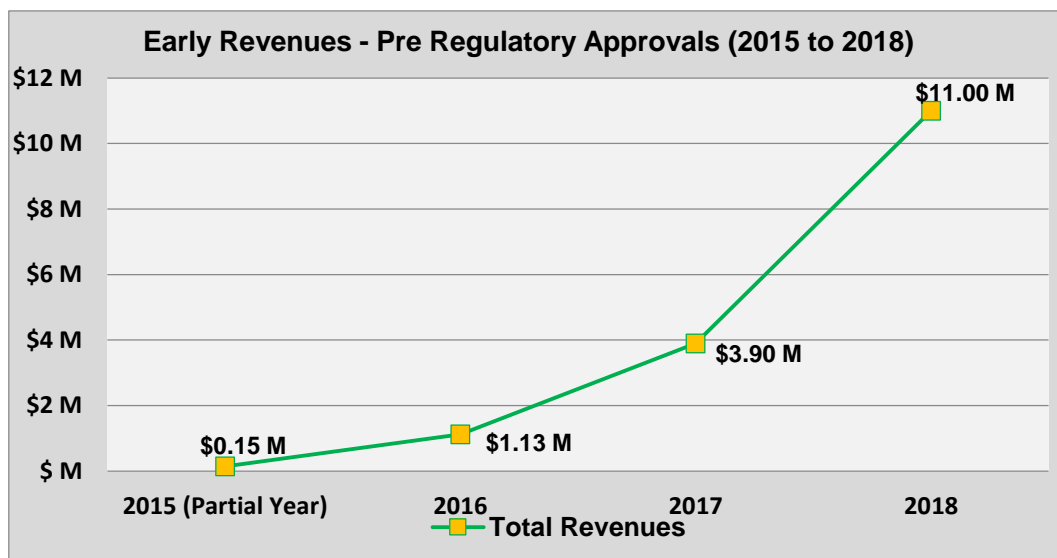
## Summary – Major Market Revenue Projections and Assumptions by Cancer

Indication	Key Assumptions	
AML	Major Market Launch	MiCK: 2019 TIRA: N/A
	Revenues @ Peak	MiCK: \$50.4M TIRA: \$0
TNBC	Major Market Launch	MiCK: 2019 TIRA: 2021
	Revenues @ Peak	MiCK: \$214M TIRA: \$39M
CRC	Market Launch	MiCK: 2020 TIRA: 2020
	Revenues @ Peak	MiCK: \$161M TIRA: \$62.4M
Ovarian	Major Market Launch	MiCK: 2021 TIRA: 2021
	Revenues @ Peak	MiCK: \$76.5M TIRA: \$14M
NSCLC	Major Market Launch	MiCK: 2022 TIRA: 2022
	Revenues @ Peak	MiCK: \$312M TIRA: \$57M

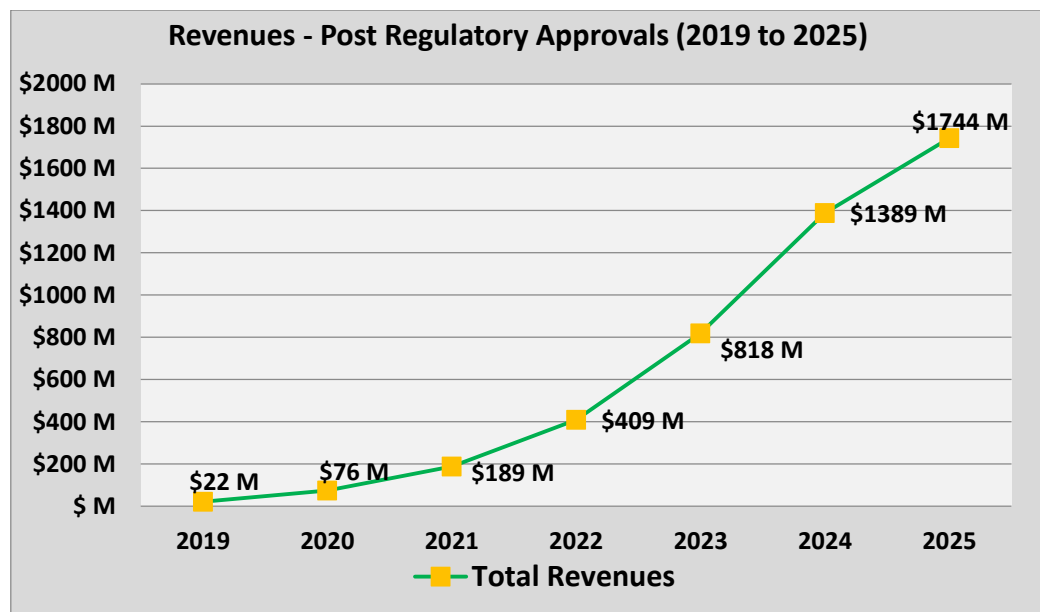
\*Major Market revenue projections (North America and EU) for the exploitation of the MiCK and TIRA IP by the Licensor and the Company net of commercial discounting (~33%) and third party royalties payable under the license for the Vanderbilt Patents (~5%), the latter expiring in 2019 at the latest).

\*\* Revenue projections at peak market penetration reflect North America revenues; note that EU revenue projections represent incremental revenues projected at approximately 50% of North America revenues.

## Pre-Regulatory Approval and Major Market Launch Revenues (2015 – 2018)



## Post-Regulatory Approval and Major Market Launch Revenues (2019 and beyond)



### **Rest of World (ROW) Market Penetration and Operations:**

Given the increasing incidence of cancer globally, coupled with expanding market access to innovative health technologies, the Company expects demand for MiCK and TIRA assays to grow in “rest of world” markets based upon the foundation of proofs and market endorsement in the Major Markets – the EU and North America. Rest of world (ROW) target markets are those with sufficient healthcare infrastructure, oncology capabilities and financial wherewithal to provide innovative health services and technologies to patients. For the Company, and the Life Sciences sector in general, these markets fall into two categories:

- Secondary Markets – Japan, Australia and New Zealand
- Developing Markets with “Major Market” segments – BRIC (Brazil, Russia, India, China)

### **Secondary Markets:**

Japan, Australia and New Zealand are fully developed healthcare and oncology markets with capabilities on par with U.S. and EU. The healthcare reimbursement systems in these markets are similar to that of the EU in that common fee schedules and cost containment measures are commonly applied as cost control measures. As such, the Company has developed market projections based upon penetration rates on par with the major markets, and pricing rates similar to that of the EU. Major projection model elements for the Major Markets include the following:

- Treatment protocols and levels of unmet need (in each target cancer type) similar to North America and the EU; *Per review of individual country cancer statistics and Decision Resources Reports per cancer types*
- Pricing on par with the EU (~50% of North America); *Per analysis of market access research publications in those markets*



- Market penetration rates mirror the major markets with TIRA penetration at 75% of the MiCK lead product per cancer type;
- Inclusion of license and alliance relationships with major life sciences organizations with existing and sufficient capabilities in the Secondary Markets to successfully commercialize MiCK and TIRA
- Launch timeframes in each cancer type lag North America and EU by one year; *To provide sufficient time to develop license/alliance relationships for marketing and distribution*

See summary of revenue and market penetration projections below:

Japan/Australia/NZ	Launch Year	Peak Penetration	Revenues 2025 (MiCK & TIRA)
AML	2020	20%	\$9.4 M
TNBC	2020	20%	\$44.6M
Ovarian	2021	20%	\$11.3
CRC	2022	20%	\$164.3
NSCLC	2023	20%	\$70.9

In a similar manner to North America and EU, the Company has projected follow-on launches (i.e.; a “Cancer 6” and “Cancer 7” to launch in 2024 and 2025), and further projects ongoing incremental product launches over time including new cancer indications as well as improved and expanded versions of products launched previously. These follow-on product launches are projected to be based upon North America and EU product development and launch, and to continue to follow an approximate one-year lag in the Secondary Markets.

### Developing Markets - BRIC:

The Company also projects demand for and associated revenues in the BRIC markets. These markets have very large population sizes and expanding market segments with demand for and access to major market healthcare technologies and services. In a similar fashion to the Secondary Markets, the Company does not intend to develop operational or commercial infrastructure in these markets, but will leverage alliances with established and local Life Sciences organizations to commercialize and distribute MiCK and TIRA (and follow-on) product line offerings. Launch timeframes in each targeted cancer type are projected to lag the Major Markets by one year to allow sufficient time to develop alliance relationships and to leverage the success and market endorsement of the major markets.

While the patient populations for targeted cancer types are much larger in the BRIC markets, management has conservatively projected revenues (for all BRIC markets) ramping to 25% that of North America over a 5 to 6 year timeframe. BRIC pharmaceutical / life sciences markets are estimated at approximately 25% of U.S., or approximately on par with Japan in terms of revenues. Note, the Japanese pharmaceutical market is currently estimated at approximately 25% that of U.S.

See BRIC revenue projections below:

	2020	2021	2022	2023	2024	2025
N America Revenue (Baseline)	\$38M	\$120M	\$290M	\$626M	\$1.0B	\$1.3B
BRIC Market penetration – 1 year lag	10%	12.5%	15%	20%	22.5%	25%
BRIC Market Revenue projections	\$3.8M	\$15.0M	\$43.5M	\$125.3M	\$229.4M	\$317.3M

**Cost Projections:**

Detailed budget projections have been developed covering the major spend areas that define the Company's business efforts through initial regulatory approvals (2019) and market launch and ramp up of major cancers and initial indications (through 2025). All such efforts and corresponding spend are focused on 1) Development of the MiCK, TIRA and TAI platforms, 2) Ramp-up and development of the organization, infrastructure and clinical programs; and 3) Commercialization of the MiCK and TIRA platforms and assay portfolios. Specific spend drivers include the following:

- Current and planned operating costs associated with North American operations including facilities, staffing, and other business operations (partial year 2015 and ongoing).
- Projected initiatives to address assay process improvement, industrialization and optimization objectives (2015 and 2016).
- Development, optimization and industrialization and launch of TIRA and TAI platforms.
- Continual updating and approval of platforms to create integrated offerings (2016 and beyond).
- Execution of validation, pivotal and follow-on clinical studies and regulatory approval programs to support North America and EU oncology market participation (2016 and beyond).
- Encompassing commercial programs to support multiple market launches and participation / penetration on par with leading innovative life sciences and diagnostic technology companies and their product offerings.
- Expansion of organizational presence and infrastructure into the EU in 2016 to manage and execute EU programs and capitalize on R&D incentive programs.

Cost summary descriptions are provided below and ten-year P&L projections directly follow.

**Clinical Development Costs:**

Sample based laboratory validation studies commence Q-4 2015 and Q-1 2016 in AML and TNBC, respectively. Observational studies in AML and TNBC will commence Q-2 and Q-3 2016 respectively. Pivotal clinical studies in AML and TNBC commence in Q-2 and Q-3 2017, respectively, with Ovarian and Colorectal programs commencing in Q-1 2018. Target completion for AML and TNBC are Q-2 and Q-3 2018, respectively, with Ovarian and CRC studies targeted for completion by Q-1 2019. Follow-on clinical development programs will be initiated at a projected pace of ~2 per year.

Clinical development of TIRA will be keyed on CRC and is targeted to begin Q-3 2017 and targeted for completion in Q-3 2018. Subsequent TIRA clinical studies will run in parallel to the MiCK studies in TNBC, Ovarian, and follow-on indications.

Total clinical development spend is projected at \$38 million through first commercial launch in 2019. Major clinical cost drivers and assumptions are detailed below:

<b><u>Clinical Cost</u></b>	<b><u>Description</u></b>
<b><u>Lab validation studies</u></b>	<ul style="list-style-type: none"> <li>• 50 samples per tumor</li> <li>• Range of cost: \$1,000 (AML) to \$2,500 (TNBC) cost per sample reflecting current market costs.</li> </ul>
<b><u>Observational studies</u></b>	<ul style="list-style-type: none"> <li>• 150 samples for lead indications (AML, TNBC, and CRC)</li> <li>• Not required for follow on indications derived proof of concept studies in lead indications</li> <li>• Sample costs ~\$2500.</li> </ul>
<b><u>Pivotal Clinical studies</u></b>	<ul style="list-style-type: none"> <li>• MiCK programs call for 500 patient tumor samples (patients) per target cancer</li> <li>• An incremental 200 patient samples where TIRA protocols are added (except AML).</li> <li>• Sample costs ~\$2500.</li> </ul>
<b><u>Investigator Costs</u></b>	<ul style="list-style-type: none"> <li>• An incremental \$1,500 per patient/sample is budgeted to cover institution / primary investigator (PI) costs.</li> </ul>
<b><u>CRO costs</u></b>	<ul style="list-style-type: none"> <li>• Costs are projected at \$3M for TNBC reflecting observational + pivotal studies as well as initial work on TIRA, all other \$2.5 M per study</li> </ul>
<b><u>IRB Fees</u></b>	<ul style="list-style-type: none"> <li>• Costs are projected at \$75,000 per program based upon projected trial complexity and corresponding patient volumes.</li> </ul>
<b><u>Regulatory Filing Fees &amp; Prep</u></b>	<ul style="list-style-type: none"> <li>• Costs are projected at \$150,000 to \$250,000 based upon number of protocols and indications per tumor type.</li> </ul>

### Assay Optimization and Development

Optimization of the MiCK assay platform is a primary focus of the Company in 2015 and 2016 with total cost through Q4 2016 projected at \$600k. These costs are largely driven by efforts targeting optimization of assay isolation and purification, as well as optimization of assay equipment.

Development costs also include next generation and follow-on assay development (including TIRA). Costs projections associated with these efforts include acquisition of additional cell line and tumor samples, materials and third party services, and are projected at ~\$500,000 annually beginning in 2016.

It should be noted that there is substantial personnel cost associated with these assay development initiatives. The human resources to carry out the development will be largely employed by the Licensor (and its subsidiaries) and such costs will be charged to the Company under its arrangements with the Licensor in respect of the Development Plan under the LDA.

In the tables set out below, the Operating Cost Elements are shared between the Company and the Licensor, and will largely be incurred by the Licensor. The Licensor will charge the Company for the development work on a cost plus basis, to satisfy fiscal requirements. The existing facilities belong to the Licensor (and its subsidiaries), and that will not change. These facilities will be used in the manner described to develop the MiCK IP, and to carry out the other developments described in this section under the aegis of the LDA.

Operating Cost Elements	
<b><u>Cost of Goods</u></b>	<ul style="list-style-type: none"> <li>• Current COGs are estimated at 30% of revenues based upon review of comparable companies in life sciences, diagnostics and the laboratory space.</li> <li>• COGS levels are projected to decline over time given projected scale benefits and ongoing assay optimization. COGS are projected to decline to 20% over a 5 year timeframe.</li> <li>• Current Company estimates indicate a direct materials per unit cost of \$325.</li> <li>• Labor and overhead costs are approximated in the total COGs figures.</li> </ul>
<b><u>Human Resources</u></b>	<ul style="list-style-type: none"> <li>• HR is the lead cost driver in the business plan given the need for specialized and highly skilled labor in all clinical, operational and commercial initiatives.</li> <li>• Total costs through 2019 are projected at \$49 Million.</li> <li>• Current (2015) headcount levels in the U.S. and Canada include 31 employees over two locations.</li> <li>• The business plan calls for rapid scale of headcount across all levels and functional areas to address competency, experience and industry relationship gaps. 2016 headcount is projected at 65, ramping to 136 FTE by 2020. See organization scale up section and figures below.</li> <li>• HR costs are projected to ramp significantly from ~\$1.8 million in Q3 and Q4 2015 to over \$7.7 million in 2016, approaching \$17 million by 2020 as the organization continues to grow and staff up.</li> <li>• Incremental staff primarily required in clinical, lab operations and assay development areas</li> <li>• Further incremental staffing levels required in senior executive ranks and with supporting staff in Finance, Commercial and Administration.</li> </ul>
<b><u>Facilities</u></b>	<ul style="list-style-type: none"> <li>• Current facilities expenses approximate \$100k per quarter for the U.S. and Canada.</li> <li>• These costs and corresponding facilities levels are expected to ~double by 2017 as The Company will require substantially increased space and equipment to manage significantly increased sample processing load as clinical studies ramp up.</li> <li>• Relatively modest UK-based facilities are projected to come online by Q3 2016 at a rate of \$30k per quarter.</li> <li>• Incremental facilities costs in New Jersey are projected at \$30k per quarter to support clinical teams being onboarded and ramped up currently.</li> </ul>
<b><u>Lab Equipment and CAPEX</u></b>	<ul style="list-style-type: none"> <li>• The Company will ramp up levels of laboratory equipment and other capital equipment items to support the rapidly expanding sample processing activities projected.</li> <li>• The majority of additional equipment will be for the Nashville facilities with secondary focus on Canada and New Jersey facilities.</li> <li>• Additionally, a new UK lab facility will be developed in 2016 with projected equipment costs of \$1.8 Million.</li> <li>• Additional equipment cost projections are in the annual range of \$650k to \$700k beginning in 2016 and cover acquisition of the following incremental items required to support ongoing scale up of operations: Spectrophotometry machines, Luminex and Biotek machines, additional diagnostic and related technology, refrigeration, software and other equipment.</li> </ul>

### **Organizational Scale Up and Projected Spend**

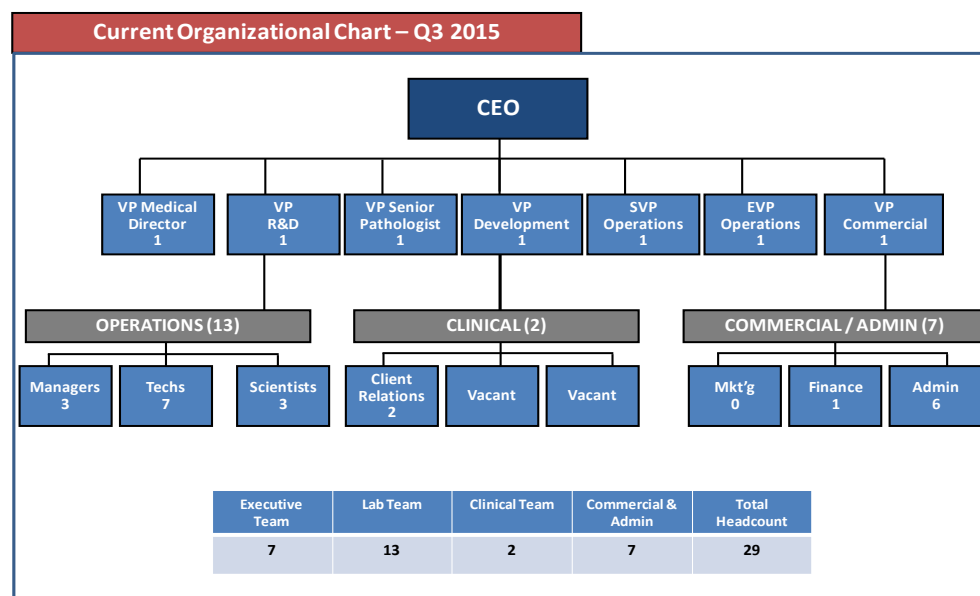
The current Licensor organization includes 31 FTEs, 7 of who are senior executives that report directly to the CEO. Remaining staff are directed at laboratory and operational roles (13), clinical roles (3) and commercial and administrative roles (8). This team is comprised of experienced and highly trained personnel across functional areas, but with skill-set, experience and industry relationship gaps that will be filled by top quality experienced professionals in the near term.

Several of the executives will also become executives of the Company, in order to manage the development of the MiCK IP in accordance with the Development Plan. Other personnel may be seconded from the Licensor to the Company, either part time or full time, dependent on operational needs.

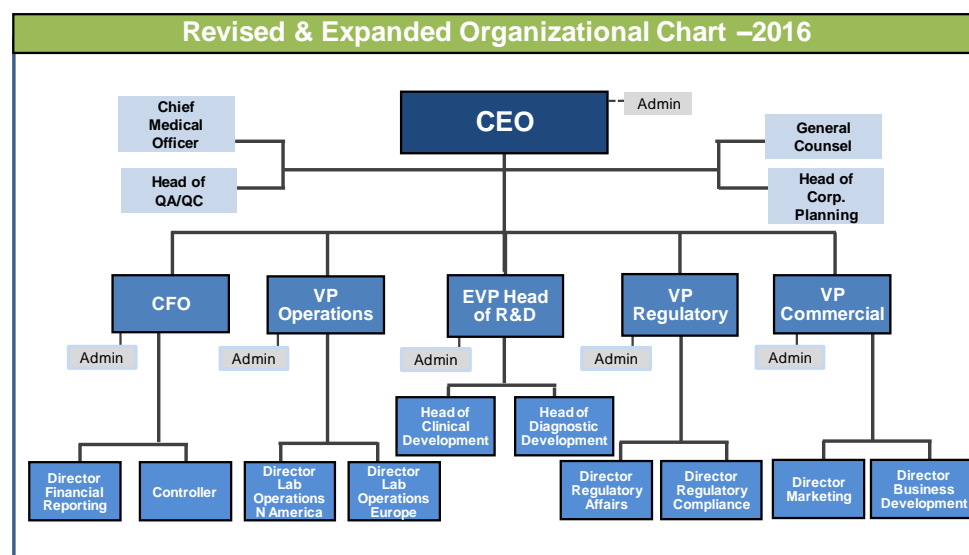
Overall headcount levels will almost double by end 2016 with a projected 65 FTEs, and these increases in headcount will continue and approach 122 FTEs in 2019 with 136 by 2020. The increase in FTEs will occur across all functional areas but will be primarily driven by additional headcount requirements in the Research and Development functions that support substantial and increasing levels of clinical trial programs beginning in Q4 2015.

See current (2015) and projected (2016) organization charts below:

The current organizational structure for the Licensor includes 31 FTEs and will be rapidly expanded to address gaps across all departments.



The Licensor will ramp-up headcount in support of substantially expanding clinical, operational and commercial initiatives, with multiple new hires beginning Q4 2015 and Q1 2016. The redesigned (expanded) organizational structure is depicted in the below organizational chart graphic, and as noted above is projected to ramp to a total organizational size of 136 FTEs by 2020. As noted, some of these FTE's may be seconded part time or whole time to the Company to enable the Development Plan to be managed and supervised.



## **Executive Directors and Consultants**

### **Directors and Senior Consultants of the US Parent**

In addition to Robert Henry, Andrew Miller Jr, and Ronald Krall, whose CVs are in Appendix 1, the US Parent has the following distinguished personnel as directors and/or consultants

#### **Board of Directors**

Andrew Miller Jr- see Appendix 1

Robert E Henry- see Appendix 1

Ronald L Krall MD- see Appendix 1

Craig Eagle MD - Pfizer Inc, New York, currently General Manager Pfizer Canada Oncology Business, responsible for P&L with \$50m to \$60m revenue generating double digit top line growth. He has continuing responsibility for R&D strategic partners strategic oversight, managing several Phase III programs in lung, kidney, CML and AML.

Daniel Tassé- Until April 2015, Daniel was Chief Executive Officer and Chairman of the Board of IKARIA, now part of the Hospital Products Division of Mallinckdrot, Inc.

R. Lawrence Van Horn- Owen Graduate School of Medicine, Vanderbilt University.

#### **Management**

Gregory Stelzer PhD

Douglas Kingma MD

Matthieu Perrée

Lyn Cates

Allen Hallquist MD

Dr. Cary Presant MDFACP- Chief Medical Officer

Curtis R Kelly PhD

Resumés are available from the Company on request

### **Directors of The Company**

CVs of the executive directors of the Company at the date of this Information Memorandum and those it is anticipated shall become Independent Directors of the Company in the months after the date of this Information Memorandum have been included as Appendix 1.

The Company will engage certain personnel to oversee the day to day running of the Company, and also to ensure the overall business model and strategy is being adhered to. It is envisaged that each senior employee of the Company shall have medical device industry experience, and will have experience of dealing with regulatory and licensing authorities and mandating bodies.

## D. REGULATORY APPROVAL, GOVERNANCE AND COMPLIANCE

### U.S. Regulatory Strategy and Situation

The regulatory environment and requirements for In-Vitro Diagnostics (IVD) and Lab Developed Tests (LDT) diagnostic products in the US is in substantial evolution. The primary driver for this evolution is an announcement in 2014 by the FDA of its intention to assume a meaningful role in the regulation of LDTs (for moderate and high-risk CLIA (Clinical Laboratory Improvement Amendment Act and Regulations (1988)) approved products) in the near term. This decision is driven by the substantial expansion in number and complexity of advanced diagnostics in oncology (as well as other multi-factorial pathologies) that underscore and enable the shift toward rational medicine (personalized treatment planning). FDA intends to ensure that such products are safe as well as analytically and clinically valid, and act to the benefit and protection of patients.

Management takes the position that the proposed level of increased regulation is warranted, given the complexity associated with evolving new diagnostic technologies, and the very substantial downside associated with clinical decisions based upon inaccurate or invalid assay results. Management believes that such regulatory governance by FDA, and the resulting approvals that industry will receive, will lead to new improved outcomes and substantial economic value. To address this situation, and capitalize on it, the Company has constructed a clinical and commercial development plan that utilizes extensive data proof sets as the foundation for broad market acceptance and enhanced value to its platforms. These proofs can only be generated through rigorous, well-controlled clinical trials that will be designed to secure FDA PMA approval and to capture medical device regulatory exclusivity, which Management holds will result in significant economic and market benefit. Reflecting this evolving regulatory and market dynamic, the Company is operating as if FDA regulations are in place. To successfully execute this strategy, the Company will retain world-class third-party advisors (consultants) to support regulatory strategy development and program execution, and is in the process of on-boarding such third parties.

As a matter of development and commercialization strategy, the Company intends to utilize the same clinical proof programs and data sets for regulatory approvals for its current and all future development and commercialization programs and intends to be ahead of regulatory requirements with regards to the deployment of the new and expanded regulatory approval regime within the USA and Canada.

### EU Regulatory Strategy and Situation

A CE is required for most IVD devices sold in Europe. CE Marking indicates that an IVD device complies with European *In Vitro* Diagnostics Directive (98/79/EC), and that the device may be placed on the market and put into service throughout the EU. The CE Marking is a key indicator (but not proof) of a product's compliance with EU legislation. EU Directive (98/79/EC) (The Directive) was effective from 1998 and implemented across Europe Member States on various dates following this (the majority in 1999) and defines an IVD as "any medical device which is a reagent, reagent product, calibrator, control material, kit, instrument, apparatus, equipment, or system, whether used alone or in combination, intended by the manufacturer to be used in-vitro for the examination of specimens, including blood and tissue donations, derived from the human body, solely or principally for the purpose of providing information:

- Concerning a physiological or pathological state;
- Concerning a congenital abnormality;
- To determine the safety and compatibility with potential recipients;
- To monitor therapeutic measures.

The Directive applies within the EEA and affects products for all laboratories where the product was intended by the manufacturer to be used for in vitro human diagnostics, including IVD and LDT (diagnostic devices). Higher risk devices (including LDTs) carry higher levels of approval requirements than lower risk devices.

The Directive specifically addresses the safety, clinical condition, quality assurance, suitability for purpose and performance of IVDs, including LDTs. The primary objective is to ensure that IVDs do not compromise the health and safety of patients, users and third parties, and attain the performance levels specified by the manufacturer. As a general rule, the manufacturer is responsible for ensuring their products comply with the Essential Requirements of the Directive before affixing the CE Mark and legally gaining access and free movement within the EEA. As declared within the Directive, all IVD devices must meet “essential requirements,” which include technical and labeling requirements. Thus IVDs and LTDs (diagnostic devices) must be designed and manufactured in such a way that, when used under the conditions and for the purposes intended, they will not compromise, directly or indirectly, the clinical condition or the safety of patients, the safety or health of users or, where applicable, other persons, or the safety of property.”

Under Directive 98/79/EC, a technical file for every IVD device must include risk analysis, appropriate protection measures, test reports, adequate performance evaluation rates and stability studies. The volume of technical documentation required is inevitably proportionate to the risk category of the device. The Directive is largely focused on the management of risk, and risk management is the most critical element of required registration documentation. The risk analysis must cover the risks to the user (healthcare professional), the patient, third parties such as delivery and service personnel, as well as possible damage to property and consideration of the environment.

In contrast to the evolving regulatory landscape in the US and Canada, the approach to IVD and LTD regulation and market approval in Europe remains firmly anchored in an approach, with the primary focus on demonstration of a) user and patient safety and b) clinical condition, quality assurance, suitability for purpose and performance.

The Directive does not include a requirement to demonstrate clinical validity (or value) through pivotal clinical trials. As such, the timeframe and associated cost of regulatory approval in Europe is substantially quicker and at lower cost than in the US and Canada.

Notwithstanding this, and reflecting the Company’s deep-seated conviction that statistically relevant clinical proof sets will lead to wide-scale clinical deployment, the Company will universally develop complete data proof sets through well-controlled pivotal clinical trials which meet the requirements of Class III medical device under FDA regulations, replicating such studies in parallel European clinical studies. This approach will deliver data and proofs that exceed the requirements of European regulators, and set the stage for wide-scale deployment. Of note, the relatively abbreviated regulatory pathway in Europe will allow the Company to commercially launch its MiCK platform, and other treatment directing diagnostic products such as TIRA and TAI, in Europe ahead of launch in the US. Management projects that European launches will precede US and Canadian launch by ~9 months for each product given the reduced regulatory requirements.



## **E. INTELLECTUAL PROPERTY**

### **Introduction**

Patents, know-how and trade secrets, trade marks and copyright protect various aspects of the invention, technology, software, solution, products and services relating to the MiCK platform and TIRA platform.

### **Patents**

There are two patents which are effective in the US only in the name of Vanderbilt University which relate to original underlying and fundamental aspects of the Licensor's MiCK assay. The Licensor has had transferred to it from DiaTech Oncology, LLC an exclusive license to these US patents from Vanderbilt University. These patents are scheduled to expire in late 2016, the US Parent believes that a patent term extension may be available to 2019 given that the Licensor and, before it, DiaTech Oncology, LLC. has initiated efforts to pursue approval of its MiCK assay under the IDE-PMA regulatory regime. These US patents in the name of Vanderbilt do not make up part of the relevant intellectual property licensed to the Company, as the Company does not require any right to them. The US Patents only affect development use and exploitation in the US. The Licensor is obliged under the LDA to perform the elements of the Development Plan which are carried out in the US (operating under its license from Vanderbilt).

In addition to these granted patents, data exclusivity will be available upon PMA approval (see below). Over and above this, DiaTech Oncology, LLC. has filed, and the Licensor intends to file, pursuant to the terms of the LDA, additional patent applications directed towards key aspects of its technology platform to protect commercially significant improvements to the MiCK platform. These improvements will be exclusively licensed to the Company under the LDA

The Licensor currently owns four families of patent applications directed to certain improvements to the MiCK platform, and which are licensed to the Company under the LDA.. Two of the patent families include patent applications directed either to the current protocol for conducting MiCK assays, or to a computer-based system for performing MiCK assays that are pending in North America (including the US), Central America, South America, Europe, and Asia. The other two patent families include international patent applications filed under the Patent Cooperation Treaty directed either to protocols for determining the efficacy of certain drug combinations or to protocols for predicting the efficacy of certain drugs in one cell type (for example, metastasized cancer cells) based on studies conducted on a different cell type (for example, cancer cells harvested from the site of the primary lesion). The Company plans to file national stage applications in the fall of 2016 in various jurisdictions, as and when appropriate. The Company's patent estate, which includes granted patents and pending patent applications, is summarized in Appendix II.

The Licensor is currently is engaged in efforts that will result in significant improvements to the sensitivity of the MiCK platform, a platform improvement that will significantly enhance the scope and accuracy of results obtained. The Licensor is simultaneously engaged in efforts that will lead to greater automation of the MiCK platform, reduced biomass requirements, and enhanced assay throughput. These and other efforts are likely to result in additional intellectual property aspects of which, Management anticipates are likely to be protectable by enforceable patent rights in the U.S. and the rest of the world.

### **Know-How and Trade Secrets**

Over and above the expansion of its patent position, the Company expects to protect certain improvements less amenable to patent protection as trade secrets.

The know-how includes but is not limited to dossiers (including those created for regulatory purposes) and data useful for Marketing Authorisations, trial information and data, including know-how and information relating to supply chain, technology, product safety and efficacy. The know-how resides in the processes and procedures of the Company (including its Quality Assurance and Quality Control Systems, Lab Systems and Lab “Notebooks”). The know-how also exists in the minds of certain individuals employed by the Licensor. The Licensor and DiaTech Oncology, LLC before it, have spent considerable development time in creating technology based systems and processes to manage and retain that which is the subject of know how.

### **Trade Marks and Copyright**

The Licensor owns four trade marks in the US which are licensed to the Company under the LDA. The Licensor and the Company, pursuant to the terms of the LDA, are considering filing additional trade mark applications in due course in various jurisdictions, as and when appropriate.

The Licensor owns copyright in the software underlying the MiCK platform, which was written in house by an employee of the Licensor, which is licensed to the Company under the LDA.

### **Regulatory Exclusivity**

The Company takes the position that its MiCK platform is a Class III medical device which requires a PMA, and is committed to seeking IDE-PMA regulatory approval in the USA. The Company has commenced efforts to execute the clinical studies and operational compliance necessary to obtain PMA approval from the FDA. Given that Class III devices receive six years of data exclusivity upon PMA approval, the FDA will not be permitted to use information (clinical data and trade secret data) contained in the Company’s PMA application to approve another device or classify, or re-classify, another device during this data exclusivity period. This affords the Company a significant commercial advantage as any competitor seeking approval of another device within the data exclusivity period will be forced to run its own clinical studies.

# P&L SNAPSHOT

Diatech - Revenue Summary and P&L											
	2015 (Partial Year)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>REVENUES:</b>											
NA - MICK Chemotherapy - Sales	\$ -	\$ -	\$ -	\$ -	\$ 4,555,391	\$ 34,207,374	\$ 104,263,660	\$ 249,294,817	\$ 550,503,976	\$ 865,578,414	\$ 1,095,956,239
NA - MICK Chemotherapy - Pharma Collaborations	\$ -	\$ 500,000	\$ 2,000,000	\$ 4,000,000	\$ 5,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000	\$ 6,000,000
NA - MICK Chemotherapy - Current Initiatives	\$ 150,000	\$ 250,000	\$ 650,000	\$ 2,000,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000
NA - TIRA Immunotherapy - Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,833,983	\$ 15,845,550	\$ 40,821,188	\$ 76,185,225	\$ 154,029,845	\$ 173,346,392
NA - TIRA Immunotherapy - Pharma Collaborations	\$ -	\$ 375,000	\$ 1,250,000	\$ 5,000,000	\$ 7,500,000	\$ 10,000,000	\$ 12,500,000	\$ 12,500,000	\$ 12,500,000	\$ 12,500,000	\$ 12,500,000
North America Total Revenues	\$ 150,000	\$ 1,125,000	\$ 3,900,000	\$ 11,000,000	\$ 19,555,391	\$ 56,541,356	\$ 141,109,210	\$ 311,116,005	\$ 647,689,201	\$ 1,040,608,259	\$ 1,290,302,631
Europe Revenues	\$ -	\$ -	\$ -	\$ -	\$ 2,277,696	\$ 19,020,678	\$ 60,054,605	\$ 145,058,002	\$ 313,344,600	\$ 509,804,129	\$ 634,651,316
ROW Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,138,644	\$ 25,970,491	\$ 79,974,339	\$ 231,065,377	\$ 465,037,133	\$ 637,864,254
<b>Total Revenues</b>	<b>\$ 150,000</b>	<b>\$ 1,125,000</b>	<b>\$ 3,900,000</b>	<b>\$ 11,000,000</b>	<b>\$ 21,833,087</b>	<b>\$ 81,700,679</b>	<b>\$ 227,134,306</b>	<b>\$ 536,148,346</b>	<b>\$ 1,192,099,179</b>	<b>\$ 2,015,449,521</b>	<b>\$ 2,562,818,200</b>
<b>EXPENSE PROJECTIONS:</b>											
COGS	\$ 45,000	\$ 337,500	\$ 975,000	\$ 2,750,000	\$ 4,366,617	\$ 16,340,136	\$ 45,426,861	\$ 107,229,669	\$ 238,419,836	\$ 403,089,904	\$ 512,563,640
Gross Margin	\$ 105,000	\$ 787,500	\$ 2,925,000	\$ 8,250,000	\$ 17,466,470	\$ 65,360,543	\$ 181,707,444	\$ 428,918,677	\$ 953,679,343	\$ 1,612,359,617	\$ 2,050,254,560
Gross Margin %	70%	70%	75%	75%	80%	80%	80%	80%	80%	80%	80%
<b>Operating Expenses:</b>											
Clinical Development Costs	\$ 87,500	\$ 4,504,924	\$ 9,200,758	\$ 14,710,985	\$ 9,570,833	\$ 10,466,667	\$ 27,256,117	\$ 69,699,285	\$ 166,893,885	\$ 302,317,428	\$ 384,422,730
% revenues	58%	400%	236%	134%	44%	13%	12%	13%	14%	15%	15%
Assay Development and Optimization	\$ 217,500	\$ 1,082,500	\$ 520,000	\$ 540,000	\$ 580,000	\$ 580,000	\$ 4,542,686	\$ 10,722,967	\$ 23,841,984	\$ 40,308,990	\$ 51,256,364
% revenues	145%	96%	13%	5%	3%	1%	2%	2%	2%	2%	2%
HR Costs	\$ 1,872,155	\$ 7,717,679	\$ 11,214,932	\$ 13,138,148	\$ 15,084,866	\$ 16,796,682	\$ 45,426,861	\$ 107,229,669	\$ 226,498,844	\$ 382,935,409	\$ 461,307,276
% revenues	1248%	686%	288%	119%	69%	21%	20%	20%	19%	19%	18%
Facilities	\$ 230,000	\$ 755,000	\$ 880,000	\$ 1,120,000	\$ 1,340,000	\$ 1,360,000	\$ 9,085,372	\$ 13,403,709	\$ 23,841,984	\$ 30,231,743	\$ 51,256,364
% revenues	153%	67%	23%	10%	6.1%	1.7%	4%	3%	2%	2%	2%
Legal	\$ 250,000	\$ 875,000	\$ 700,000	\$ 700,000	\$ 800,000	\$ 800,000	\$ 4,542,686	\$ 10,722,967	\$ 23,841,984	\$ 40,308,990	\$ 51,256,364
% revenues	167%	78%	18%	6%	4%	1%	2.0%	2.0%	2%	2%	2%
SG&A	\$ 1,351,500	\$ 3,300,000	\$ 2,182,000	\$ 2,560,000	\$ 3,290,000	\$ 3,580,000	\$ 15,899,401	\$ 37,530,384	\$ 83,446,942	\$ 120,926,971	\$ 153,769,092
% revenues	901%	293%	56%	23%	15%	4%	7%	7%	7%	6%	6%
CAPEX, Lab and Other Equipment	\$ 120,000	\$ 2,605,000	\$ 835,000	\$ 835,000	\$ 845,000	\$ 845,000	\$ 2,271,343	\$ 5,361,483	\$ 11,920,992	\$ 20,154,495	\$ 25,628,182
% revenues	80%	232%	21%	8%	4%	1%	1%	1%	1%	1%	1%
<b>Total Operating Expenses</b>	<b>\$ 4,128,655</b>	<b>\$ 20,840,103</b>	<b>\$ 25,532,690</b>	<b>\$ 33,604,133</b>	<b>\$ 31,510,699</b>	<b>\$ 34,428,348</b>	<b>\$ 109,024,467</b>	<b>\$ 254,670,464</b>	<b>\$ 560,286,614</b>	<b>\$ 937,184,027</b>	<b>\$ 1,178,896,372</b>
<b>EBITDA</b>	<b>\$ (4,023,655)</b>	<b>\$ (20,052,603)</b>	<b>\$ (22,607,690)</b>	<b>\$ (25,354,133)</b>	<b>\$ (14,044,230)</b>	<b>\$ 30,932,194</b>	<b>\$ 72,682,978</b>	<b>\$ 174,248,212</b>	<b>\$ 393,392,729</b>	<b>\$ 675,175,590</b>	<b>\$ 871,358,188</b>
Net Margin %	-2682%	-1782%	-580%	-230%	-64%	38%	32%	33%	33%	34%	34%
Cash on hand	\$ 4,000,000										
UK TAX CREDITS - 30% of R&D	\$ -	\$ -	\$ 2,760,227	\$ 4,413,295	\$ 2,871,250	\$ 3,140,000	\$ 8,176,835	\$ 20,909,785	\$ 50,068,165	\$ 90,695,228	\$ 115,326,819
Financing Fee Recovery	\$ 500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Cumulative Cash Post UK R&amp;D Credits &amp; Fee Recovery</b>	<b>\$ 476,345</b>	<b>\$ (18,076,257)</b>	<b>\$ (37,923,720)</b>	<b>\$ (58,864,558)</b>	<b>\$ (70,037,537)</b>	<b>\$ (35,965,343)</b>	<b>\$ 44,894,470</b>	<b>\$ 240,052,468</b>	<b>\$ 683,513,362</b>	<b>\$ 1,449,384,180</b>	<b>\$ 2,436,069,187</b>

## PART 4

### The Licence and Development Agreement and IP Option

The Company has an exclusive, sub-licensable (for the purposes of commercialisation), perpetual (but terminable in accordance with specific termination provisions) licence, from DiaTech, LLC, the Licensor, of the MiCK and TIRA IP, for the development of “Licensed Products” (any product or process envisaged to be developed pursuant to the Business Plan) in relation to the global oncology treatment market for all types of cancer.

The Licence is subject to the achievement of the Minimum Subscription Level.

Pursuant to the LDA, the Company will promulgate a Development Plan based on the Business Plan which will set the milestones and timeline for the development of MiCK Assays and the MiCK and TIRA IP, against the projected budget and expenditures. The Development Plan will set out the part of the development work to be conducted by the Company, and the part of the development work to be conducted by the Licensor, and/or other parties and affiliates of the Company and the consideration and pricing to be paid for such development work and/or services. The funding for the Development Plan will come from the Company, and be executed by the executives of the Company under the ultimate review of the Independent Directors of the Company. The Company has the longer of 90 days from the effective date of the LDA or 30 days from the time it is notified that the Minimum Subscription has been received, to submit the Development Plan to the Licensor. The Independent Directors can, in their discretion, bring in new executives (not as directors of the Company) to manage the Development Plan if issues arise with the management of the Development Plan otherwise than as a result of a failure to raise sufficient funds to meet the budget.

Under the Licence the Company and the Licensor have obligations to use commercially reasonable endeavours to implement the Development Plan. The Company shall finance and/or conduct certain tasks in accordance with the Development Plan in conjunction with the Licensor. The Company grants a license back to DiaTech, LLC, the Licensor, solely to the extent necessary for the Licensor to perform its role under the Development Plan. With respect to the Development Plan, where, but for the license of the Vanderbilt Patents, the acts carried out would be an infringement of Vanderbilt's rights, the Licensor shall be obliged under the LDA to perform such elements of the Development Plan under its license from Vanderbilt.

The terms of the Development Plan shall include provision as to pricing for the development work and services to be provided by the Licensor and it is anticipated that such pricing shall incorporate a margin appropriate and commensurate with pricing for the provision of such services in the diagnostic and pharmaceutical industry. The terms of the Development Plan shall also include provision as to how any revenues generated during development, commercialisation and exploitation of the Licensed Products are to be shared between the Company and the Licensor. Such terms may be agreed from time to time as the development, commercialisation and exploitation of the Licensed Products progresses.

The Company also has an IP Option to acquire the MiCK and TIRA IP. The IP Option may be exercised under the following circumstances:

- By either party under circumstances where the Company has an arms-length bona fide offer to acquire the Company's rights under the LDA provided that the Option shall be effectively exercised on the closing of any agreement between the Company and the third party to acquire the exclusive license.
- By the Licensor in the event that there is a Liquidity Event resulting in the redemption of all Redeemable Preference Shares

- If there is a sale of ordinary shares of the Company, the Licensor may exercise the Option on the completion of such sale of ordinary shares and the “Deferred Consideration” (see below) shall be calculated by reference to the overall transaction resulting in the sale of the said ordinary shares

Provided that, if as a result of such sale of ordinary shares (i) there is a Change of Control of the Company, and (ii) the Licensor does not exercise the Option on the date of completion of such sale of ordinary shares, then:

- only the Company may exercise the Option thereafter; and
- the Deferred Consideration shall be waived irrevocably and shall be reduced to nil

As a further Investor protection, upon a change of control of the Licensor, the RPS Shareholders have the right under the Articles to appoint so many Independent Directors as have a majority of the Board.

The LDA does not commence unless the Company raises the Minimum Subscription Level by the Long Stop Date. The LDA is terminable by the Licensor for standard insolvency reasons. Once the Option becomes exercisable the LDA cannot be terminated.

The consideration paid by the Company to the Licensor under the agreement is as follows:

- In consideration for the grant of the License the Company shall pay the Licensor
  - the sum of £1.00;
- In consideration of the grant of the Option, the Company shall pay the Licensor
  - £1.00 on the grant of the Option;
  - On the exercise of the Option, the Company shall pay the Licensor the Deferred Consideration.

Deferred Consideration shall not exceed a sum, to be agreed upon the exercise of the IP Option or determined in accordance with the dispute resolution procedures included in the LDA, as the fair value of the MiCK and TIRA IP at the date of the LDA and shall otherwise be a sum equal to: (i) any monies that would have been the subject of a Liquidity Event Distribution and would otherwise have been paid to the holders of any Priority Preference Shares where those holders of Priority Preference Shares have waived their right to such Liquidity Event Distribution; and (ii) 40% of the monies that would otherwise be available for distribution for the Fourth Tranche of the Distribution Waterfall; and (iii) the whole of the monies that would otherwise be available for distribution by the Company as the 5<sup>th</sup> Tranche of the Distribution Waterfall.

The amount of the Deferred Consideration shall reduce the profits of the Company available for distribution to the shareholders of the Company and shall be taken into account under the RPS Terms with respect to Liquidity Event Distributions to be made to the Shareholders of the Company from time to time.

## **Vanderbilt Patents**

There are two patents, which are effective in the US only, in the name of Vanderbilt University, which relate to original, underlying and fundamental aspects of the Licensor's MiCK assay. The Licensor has had transferred to it from DiaTech Oncology, LLC an exclusive license to these US patents from Vanderbilt University, which both protects the MiCK development in the US and permits the Licensor to carry out commercial activities in the US without the risk of infringement. These patents are important in protecting the MiCK development against competition in the US market during their lifetime. The Vanderbilt Patents are scheduled to expire in late 2016, but may be extended until 2019. They act as a significant deterrent to any third parties (i.e. anyone other than the Licensor) carrying out competing activities in the US due to the risk of infringement. The US patents in the name of Vanderbilt do not make up part of the relevant intellectual property licensed to the Company. Where, but for the License under the Vanderbilt Patents, the acts carried out in the US would be an infringement of Vanderbilt's rights, the Licensor shall be obliged under the LDA to perform such elements of the Development Plan at least for the duration of those patents. On this basis, the Company does not require any further rights to those Vanderbilt Patents

## **Licence Back of MiCK and TIRA IP**

There is a license of the MiCK and TIRA IP from the Company back to the Licensor. The purpose of this License is to enable the Licensor to undertake its responsibilities and obligations from time to time under the LDA with respect to the Development Plan and to enable it to maintain and manage the two laboratories that it owns that are equipped to undertake MiCK and TIRA Assays.

The License Back is a sole license. It does not permit sub licenses.

The scope of the License Back is limited to permitting the Licensor to perform its obligations and to provide the services anticipated under the LDA with respect to delivery of the Development Plan from time to time.

Any payment for the services provided, any accounting for any revenue generated and/or any royalty payable with respect to any revenues or profits generated from the exploitation of the MiCK and TIRA IP under the License Back are to be agreed between the Company and the Licensor from time to time as agreement is reached between them on their respective rights and obligations with respect to the Development Plan.

## PART 5

## RPS TERMS

**Note:** In the event of any conflict or inconsistency between the provisions of the RPS Terms and the Articles of Association, the Articles of Association shall prevail.

The Company intends to be in a position whereby it can issue the Redeemable Preference Shares and the Priority Preference Shares in an uncertificated form and such shares shall be registered and held and may be transferred in uncertificated form on the CREST® platform (or such other platform as the Company may determine that meets the requirements of all relevant regulations relating to the issue, holding and transfer of shares in uncertificated form).

Redeemable Preference Shares		
1.	How many do I receive?	One Redeemable Preference Share for each £1.00 invested.
2.	What is the nominal or par value?	£0.000001 per Redeemable Preference Share.
3.	What is the subscription price?	£1.00 per Redeemable Preference Share.
4.	What is the highest achievable return?	£1.70 per Redeemable Preference Share plus a Trading Dividend that might be declared from time to time.
5.	What rights do they have as to dividends?	<p>The rights to receive Trading Dividends and Liquidity Event Distributions attaching to the Redeemable Preference Shares are more particularly set out below under the heading "Distribution Waterfall"</p> <p>The Redeemable Preference Shares hold no other rights to receive any dividend or distribution declared or made by the Company.</p>
6.	Are the shares secured/unsecured?	Unsecured.
7.	Do the Redeemable Preference Shares have a life span after which they are cancelled?	No
8.	Do they offer voting rights?	No.
9.	Do they offer any controls?	<p>Independent Directors are appointed to the Board by the Company, being Directors independent of the parent company, DiaTech Holdings, Inc.. They are not appointed by the RPS Shareholders save as set out in the following paragraph. Many of the Company's material decisions with respect to the development of the IP cannot be undertaken without the approval of the Independent Directors.</p> <p>Upon a change of control of DiaTech Holdings, Inc., the RPS Shareholders have the right to appoint so many Independent Directors as have a majority of the Board.</p> <p>Material decisions which require the approval of the Independent Directors include:</p>

		<ul style="list-style-type: none"> <li>(i) the approval of the Development Plan and any alterations to it;</li> <li>(ii) a decision to terminate the LDA or to transfer rights under it to a third party</li> <li>(iii) a decision to declare a Liquidity Event Distribution in circumstances where a Liquidity Event has not occurred but would do with the passage of time or the satisfaction of conditions;</li> <li>(iv) a decision to take any step to wind the Company up or to appoint a receiver or administrator over the assets of the Company.</li> </ul>
10.	Are they transferable?	The Redeemable Preference Shares are freely transferable.
11.	What financial information will the holders of the Redeemable Preference Shares receive?	<p>The Company will prepare and deliver to each holder of Redeemable Preference Shares:</p> <ul style="list-style-type: none"> <li>(i) within 45 Business Days of the end of the second quarter of each Financial Year, consolidated half-yearly management accounts of the Company, including a profit and loss account or equivalent financial statement, a balance sheet, cash flow statement and forecast with a comparison against the Company's business plan and a report by the directors of the Company on the prospects of the Company with respect to its business plan; and</li> <li>(ii) promptly and no later than 4 months after the end of each Financial Year, the financial statements for such Financial Year, including all additional information and related notes and directors' report (and auditors' report, as appropriate).</li> </ul>
<b>Priority Preference Shares</b>		
12.	How many do I receive?	One Priority Preference Share for each Redeemable Preference Share issued to you.
13.	What is the nominal or par value?	£0.000001
14.	What is the subscription price?	£0.000001
15.	What is the highest achievable return?	The Priority Preference Share Redemption Amount, being a maximum of £4.00 per Priority Preference Share with any payment being made in units of £1.00.
16.	What rights do they have as to dividends?	<p>The rights to receive Liquidity Event Distributions attaching to the Priority Preference Shares are more particularly set out below under the heading "Distribution Waterfall."</p> <p>The Priority Preference Shares hold no other rights to receive any dividend or distribution declared or made by</p>



		the Company and for the avoidance of doubt, hold no rights to receive any Trading Dividend.
17.	Are the shares secured/unsecured?	Unsecured.
18.	Do the Priority Preference Shares have a life span after which they are cancelled?	No.
19.	Can an Investor waive its right to a Priority Preference Share Payment	<p>The Directors are obliged to accept a waiver of a Priority Preference Share Payment if properly made.</p> <p>An Investor who waives entitlement to receive Priority Preference Share Payments in respect of any Priority Preference Shares held by him, shall do so irrevocably and the waived amount shall be the entire Redemption Amount remaining outstanding in respect of the relevant Priority Preference Share, which shall be deemed to be and shall be treated to be a reduction in the redemption value of that Priority Preference Share to nil, such that that Priority Preference Share shall be deemed to be redeemed in full and shall be cancelled.</p> <p>Any Warrant exercisable in respect of such Priority Preference Share Payment as has been waived shall immediately expire to the extent of the Priority Preference Share Payment so waived.</p>
20.	Do they offer voting rights?	No.
21.	Are they transferable?	The Priority Preference Shares are freely transferable. The Warrants are incorporated into the Priority Preference Shares and are not transferrable independently of them and the Priority Preference Shares are not transferable independently of the Warrants.
<b>Financial Reporting</b>		
22.	What financial information will the holders of the Redeemable Preference Shares receive?	<p>The Company will prepare and deliver to each holder of Redeemable Preference Shares:</p> <p>(i) within 45 Business Days of the end of the second quarter of each Financial Year, consolidated half-yearly management accounts of the Company, including a profit and loss account or equivalent financial statement, a balance sheet, cash flow statement and forecast with a comparison against the Company's business plan and a report by the directors of the Company on the prospects of the Company with respect to its business plan; and</p> <p>(ii) promptly and no later than 4 months after the end of each Financial Year, the financial statements for such Financial Year, including all additional information and related notes and directors' report (and auditors' report, as appropriate).</p>

Warrants		
23.	How many do I receive?	Warrants equal in number to the PPS Redemption Amount (£4 at issue) for the Priority Preference Shares are incorporated into each Priority Preference Share issued to you. The Warrants are non-detachable from the Priority Preference Shares and vice versa.
24.	What is the subscription price?	£1.00 per Warrant RPS Share.
25.	What are the Warrants?	Each Warrant is triggered on the making of a Liquidity Event Distribution resulting in a Priority Preference Share Payment whereupon the Priority Preference Share Payment shall be automatically applied in the subscription by the PPS Shareholder for one Warrant Share per Warrant at an exercise price per Warrant Share of £1.00 each. The relevant Priority Preference Share Payment shall be retained by the Company in full satisfaction of the Warrant Exercise Price payable for the Warrant RPS Shares.
Warrant RPS Shares		
26.	What are the Warrant RPS Shares?	Redeemable Preference Shares automatically subscribed for by the Investor and issued and allotted by the Company to the Investor under the terms of the Warrant, one Warrant RPS Share for one Warrant at an exercise price of £1 each.
27.	Is there any difference between a Warrant RPS Share and a Redeemable Preference Share	No

## Distribution Waterfall

### Trading Dividends

Profits arising from the exploitation of the MiCK and TIRA IP are to be aggregated between the Licensor and the Company. This aggregation will apply to all profits of the Licensor (and its subsidiaries) in exploiting the MiCK and TIRA IP under arrangements agreed between the Licensor and the Company that are in excess of what would be a reasonable market rate of return for undertaking the commercialisation, marketing and exploitation if the MiCK and TIRA IP that is being undertaken by the Licensor ("**Trading Profits of Exploitation**").

In the event that there is at any time: (i) a lawful distribution by way of dividend of distributable profits of the Company (otherwise than in the circumstances of a Liquidity Event); or (ii) the Licensor (and/or its subsidiaries) is in receipt of Trading Profits of Exploitation which it is not otherwise obliged to account to the Company for, then the Directors of the Company shall be obliged as and when there are distributable reserves of the Company, to declare dividends on the RPS Shares and on the Ordinary Shares such that the share of the profits available for distribution and distributed to the Shareholders (otherwise than in the circumstances of a Liquidity Event) and the Trading Profits of Exploitation, shall over time be split between the RPS Shareholders as one class and the ordinary shareholders (as to Trading Dividends) and Licensor (as to Trading Profits of Exploitation) as the other class so that 30% of such profits to be distributed are distributed to the RPS Shareholders *pari passu* and the remaining 70%

shall be retained profits of the Licensor (and its subsidiaries) or distributed to the ordinary shareholders *pari passu*. It should be noted that if no Trading Profits of Exploitation are made by the Licensor (and/or its subsidiaries) and no profits available for distribution are distributed by the directors of the Company, the Directors of the Company shall be under no obligation to declare a dividend with respect thereto.

### **Liquidity Event Distributions**

In the event of: (i) a lawful distribution by way of Liquidity Event Distribution on the happening of a Liquidity Event; or (ii) a return of capital on a liquidation, reduction of capital or otherwise, the assets of the Company available for distribution among the shareholders shall be applied in the following manner and order of priority:

#### **First Tranche**

- (i) The first tranche shall equal 1.6667 times the Subscription Commitments invested by all of the Investors.

The first tranche shall be distributed as to 60% to the Redeemable Preference Shares then in issue *pari passu* so that as a maximum they then receive an amount equal to their RPS Subscription Price as a partial redemption. The remaining 40% shall be distributed to the Priority Preference Shares then in issue *pari passu*, as a Priority Preference Share Payment, subject to a minimum distribution per Priority Preference Share of £1 and multiples thereof as a partial redemption of such Priority Preference Shares.

Any Priority Preference Share Payment proposed in respect of the PPS Shares may be waived by any individual PPS Shareholder in an amount in respect of any Priority Preference Share equal to its full Redemption Amount and any such waiver of a dividend on the Priority Preference Shares shall trigger deferred consideration to be payable to the Licensor under the LDA in the same amount as the Liquidity Event Distribution waived in the event that the Option under the LDA is exercised. A waiver of a Priority Preference Share Payment with respect to a Priority Preference Share shall result in a lapse of all Warrants attached to that Priority Preference Share.

All Priority Preference Share Payments declared shall be applied in the exercise of Warrants and subscription for Warrant RPS Shares in an equal amount to the Priority Preference Share Payment and allotted to the Investors.

#### **Second Tranche**

- (ii) Following the first tranche, the second tranche shall equal such amount of distributable profits as shall be required to be distributed to the holders of the Priority Preference Shares their full Redemption Amount having been paid and in all of the Warrants being exercised such that the Priority Preference Payments are all applied in the subscription for Warrant RPS Shares on behalf of the Investors, which shall mean that all Priority Preference Shares have been redeemed in full and all Warrant RPS Shares have been issued by the Company.

Any Priority Preference Share Payment proposed in respect of the PPS Shares may be waived by any individual PPS Shareholder in an amount in respect of any Priority Preference Share equal to its full Redemption Amount and any such waiver of a dividend on the Priority Preference Shares shall trigger deferred consideration to be payable to the Licensor under the LDA in the same amount as the Liquidity Event

Distribution waived in the event that the Option under the LDA is exercised. A waiver of a Priority Preference Share Payment with respect to a Priority Preference Share shall result in a lapse of all Warrants attached to that Priority Preference Share.

All Priority Preference Share Payments declared shall be applied in the exercise of Warrants and subscription for Warrant RPS Shares in an equal amount to the Priority Preference Share Payment and allotted to the Investors.

Following the second tranche, distributions shall have been declared in favour of Investors in an amount equal to 5 times the Subscription Commitments invested by all Investors, but four fifths of such amount shall have been re-invested in the Company in subscription for Warrant RPS Shares, unless the relevant Investor has waived his right to such Priority Preference Share Payments.

### Third Tranche

(iii) Thereafter, as the Third Tranche:

- a. If the Option has been exercised under the LDA, the aggregate value of all Priority Preference Share Payments waived by the Investors in respect of their Priority Preference Shares shall be applied in payment of deferred consideration under the LDA and paid to the Licensor (DiaTech, LLC) and an amount equal to the aggregate value of all the subscriptions for Warrant RPS Shares arising as a result of the exercise of Warrants shall be distributed to the holders of the ordinary shares; or
- b. If the Option has not been exercised, an amount equal to the aggregate value of all the subscriptions for Warrant RPS Shares arising as a result of the exercise of Warrants plus an amount equal to the aggregate value of all Priority Preference Share Payments waived by the Investors in respect of their Priority Preference Shares shall be distributed to the holders of the ordinary shares.

It should be noted that, in accordance with the RPS Terms, the Company shall be entitled to make such distributions out of funds received from the subscription for Warrant RPS Shares, to the ordinary shareholders prior to the redemption of all the Priority Preference Shares, and to create distributable profits for distribution through capitalisation and reduction of the share premium reserves of the Company.

### Fourth Tranche

(iv) The Fourth Tranche shall equal 12.5 times the Subscription Commitments of the Investors invested in the Company (including the Keyholder Fee but not, for the avoidance of doubt, including subscriptions for Warrant RPS).

Under the LDA, 40 per cent. of all profit generated (or the proceeds of sale) and otherwise distributable as the Fourth Tranche has been reserved and shall be paid to the Licensor, DiaTech, LLC, who at the date hereof is a subsidiary of the holder of the ordinary shares. This payment is part of the deferred consideration for the exercise of the IP Option. The entitlement of the Licensor should be treated as an expense of the Company and is not a profit distribution, but instead a reduction in profits.

The deferred consideration under the LDA is subject to a maximum aggregate value which is to be agreed at the time of exercise of the Option, between the Company and the Licensor, as the fair market value of the IP at the date of the LDA. Should the aforementioned 40% (when aggregated with any payment of deferred consideration triggered in Tranches one, two or three above) exceed such market value, no more

deferred consideration shall be payable and the remainder of such 40% shall remain in profit and be distributed to the holders of ordinary shares by way of a dividend.

The remaining 60% of all profit generated (or the proceeds of sale) and otherwise distributable as the Fourth Tranche shall all be distributed (by way of redemption or partial redemption) to the holders of Redeemable Preference Shares (including for this purpose the Warrant RPS Shares) pari passu subject to a maximum distribution per Share (including the distributions made to such Shares out of tranche 1) of £1.70 at which time they shall be redeemed in full.

#### Fifth Tranche

- (v) The Fifth Tranche is all monies available for distribution to the shareholders of the Company or payable under the LDA to the Licensor after payment out in full of the Fourth Tranche above.

Under the LDA, from the time that the fifth tranche would be distributed if available for distribution, 100% of the monies that would otherwise be profits of the Company shall be paid to the Licensor, DiaTech, LLC, who at the date hereof is a subsidiary of the holder of the ordinary shares. This payment is the remaining part of the deferred consideration for the grant of the LDA license or, depending on the timing of the payment, the commercialization of the MiCK and TIRA IP, or for the exercise of the IP Option. The entitlement to deferred consideration of the Licensor is anticipated to be treated as an expense of the Company and would therefore not be a profit distribution, but would instead act to reduce the profits available for distribution.

The deferred consideration under the LDA is subject to a maximum to be agreed at the time of exercise of the Option, between the Company and the US Parent, as the fair market value of the MiCK and TIRA IP at the date of the LDA. Should the aforementioned 100% (when aggregated with any payment of deferred consideration triggered in Tranches one, two, three or four above) exceed such market value, no more deferred consideration shall be payable and any remaining monies available for distribution shall be available for distribution to the holders of ordinary shares by way of a dividend.

After the fourth tranche has been distributed, all the Redeemable Preference Shares (including the Warrant RPS Shares) shall have been redeemed in full and shall be cancelled. Any profits of the Company not paid out under the LDA in respect of the Fifth Tranche shall be distributed to the holders of the ordinary shares.

In the event that the aggregate of all Liquidity Events does not provide sufficient proceeds to proceed to distribute under the Fourth Tranche above, it may be in the interests of certain PPS Shareholders, depending on their own situation, to waive their Priority Preference Share Payments in relation to PPS Shares. Please refer to paragraph 7 of Part 2 (Risks) above. The Board is obliged to accept any such waiver. If any PPS Shareholder were to waive their Priority Preference Share Payment payable on any PPS Share, the waived distribution shall trigger deferred consideration due under the LDA upon exercise of the Option and in the absence of the exercise of the Option shall fall to be distributed to the ordinary shareholders and shall be counted towards the Third Tranche payments payable in respect of the ordinary shares under the Third Tranche above.

An Investor who waives entitlement to receive Priority Preference Share Payments in respect of any Priority Preference Share held by it shall do so irrevocably in the full Redemption Amount of such Priority Preference Share and the waived amount in respect of each Priority

Preference Share shall be deemed to be and shall be treated to be a reduction in the redemption value of the Priority Preference Share to nil, such that that Priority Preference Share shall be deemed to be redeemed in full and shall be cancelled. Any Warrant exercisable in respect of such Priority Preference Share shall immediately expire.

The approval of the Independent Directors is required for any Liquidity Event Distribution to be made in circumstances where an event has occurred which could, with the passing of time and/or the satisfaction of certain conditions be a Liquidity Event but where, at the date of the Liquidity Event Distribution, there has not been a Liquidity Event. Such Liquidity Event Distribution can be made by the Directors where there is justification for making such a Liquidity Event Distribution that balances the interest of the RPS Shareholders, the PPS Shareholders and the Ordinary Shareholders and the risk implications to any or all of them in making such Liquidity Event Distribution in such circumstances.

The Shares will not have any guaranteed Trading Dividend, Liquidity Event Distribution or redemption rights in the event that revenue from the exploitation of MiCK Assays and/or TIRA Assays or any other revenue received by the Company which may be distributed) is insufficient to create sufficient distributable profits to pay Trading Dividends or Liquidity Event Distributions.

#### Example

The following is an example for a Prospective Investor who has invested an individual subscription of £600,000.

Subscription Commitment of £600,000:	600,000 Redeemable Preference Shares
	600,000 Priority Preference Shares
	2,400,000 Warrants

Out of the First Tranche, the Investor would receive £600,000 as Dividends against the Redeemable Preference Shares. £400,000 would be declared as payable to the Investors as Dividend against the Priority Preference Shares. If this Dividend is not waived, it would be applied in exercising 400,000 Warrants in the subscription at £1 per share for 400,000 Warrant RPS Shares. The Company would utilise the funds received on such subscription in paying a distribution to the ordinary shareholders. In the event that a Priority Preference Share Payment is waived by an Investor, an amount equal to the amount so waived shall be applied in making a payment of deferred consideration (provided the Option has been exercised) to the Licensor. In either case the US Parent or its subsidiary, the Licensor, would receive £400,000.

Out of the Second Tranche, the Investor would receive £2,000,000 as Dividends on the Priority Preference Shares, which would then be fully redeemed. This Dividend would be applied in the Second Tranche in exercising 2,000,000 Warrants, being the remainder of the Warrants, in the subscription for 2,000,000 Warrant RPS Shares at a subscription price of £1 each. Under the Third Tranche the Company would utilise the funds received on such subscription in paying a distribution to the ordinary shareholders. In the event that a Priority Preference Share Payment is waived by an Investor, an amount equal to the amount so waived shall be applied in making a payment of deferred consideration (provided the Option has been exercised) to the Licensor. In either case the US Parent or its subsidiary, the Licensor, would receive £2,000,000.

So by the end of the third tranche, the Investor will have received £600,000, being the amount of their initial subscription, and the ordinary shareholder, the US Parent, or its subsidiary, the Licensor, will have received £2,400,000 either as a distribution or as deferred consideration under the LDA.

Out of the Fourth Tranche, the Investor would receive £4,500,000 as Dividends on the Redeemable Preference Shares. The Licensor, the subsidiary of the US Parent, would receive £3,000,000, being deferred consideration under the LDA before such profits become available as distributable reserves. At the end of the Fourth Tranche the Redeemable Preference Shares shall all have been fully redeemed and the Investors shall have no ongoing interest in the Company. All distributable profits of the Company thereafter would be for the account of the ordinary shareholders, to the extent not payable to the Licensor as deferred consideration under the LDA.

## PART 6

### SUBSCRIPTION AGREEMENT

#### APPLICATION TO SUBSCRIBE FOR SHARES

To:

The Directors  
DiaTech Oncology Limited  
9<sup>th</sup> Floor, The Royal Liver Building,  
Pier Head,  
Liverpool L3 1JH  
United Kingdom

The Applicant hereby applies for the allotment and issue to it of Shares in DiaTech Oncology Limited, a company formed in England with limited liability having Company Number 9716938 (the “**Company**”), upon and subject to the terms of the Information Memorandum dated 7 November 2015 (as amended on 2 March 2016) (the “**Information Memorandum**”) and the Articles of Association.

Defined terms used but not defined in this Subscription Agreement will have the definitions given to them in the Information Memorandum.

#### 1. SUBSCRIPTION COMMITMENT

- 1.1 The Applicant hereby applies for the allotment and issue to it of Shares as set out in its Application Form in the form set out at Schedule 1 to this Subscription Agreement and confirms that on payment of the Subscription Price (as defined herein) it shall have satisfied in full its obligations to make a Subscription Commitment in respect of the Shares.
- 1.2 In the event the Minimum Subscription Level is not met, all monies received from Applicants shall be returned to them without deduction.
- 1.3 Except at the discretion of the Company, once an Applicant’s subscription application has been accepted by the Company (such notice of acceptance to be given to each Applicant in writing by or on behalf of the Company), Subscription Commitments shall only be refundable by the Company in the event that the Minimum Subscription Level is not met by the Long Stop Date (or an Applicant has sought to withdraw its Subscription Commitments following an extension of the Long Stop Date in accordance with the provisions of the Information Memorandum).

#### 2. Warranties

The Applicant hereby warrants and represents that:

- 2.1 Its obligations under this agreement are irrevocable and shall not be capable of rescission or termination in any circumstances save as set out in the Information Memorandum;
- 2.2 it will acquire the Shares as principal, for investment purposes only, and not with a view to creating any encumbrance over, transferring or otherwise disposing of the whole or any part of its interest in or granting any option over any Shares to any person



except as permitted by the Articles of Association as summarised in the Information Memorandum or with the prior written consent of the Company;

- 2.3 it is aware that the Company makes no representations and warranties to any transferee in the event that the Applicant transfers any of its holding of Shares in accordance with Clause 3.1 of this Subscription Agreement;
- 2.4 it was not in the United States (i) at any time that the Shares were offered for sale to it, (ii) at the time it originated an order to purchase the Shares or at any time it offered to purchase such Shares, or (iii) at the time such offer was accepted. As used herein, "United States" has the meaning provided in Regulation S under the 1933 Act;
- 2.5 it is not a U.S. Person, and will notify the Company immediately if it becomes a U.S. Person at any time during which it holds any interest in the Company. The Applicant is not acquiring the Shares for the account or benefit of any U.S. Person and will not fund its Subscription Commitment with funds obtained from U.S. Persons. As used herein, "U.S. Person" means any citizen or resident of the United States (as defined in Regulation S under the 1933 Act), including any U.S. resident temporarily residing outside the United States and any other person who is a U.S. person as defined in Regulation S under the 1933 Act;
- 2.6 it became aware of the offer, and has obtained information regarding the opportunity to subscribe for Shares, from the Company or its affiliates or agents, and not by means of any general solicitation or general advertising, including, without limitation, any advertisement, article, notice or other communication published in any newspaper, magazine or similar media or broadcast over television or radio, and any seminar or meeting whose attendees have been invited by any general solicitation or general advertisement;
- 2.7 it understands that the Shares have not been and are not presently intended to be registered under the 1933 Act or the securities laws of any State and accordingly may not be offered, sold, transferred or pledged unless:
  - 2.7.1 the interests are duly registered under the 1933 Act and all applicable State securities laws; or
  - 2.7.2 registration under the 1933 Act and all applicable State securities laws is not required and, if requested, the Company has received an opinion of counsel to such effect satisfactory to it;
- 2.8 it is entitled to receive the Information Memorandum and to subscribe for the Shares comprised in the application form under the laws of all relevant jurisdictions which apply to it and that it has fully observed such laws and obtained all governmental and other consents which may be required thereunder or otherwise and complied with all necessary formalities;
- 2.9 all of the representations and warranties made by the Applicant in connection herewith are to the Applicant's knowledge true, and it covenants to notify the Company promptly if any statement made therein ceases to be true in the future;
- 2.10 it acknowledges that an investment in the Company is only suitable for sophisticated investors who understand the risks involved in acquiring such an investment;
- 2.11 it has such knowledge and experience in financial and business matters as to be capable of evaluating the merits of, and it is able to bear the economic risk of,

subscription for the Shares;

- 2.12 it has the financial ability to bear the economic risk of its investment, has adequate means for providing for its current needs and possible contingencies and has no need for liquidity with respect to its subscription;
- 2.13 it is aware that the nature of medical trials carry inherent risk and no positive outcome can be guaranteed. The Company makes no guarantee that the Applicant shall receive any Trading Dividend or Liquidity Event Distribution, repayment of their Subscription Commitment or other return or that a Liquidity Event shall ever occur;
- 2.14 it has been given the opportunity to ask questions of, and receive answers from, the Company with respect to the business to be conducted by the Company, the financial condition and capital of the Company, the terms and conditions of the subscription and other matters pertaining to investment in the Company, has been given the opportunity to obtain such additional information necessary to verify the accuracy of the information that was provided in order for it to evaluate the merits and risks of investment in the Company to the extent that the Company or its affiliates possess such information or can acquire it without unreasonable effort or expense. The Applicant understands that the Company may have no or only a limited operating history;
- 2.15 it has read carefully and notwithstanding the opportunity referred to above, has relied solely on the information contained in the Information Memorandum in determining to make this investment, and not on any other oral or written statement with respect to the subscription for Shares by the Company or any agent, partner, officer, director, employee, shareholder or affiliate of the Company;
- 2.16 with regard to the tax, currency and other economic considerations related to this investment, it has only relied on the advice of, or has only consulted with, its own professional advisors, and has not been induced by the Company or any other person to apply for Shares on the basis of any statement made by the Company or such other person in respect of the tax, currency and other economic considerations;
- 2.17 it hereby undertakes and agrees to (i) keep confidential, without limitation in time, the contents of all information provided to it by the Company; and (ii) not to reproduce, redistribute or pass on to any other person or publish, in whole or in part, any information provided to it by the Company for any purpose without the prior written consent of the Company;
- 2.18 it is not connected by way of ownership or shareholding in or by way of it being an officer or employee of the US Parent or by way of familial or spousal relationship to any such person;
- 2.19 by completing this Subscription Agreement it consents to the processing of personal details and other information provided in accordance with its subscription in accordance with applicable law;
- 2.20 it acknowledges that (i) applications to subscribe for Shares may be accepted or rejected at the Company's discretion and, in particular, the Company may require an Applicant to provide further information and/or declarations; (ii) the Company reserves the right to request such information as is necessary to verify the identity of an Applicant, and (iii) in the event of delay or failure by the Applicant to produce any information required for the verification purposes, the Company may refuse to accept the application; and

- 2.21 to the extent that the Subscription Price has not previously been tendered to the Company, it acknowledges that within five (5) business days of receipt of a notice in writing from the Company (but not before receipt of such notice) stating that its subscription application has been received and accepted, it shall pay the Subscription Commitment to the Company's bank account, the details of which shall be contained in the notice of acceptance of an Applicant's subscription application.

### **3. Permitted Transfers**

There is no restriction on the transfer of either Redeemable Preference Shares or Priority Preference Shares. For the avoidance of doubt, the Warrants are incorporated into the rights attaching to the Priority Preference Shares and cannot stand independently of them, hence the Priority Preference Shares cannot be transferred independently of the Warrants and vice versa.

### **4. Confidentiality**

The Applicant hereby undertakes and agrees to keep confidential, without limitation in time, the contents of the Information Memorandum and any information made available in connection with further enquiries. These materials must not be reproduced, redistributed or passed on to any other person or published, in whole or in part, for any purpose without the prior written consent of the Company.

The Applicant agrees that save as required by law or regulation it shall promptly return to the Company or destroy the Information Memorandum and any other documents or information furnished and all copies of any analyses, compilations, studies or other documents prepared by the Applicant or its employees or representatives and containing or reflecting or derived from any information in this Information Memorandum or such other information, if the Company's offer to subscribe for Shares is terminated or withdrawn or the subscription application is rejected by the Company.

### **5. Compliance and Money Laundering**

The Applicant further represents, warrants and undertakes to the Company and acknowledges that it is aware of, has complied with and will continue to comply with any obligations it has under the Criminal Justice Act 1993 and the Proceeds of Crime Act 2002 to the extent applicable to it.

It is a term of this Subscription Agreement that, to ensure compliance with the Proceeds of Crime Act 2002 and the Money Laundering Regulations 2007 (as applicable) and any other applicable anti-money laundering requirements the Company may, in its absolute discretion, require verification of the identity of the Applicant to the extent that it has not already provided the same. Pending the provision to the Company of evidence of identity, definitive certificates in respect of the Shares subscribed may be retained at the absolute discretion of the Company. If within a reasonable time after a request for verification of identity the Company has not received evidence satisfactory to it, it may, at its absolute discretion, terminate the Applicant's Subscription Agreement and Subscription Commitment in which event the monies payable on acceptance of the application form will, if paid, be returned without interest to the account of the drawee bank from which they were originally debited. No Shares will be subscribed for by the Applicant if the application is rejected pursuant to the Money Laundering Regulations 2007 or any other anti-money laundering laws or regulations.

### **6. Reliance**

The Applicant understands that the Company is relying upon representations, warranties and agreements made by the undersigned herein and, accordingly, agrees to indemnify and hold harmless the Company against any losses, claims, damages, liabilities, or expense, including reasonable attorneys' fees, which it may sustain or incur by reason of any material misrepresentation or material breach of a material warranty or any material breach of any agreement made by the undersigned herein, or otherwise, in connection with the subscription for or sale or distribution by the undersigned of the Redeemable Preference Shares purchased by the undersigned pursuant hereto (as determined in a court of competent jurisdiction) in violation of any applicable law, or that causes the Company to become subject to regulation under any such laws.

## 7. Governing Law

This Subscription Agreement and the rights, obligations and relationships of the parties under it and the Information Memorandum shall be governed by and construed in accordance with English law.

The Applicant irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of, or in connection with, this Subscription Agreement or its subject matter or formation (including non-contractual disputes or claims).

**8. Liquidity Event Fee Due From Applicant to Keyholder Investments Limited**

The Applicant agrees that the Company may deduct from any payment due to the Applicant under the Fourth Tranche (as described in the Distribution Waterfall in Part 5 of the Information Memorandum) and pay to Keyholder Investments Limited the amount of the fee due from the Applicant (or its successor in title) to Keyholder Investments Limited or its successor in title. This fee shall be [       ] %, and the default if this box is not completed shall be 5%.

Signed by [Applicant's name] ) .....

Date: .....

## SCHEDULE 1

### Application Form

#### Application to subscribe for shares in DiaTech Oncology Limited (“the Company”)

#### To Be Completed By The Applicant

Name of Applicant (full legal name):

---

The Applicant agrees and undertakes that subject to the terms and conditions of the Subscription Agreement:

- (1) it will subscribe for:
  - a) \_\_\_\_\_ Redeemable Preference Shares of £0.000001 each in the Company at a subscription price of £1.00 per share;
  - b) \_\_\_\_\_ Priority Preference Shares of £0.000001 each in the Company at a subscription price of £0.000001 per share;
- (2) it authorises and instructs the Company to issue:
  - a) \_\_\_\_\_ Redeemable Preference Shares of £0.000001 each in its name as a shareholder;
  - b) \_\_\_\_\_ Priority Preference Shares of £0.000001 each in the Company at a subscription price of £0.000001 per share;and to enter details of its interests into the Company’s register of members;<sup>1</sup>
- (3) it undertakes to pay to the Company (by cheque, draft or electronic transfer) £\_\_\_\_\_ (the “**Subscription Price**”) as and when demanded by the Company in accordance with the terms of the Information Memorandum; and
- (4) it will provide promptly to the Company such information as it may reasonably require for the purpose of verifying its identity.

---

<sup>1</sup> Please note that the figure entered at (1) (a) and (2) (a) should equal the figure entered at (1) (b) and (2) (b) respectively.

The Applicant should tick one of the five boxes below pursuant to the requirements of the Financial Services and Markets Act 2000 and the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the “**Order**”):

- a) The Applicant is an investment professional for the purposes of article 19 of the Order; or ☐
- b) The Applicant is a sophisticated investor for the purposes of article 50 of the Order and has provided a statement from an authorised person certifying that they are a sophisticated investor as well as having executed a statement for sophisticated investors and delivered such statements to the Company; or ☐
- c) The Applicant is a self-certified sophisticated investor for the purposes of article 50A of the Order and has executed a statement for self-certified sophisticated investors (in the form prescribed in the Order) and delivered such statement to the Company; or ☐
- d) The Applicant is a high net worth individual for the purposes of article 48 of the Order and has executed a statement for certified high net worth individuals (in the form prescribed in the Order) and delivered such statement to the Company; or ☐
- e) The Applicant is a high net worth company, unincorporated association or high value trust for the purposes of article 49 of the Order. ☐

Signed by [*Applicant's name*] ) .....

Date: .....

**Applicant Details**

Contact name (if different to Applicant name):	
Contact address:	
Correspondence address (if different to above):	
Fax number:	
Telephone number:	

**Bank Name and Address for Dividends and Bank Transfers**

Bank name:	
Bank address:	
Account name:	
Account number:	
Sort code:	
IBAN (if relevant):	

## APPENDIX I

### BIOGRAPHIES

#### Executive Directors

##### **Robert Henry**

Mr. Henry is the CEO of the Company and the US Parent and its group of companies. He is a highly accomplished executive/board member with more than 22 years of successfully growing, building and turning around healthcare companies. Management experience in product development as well as all functional areas of contract services outsourcing, operational management, business development, capital funding, corporate governance, development and implementation of strategic direction, identifying sales and revenue growth opportunities, developing and growing physician relationships, surgery center development, managing cash flow, managed care and bio-medical device manufacturing. Unique understanding of key constituencies and their needs.

---

#### SIGNIFICANT ACHIEVEMENTS & QUALIFICATIONS

---

- Business Executive, President and CEO/Board member with extensive qualifications in operational management, financial management, management restructuring, contract negotiations and international governance
- Proven track record of successfully building strong management teams that consistently over achieve goals
- Extensive experience in Board work with both US and international based companies
- Proven ability to raise capital for startups and existing companies for growth, expansion, debt restructuring and acquisitions
- Sold American Endoscopy Services, Inc. three times creating over \$95m in shareholder equity
- Guided SaferSleep through two management restructurings, two capital raises and a hostile takeover attempt by the former management team
- Experienced in mergers and acquisitions

---

#### PROFESSIONAL EXPERIENCE

---

##### DiaTech Oncology, LLC. Franklin, TN

President and CEO, February 2014 – Present

COO, September 2013 – February 2014

##### Symbion Healthcare, Inc. Nashville, TN

Senior Vice President – Director Business Development, September 2011 – September 2013

##### American Endoscopy Service, Inc. – Brentwood, TN

President and CEO, 1997 – April 2011



Physicians Alliances – Nashville, TN

COO/Director of Development, Principle – 1995 - 1997

CIRCON ACMI – Nashville, TN

Development/Marketing – 1990 – 1995

C.R. Bard, Inc. Bard Critical Care Division – Nashville, TN

Critical Care Specialist – 1984 – 1990

Federated Mutual Insurance Company – Atlanta, GA

Financial Management/Marketing Manager – 1982 – 1984

**Andrew Miller**

Managing Partner – Healthmark Ventures

Mr. Miller received his BA in Economics from Belmont University, Nashville, TN, and his MBA from Vanderbilt's Owen School of Business Management, Nashville, TN.

Mr. Miller started his career on "Wall Street" in 1990 joining the firm of Donaldson, Lufkin, and Jenrette (DLJ) as an Institutional Broker/Trader focused exclusively on health care services investments. The group he founded at DLJ became the 5th most profitable division of the investment banking firm.

After leaving DLJ in 2000 Mr. Miller moved to manage a significant private investment fund in Nashville, TN. In this capacity Mr. Miller funded and managed over 25 new companies in the healthcare space, creating over a \$ 1.0 billion of value.

Mr. Miller's investment focus has been, and will continue to be, health care products and services companies. In this capacity, he has proven to be an effective company "turnaround" specialist, taking loss positions to profitable or high value positions. On average, creating greater than 100% returns.

Mr. Miller currently serves as chairman of over 20 companies in Health Care Services, Pharmaceutical, Technology and Diagnostic areas.

**Non-Executive Independent Directors**

**Dr. Ian Ferrier**

Dr. Ian Ferrier is a senior partner at Bogart Delafield Ferrier, a New Jersey-based strategy consultancy providing high level commercial and strategic counsel to the pharmaceutical, biotechnology, medical device, diagnostic and nutraceutical industries. Dr. Ferrier has high level access to senior pharmaceutical executives important for value realisation and will also provide a close connection to the world's largest pharmaceutical market, the USA. Dr. Ferrier is an acknowledged expert in the healthcare industry with over three decades of management and marketing experience in international healthcare, encompassing ethical pharmaceuticals, diagnostics and devices, generic drugs and animal health. He has provided expert opinion for senior management and government agencies across a broad range of healthcare issues and problems and is a regular panellist on CEO forums in Europe and U.S. He has held numerous

senior management positions in several multinational pharmaceutical companies where he has been instrumental in developing growth strategies through internal development and acquisition.

**Mr Laurence Cohen**

**(anticipated to be appointed after the launch of this Information Memorandum)**

Mr Cohen is an English Solicitor. He was in private practice for over 40 years, including 19 years at a specialist Intellectual Property firm, Bristows, (10 years as a partner), and for 7 years until his retirement in December 2014, as a partner of Latham & Watkins LLP. Mr Cohen initially specialised in Intellectual Property Litigation, including a number of cases for the pharmaceutical and medical device industries. Latterly he assisted IP rich companies structure efficiently. He has been involved in a number of IP based cross border due diligences in relation to mergers and acquisitions. He has advised on certain aspect of pharmaceutical medical device regulatory law in the EU, and been involved in leading matters relating to the interface of IP and anti-trust law in Europe. In 2010 he led a team advising the government of Abu Dhabi relation on the modernising of their IP laws and environment to meet the challenges of moving from an oil based economy to a tech based economy under the 2030 plan.

## Candidate Board Member

The Board has as a candidate Board Member:

### Ronald Krall

Dr. Ronald Krall M.D. is Adjunct Associate Professor of Neurology and a BOD member Neurology and Member of the Center for Health Law and Bioethics at the University of Pittsburgh and a collaborator in the Observational Health Data Sciences and Informatics (OHDSI) project based at Columbia University. He is a member of the Board of the Foundation of the NIH, of the Scientific Advisory Board of Kala Pharmaceuticals, of the Safety Board of Takeda Pharmaceuticals and consults for a number of healthcare companies.

Dr. Krall, served as Chief Medical Officer of GlaxoSmithKline plc. from March 2006 to September 9, 2008. Dr. Krall served as Senior Vice President of GlaxoSmithKline plc. since March 2006. He led drug-development programs in numerous therapeutic areas during his two decades in the pharmaceutical industry. Since 1992, he has worked in senior R&D management positions at AstraZeneca and one of its predecessor companies, including roles in which he headed global clinical development. He served as Senior Vice President of US Drug Development at AstraZeneca, with responsibility for all US clinical and regulatory activities. He serves as Member of Scientific Advisory Board for Kala Pharmaceuticals, Inc. Over 25 years in the pharmaceutical industry, Dr. Krall worked for four companies (Lorex Pharmaceuticals, Abbott Laboratories, Zeneca/AstraZeneca and GlaxoSmithKline), holding a variety of positions responsible for drug development, and safety of medicines. Over his career he has overseen in some capacity the development of over 20 medicines, including Ambien, Hytrin for Benign Prostatic Hypertrophy, Depakote for Migraine and Bipolar Disorder, Nolvadex, Arimidex and Faslodex for breast cancer, Seroquel, Accolate, Diprivan, Iressa, Tykerb, and Entereg. He was a trustee of the American Academy of Pharmaceutical Physicians. He trained at the U.S. National Institutes of Health Epilepsy Branch and then completed his training in neurology and clinical pharmacology at the University of Rochester. He is a member of the Executive Board of the Observational Medical Outcomes Partnership and of The Institute of Medicine Forum for Drug Discovery, Development and Translation. He holds a BA degree in Mathematics from Swarthmore College and an MD degree from the University of Pittsburgh and is board-certified in Neurology. Dr. Krall is Associate Fellow, University of Pennsylvania Center for Bioethics.

## APPENDIX II

## DiaTech, LLC

## Patent Portfolio

Patent number	Short title	Country	Dates
US 2014/0141462A1 WO2013/166233 A1	System and Method for automated determination of the relative effectiveness of anti-cancer drug candidates	US, AU, BR, CA, CL, CN, CO, CR, CU, EG, EP, GC, GT, HK, HN, HD, ID, IL, IN, JP, KR, MX, MY, NI, NZ, PE, PH, RU, SG, SV, TH, TW, ZA	Priority :May 2, 2012 Filing date March 14, 2013, US, and May 2, 2013, PCT
US 2015/160193 A1 WO2013/172955 A9	Tumor cell isolation/purification process and methods for use thereof	US, AU, BR, CA, CN, CO, CR, EP, GC, GT, HN, IN, IL, JP, KR, MX, NZ, SG, TH, TW, ZA	Priority May 15, 2012 Filing date Nov 11, 2014 US, March 14, 2013, PCT
PCT/US2015/0272210	Intertumoral homogeneity determined by MiCK assay	Global scope of protection available until November 2016, when PCT enters national phase. GC applied for	Priority date April 25, 2014, Filing date April 23, 2015
PCT/US2015/029589	Synergism and Antagonism between multiple anti-cancer agents determined by MiCK assay	Global scope of protection available until November 2016, when PCT enters national phase. GC applied for	Priority date May 8, 2014, Filing date May 7, 2015

The Vanderbilt Patents are not included as they are licensed to DiaTech, LLC.

**APPENDIX III**  
**VALUATION REPORT**

**DIATECH ONCOLOGY LIMITED**

**AND**

**DIATECH HOLDINGS INC**

**VALUATION OF BUSINESS SEGMENT**

**3 NOVEMBER 2015**

DiaTech Oncology Limited  
Floor 9  
The Royal Liver Building  
Pier Head  
Liverpool  
L3 1JH

And

DiaTech Holdings Inc  
405 Duke Drive  
Suite 240  
Franklin TN  
37067 USA

**Valuation Consulting LLP**  
**90 Long Acre**  
**London**  
**WC2E 9RA**

**Tel: +44 (0) 20 7420 0007**

**Fax: +44 (0) 20 7836 3339**

**Email: [ianbrewer@valuationconsulting.com](mailto:ianbrewer@valuationconsulting.com)**

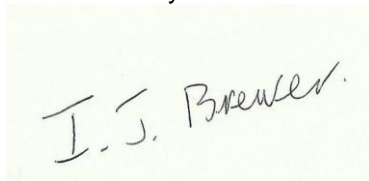
3 November 2015

Dear Sirs

**Valuation report in respect of DiaTech Oncology Limited and DiaTech Holdings Inc and its subsidiary undertakings as shown at Appendix A (“the Subsidiary Undertakings”) (all “the Company”)**

Our report is set out below. If you require any further information or clarification, please do not hesitate to contact Ian Brewer.

Yours faithfully



Ian Brewer BA FRICS Registered Business Valuer

For and on behalf of **Valuation Consulting LLP**

---

**TABLE OF CONTENTS**

<b>CONTENT</b>	<b>PAGE NO</b>
1. INTRODUCTION AND SUMMARY	4
2. INFORMATION AND CAVEATS	5
3. COMPANY OVERVIEW	6
4. FINANCIAL PERFORMANCE	15
5. RESEARCH	23
6. VALUATION METHODOLOGY	28
7. VALUATION ASSUMPTIONS	31
8. VALUATION CALCULATIONS	34
 <b>APPENDICES</b>	
A DIATECH CERTIFIED FAMILY TREE	
B GRANTED AND PENDING PATENTS RELATING TO THE MICK PLATFORM	



## 1. INTRODUCTION AND SUMMARY

### Introduction

Valuation Consulting LLP (“VC”) is dedicated to the appraisal of any financial asset that does not have a ready market valuation. VC’s partners are accredited experts in the practice of valuing companies, intellectual property and intangible assets in the UK and internationally.

This report has been prepared in accordance with our letter of engagement dated 2 November 2015. We have been asked to provide an independent opinion as to the likely current value of the business segment reliant on certain intangible assets and intellectual property (together the “IP”) owned or to be licensed by either DiaTech Oncology Limited (“DOL”) or DiaTech Holdings Inc and/or its subsidiaries as set out at Appendix A (together “the Companies” or “DiaTech”). This Business Segment will develop and commercialise a series of platforms which provide treatment-directing diagnostic data to support improved cancer outcomes.

We understand that the valuation report will be required by the Directors in the context of strategic planning and for the incorporation into funding documents, in particular an Information Memorandum to be issued by DOL, in whole or as a summary as regards future funding requirements.

Whilst our report is addressed to you, we acknowledge that our valuation may be viewed by potential investors in DiaTech. As none of the potential investors instructs us naturally none other than yourselves can use or rely upon our valuation.

This valuation is as at the current date (3 November 2015) and on the basis of market value. Market value is defined by International Valuation Standards as “the estimated amount for which a property (asset) should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.”

### Summary Opinion

On the basis of the information available to us, the assumption that adequate funding will be raised on a timely basis, which we understand may be in more than one tranche, at different times and our own research into the market, we are of the opinion that the **market value of the DiaTech Business Segment as at 3 November 2015 is in the region of \$985million on a pre-tax basis.**

## 2. INFORMATION AND CAVEATS

### Information

The following information has been provided to us and forms the basis of our valuation. In addition, we have undertaken our own research into comparable quoted companies and transactions, based on publicly available information.

- Business Plan version dated 15 October 2015
- Excel financial projections as used in the Business Plan as revised 27 October 2015

Our valuation report should be read in conjunction with the Business Plan.

We have also held discussions with and exchanged emails with Ian Ferrier and Jim Siti of Sibelius LLC, advisors to DiaTech.

### Caveats

We have not performed any work in the nature of an audit on any of the information that has been made available to us. Accordingly, we assume no responsibility and make no representations with regard to the accuracy or completeness of any information provided to us.

Budgets and forecasts prepared by or on behalf of the Companies relate to future events and are based on assumptions; consequently, they cannot be relied upon to the same extent as information derived from audited accounts for completed accounting periods. The facts and assumptions that underpin the budgets/forecasts are the sole responsibility of the Companies. Whilst we may comment on these facts and assumptions, we accept no responsibility for them, or the ultimate accuracy and realisation of the same. You should note that there are usually differences between forecast and actual results, because events and circumstances frequently do not occur as expected and these differences may be material.

Our valuation is predicated on the DiaTech Business Segment obtaining adequate and timely funding.

This Report is strictly confidential and has been prepared solely for the use of the directors of the Companies for the purpose noted in Section 1 above. It may not be relied upon by any third party and (apart from your professional advisors and any regulatory body) it may not be shown to any third party without our express written consent which will not be unreasonably refused. VC accepts no duty of care to any third party for the Report.

This report does not constitute tax advice or investment advice and nothing written in or implied by this report should be taken as tax or investment advice by the directors of the Companies or by any third party.

The valuation of interests in Business Segments is not an exact science and others may have a different view in this regard.

### 3. COMPANY OVERVIEW

#### Company outline

DiaTech is dedicated to providing treatment-directing diagnostic data in support of improved cancer outcomes. The Business Segment that we are valuing will be just one of a series of approaches to this. No other technologies or business areas impact our valuation or are considered in its preparation.

For the purpose of this exercise, we understand the Business Segment forms part of DOL.

#### Introduction to the Business

The Business Segment of DiaTech holds a broad technology and intellectual property portfolio centred on a core diagnostic platform that analyses the functional (apoptotic) response of tumour cells to cytotoxic (anti-cancer) drug exposure.

During the period of the Business Plan, DiaTech intends to develop and commercialise two key platforms

- MiCK – the Micro-culture Kinetic Assay
- TIRA – T-cell Immunotherapeutic Response Assay

DiaTech will later seek to build a Tumour Antigen Identification (TAI) Platform, but there is no income or expenditure relating to this in the Business Plan, and we have not taken it into account in our valuation.

For both platforms, the Company recognizes that it will be required to raise substantial additional capital to fund its programs and has taken steps to secure such funding in the near term. In addition, the Company will move to engage qualified pharmaceutical, clinical, provider and payer collaborations that will be selected on the basis of their ability to broaden the clinical exposure to its products in development, contribute to physician and institutional acceptance, and accelerate the commercialization of its products.

#### MiCK Platform

The lead platform, the Micro-culture Kinetic (MiCK) assay, is a new tool to help clinicians determine which of the available cytotoxic drugs is best suited to treating a particular patient's cancer. Choosing the most effective treatment for that patient – which will not necessarily be the same as the treatment for another patient presenting with the same cancer - drives improved treatment outcomes.

Management's research shows that approximately 85% of cancer patients receive cytotoxic chemotherapy as a keystone basis for the treatment of their cancer. The drug chosen for treatment is based upon treatment protocols developed as a result of large multi-centred studies, rather than the drug that will necessarily have the most impact.

DiaTech's MiCK platform aims to favourably impact near-term advances in oncology treatment triage.

We understand that the MiCK assay has been deployed in over 1,000 patients, across 50 cancer types and subtypes as well as in eight clinical proof-of-concept studies focused on correlating patient outcomes with assay response prediction. We further understand that the data generated to date indicate that MiCK can successfully predict tumour response to cytotoxic drug administration enabling actionable treatment selection to help deliver improved treatment outcomes. The following areas have been selected to date, for the reasons shown in this table copied from the Business Plan:

<u>Cancer Type</u>	<u>Selection Rationale</u>
<b><u>Acute Myeloid Leukemia (AML)</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes with very poor survival rates for patient 60+ yrs</li> <li>• Need to identify sensitivity to justify treatment – patients often given supportive care due to risk associated with chemo and unsure response to treatment</li> <li>• Poor survival statistics (patients 60+)</li> </ul>
<b><u>Triple Neg. Breast Cancer (TNBC)</u></b>	<ul style="list-style-type: none"> <li>• Composed of 6-8 subtypes that each respond differently to chemo</li> <li>• No commercially available way to type TNBC</li> <li>• Selection of wrong chemo can make some subtypes of TNBC more aggressive</li> </ul>
<b><u>Ovarian Cancer</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes</li> <li>• Disease presents late with high risk for metastatic relapse</li> <li>• Selection of “best” chemo can significantly increase outcomes</li> <li>• Poor survival statistics for late stages</li> </ul>
<b><u>Colo-Rectal Cancer (CRC)</u></b>	<ul style="list-style-type: none"> <li>• Third most common cancer in men and women in the United States with a prevalence of ~1.1 million</li> <li>• Overall 5-year survival rates are ~65%, with survival rates significantly impacted by disease stage itself directly related to the time of detection</li> <li>• Mortality rates have also been falling on average 3.1% each year over the same period</li> </ul>
<b><u>Non-small cell lung cancer (NSCLC)</u></b>	<ul style="list-style-type: none"> <li>• Large patient volumes</li> <li>• Ability to select best treatment option early can significantly improve outcomes</li> <li>• Poor survival statistics</li> </ul>

The first two cancers to be addressed are AML and TNBC, followed by the other three above.

Central to the next phase of the Business Segment's growth is to extend its clinical research and development efforts beyond proofs-of-concept studies to full commercial acceptance in AML and TNBC through controlled clinical studies that deliver unequivocal proof of improved clinical outcomes (clinical benefit) and meet regulatory (FDA) and peer-group (American Society of Clinical Oncology etc.) criteria.

### TIRA

Tumours are able to establish and proliferate in the body by evading its anti-tumour immune responses. If testing can identify that a patient's immune system is being suppressed in this way, then immune therapies can be targeted to bolster the immune response. Management has seen from research by others that these therapies can have significant (up to 75%) response rates and up to 90% disease control where they are properly targeted. The challenge to date is to select those patients who are likely to benefit from such therapies.

DiaTech intends to build on its well-established core competencies in tissue harvesting, tissue visibility maintenance, cell separation, isolation and identification to develop and commercialise a novel platform to predict patient response to selected immunotherapies. The cell samples that arrive for MiCK analysis also generally contain T-Cells, the cells central to immunity. Samples of these will be taken for the purposes of development and validation of the TIRA assay. The platform will then be developed, optimised and validated ready for initial clinical development in colorectal cancer. It will then be expanded to cover a portfolio of cancers, including breast, ovarian, melanoma and gastric.

At present, there is no TIRA-specific IP in existence. Development is expected to mean access to this market starting in two years as the assay is developed and deployed.

### Commercialisation

Once the platforms have been developed, DiaTech intends to go on to commercialise them, offering the service through a series of laboratories which is being established and some of which have already received CILA approval.

## **The Intellectual Property**

### Technology overview of the MiCK Assay Platform

The technology is based on the fact that all cells have an innate ability to undergo apoptosis - all cells are programmed to have a finite existence. As well as this in-built finite existence, cells can undergo apoptosis when attacked, for example by cytotoxic drugs. Being able to see which drugs have the greatest impact on apoptosis (ie, kill the cells most quickly and effectively) provides a directly correlated indication of how a patient will respond to a particular treatment.

The way the technology works is to look for changes to the cells at measured intervals. The key change is “blebbing” whereby protrusions are seen in the cell membrane which are an early stage indication of apoptosis having reached the point of no return – that is, the cell is dying. As a result blebbing is an early, reliable and highly specific marker of apoptotic response.

In brief, the technology is applied in a clinical setting as follows:

- A sample of viable cancer cells are collected from the patient
- Groups of these cells (once isolated and purified) are separated
- Different drugs are applied to each sample
- The samples are incubated for 28 hours with readings taken every 5 minutes
- These readings show optical density of cells and the timing and extent of apoptosis
- In particular, the readings look at blebbing that precedes the breakdown of the cell's DNA
- Comparing the readings across drugs shows which drug is most effective

This process has been automated by DiaTech and we understand that the automation forms an important cornerstone of the business.

### Relevant patents

A full list of patents is provided in the Business Plan and replicated at Appendix A. The key patents to the MiCK assay are

Patent number	Status	Filing date	Title	Inventor	Assignee
US6,077,684	Issued	14-Nov-96	Automated Assay for Measuring Apoptosis in Cell Culture	Vladimir D Kratsov	Vanderbilt University
US 6,258,553	Issued	22-Nov-99	Assay for Measuring Apoptosis in Cell Culture	Vladimir D Kratsov	Vanderbilt University

The first patent is due to expire in 2016. Management believes that a patent term extension may be available given that the Company has initiated efforts to pursue approval of the MiCK assay under the IDE-PMA regulatory regime. Additional protection is expected to come in the shape of market exclusivity.

In addition, the Company has four families of patent applications directed to certain improvements to the MiCK platform. Further development is expected to generate additional IP, a large part of which should be capable of patent protection in the US and worldwide.

The two key patents are used by DiaTech under license from Vanderbilt University.

We are informed that at present there are no patents relating to the TIRA platform but that specific IP will be developed during the period of the projections.

### Regulatory approval and exclusivity

DiaTech is of the opinion that the MiCK platform is a Class III medical device which means that it needs to obtain regulatory approval. Regulatory approval for IVD, which is a Laboratory Developed Test ("LDT") is governed by the FDA but carried out through different bodies.

The primary regulatory body for laboratory diagnostics in the US at present is The Centers for Medicare and Medicaid Services (CMS) which derives this authority from the Clinical Lab Improvements Amendment (CLIA). CLIA regulates laboratory operations and is focused on ensuring accuracy, quality and reliability of laboratory test results - an LDT can only be carried out in a CLIA approved laboratory. All laboratories that perform human testing must be registered and certified although this does not prove the clinical validity of a test or the interpretation of test results which are subject to regulatory oversight and marketing approval by FDA. There are also various state-level regulations.

DiaTech has created a state-of-the-art commercial laboratory facility at its headquarters in Nashville, a satellite full-service commercial laboratory facility in Montreal PQ Canada, and plans are underway to establish a further laboratory in Europe. The Nashville laboratory has already received CLIA approval. The Clinical Lab Improvements Amendment regulates laboratory operations and is focused on ensuring accuracy, quality and reliability of laboratory test results. CLIA requires that all laboratories that perform human testing (with the exception of research testing) be registered and certified by the organization. While CLIA certification is considered rigorous in its coverage of laboratory operations, it does not address the clinical validity of a test or the interpretation of test results.

The rules in this area are under review by the FDA but it looks like certain “high-risk” IVDs and LDTs will be regulated in a fashion similar to Medical Devices via 510(k) or the IDE/ PMA approval (Premarket Approval) processes.

DiaTech has assumed that the more onerous PMA route will need to be followed for both MiCK and TIRA. Further detail on this area is found in the Business Plan. The new rules are not due to come into force for a few years, but DiaTech is acting as if they are in force to establish best practice.

The Company has started work towards the clinical studies and operational compliance necessary to obtain PMA necessary to market the MiCK device.

Upon approval, Class III devices receive 6 years of data exclusivity, which gives DiaTech significant commercial advantage over competitors during this period. A similar route will be targeted for the TIRA platform, albeit several months later.

Approvals will also be required to comply in Europe.

#### Medicare funding

We are informed that at least two major Medicare providers in the USA have indicated that they will fund the use of the platforms once commercialised, having already approved the laboratories.

#### Other IP

The MiCK platform is not just reliant on the patents. There is a host of other IP used in its application, such as know-how and training of the lab staff, but core to MiCK and TIRA is the whole process of harvesting, transporting and keeping tumour cells alive. This process underpins each of the assays in development.



## Current development status and proposed development timeline

Management has summarised its development plan into the following timeline diagram:

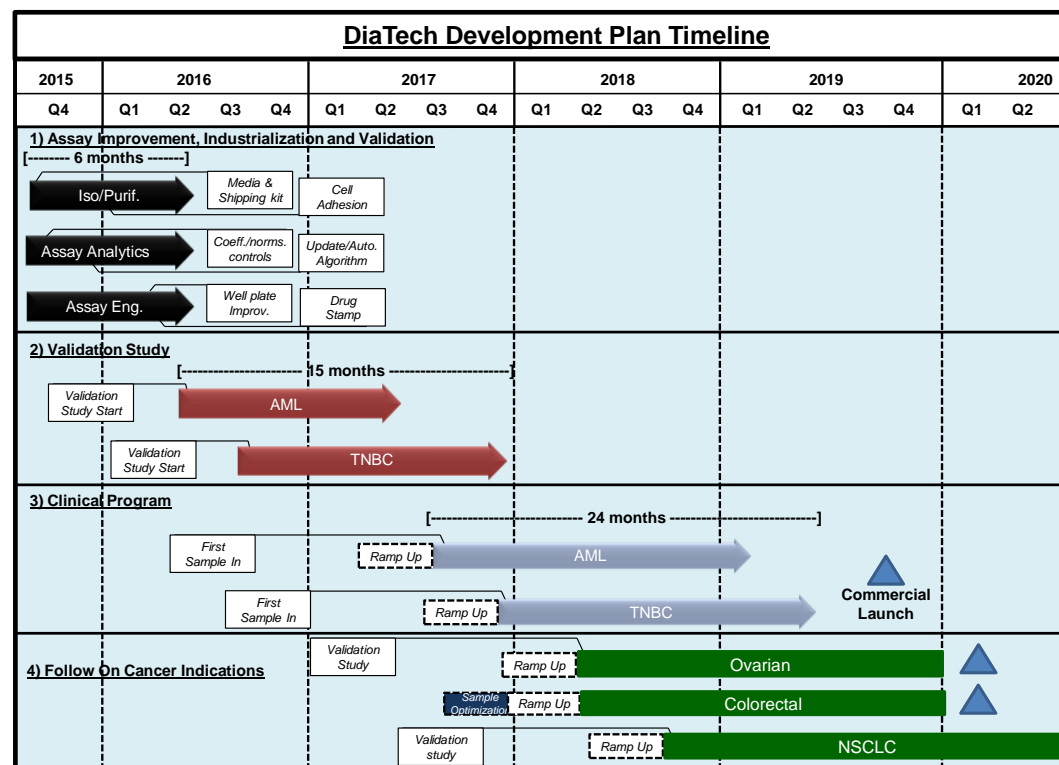


Figure 8: Proposed time line overview for MiCK assay development and optimization, validation studies, and clinical programs

Following receipt of funds, the Company will continue to progress its initiative to develop and commercialise the MiCK platform of AML and TNBC. Management projects that its development plan, including the development of clinical proofs will be completed in a 3.5 year time frame from Q4 2015, requiring funding of \$65million. This will be received in tranches. The platforms will initially be launched in North America (NA) and Europe (EU), closely followed by Japan, Australia and New Zealand and the BRIC countries, together termed Rest of the World in our report.

Briefly describing the development stages:

#### Assay optimisation and development

This stage intends to translate the product onto an industrial scale, with high volume throughput and further system automation. There will be three paths:

1. Assay process technology
2. Assay analytics - The MiCK platform produces an apoptotic response curve which needs to be read by a staff pathologist. This is possible at low volumes but at higher volumes automating this process will speed it up. At the same time, DiaTech is exploring whether there is an alternative way to analyse outputs providing better results.
3. Platform evolution - Alongside development of the existing platform, development of an “evolved” platform will use new approaches and technologies to take the platform forward.

#### MiCK Assay Clinical Programmes

The MiCK platform will be tested to show how detailed characterization of tumours and assessment of responsiveness to available drugs can provide a rational basis for care. The clinical programme has two stages:

1. Validation studies
2. Clinical programmes

#### Revenue generation

These stages will translate to revenue generation from

- Current initiatives (2015 onwards)
- Pharma Collaborations (from 2016)
- Sales (from 2019)

Sales from the approved platform are expected to drive significant income growth, as shown in management's projections.

Not shown in the above diagram, the TIRA Platform is expected to be developed during the period of the business plan and to contribute to income from 2020 onwards. It will be developed for 4 core cancers – TNBC, Ovarian, NSCLC and CRC. Using the Company's existing competences in cell separation, isolation and identification, DiaTech will be able to quantify and characterise T-Cells, which is a critical contribution to the prediction of patient response to immunotherapy, a branch of cancer treatment. This branch relies on the fact that tumours establish and proliferate by evading anti-tumour immune responses. Immuno-therapies inhibit the mechanisms that inhibit immune responses – that is, they enable an immune response to recognise and attack cancer cells.

This platform is expected to generate incomes from:

- Bio-Pharma collaborations – patient identification, stratification and study optimization
- Deployment in clinical studies advanced by early adopters and their conversion to the use of the platform
- Commercialisation as a component of the Company's cancer treatment-directing portfolio, leading to widespread adoption

The TAI Platform will start to be developed but is not expected to generate any income in the period of the projections.

### **Relationship to the field of cancer treatment**

Current developments in cancer treatment are looking at matching treatments to patients rather than using a one-drug-suits-all approach. There are several ways of doing this, but DiaTech have identified the most closely competing technologies as:

- *Helomics* – a drug response marker ("ChemoFX") used to see how cancers respond to various types of chemotherapy. Tested primarily in ovarian cancer. Aim to help guide treatment choice
- *Genomic Health* – providing actionable genomic information to personalise cancer treatment decisions and assess recurrence risk, looking at the underlying biology of the cancer – product Oncotype DX
- *NanoString Technologies* – uses gene expression data to assess recurrence risk
- *Cordgenics / Chemogenics* – cell samples are subjected to cytotoxic drugs and their responses plotted to give results in 21 days
- *Foundation Medicine* – product to understand genomic profile of patients to complement traditional decision tools and match patients with targeted therapies

#### 4. FINANCIAL PERFORMANCE

##### Historical financial performance

We understand that the historical costs of development are in the region of \$42million.

##### Financial projections

The financial projections provided by DiaTech are summarised in the following table.

Part year											
Year ending 31 December	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Total revenues	150,000	1,125,000	3,900,000	11,000,000	21,833,087	81,700,679	227,134,306	536,148,346	1,192,099,179	2,015,449,521	2,562,818,200
Cost of sales	(45,000)	(337,500)	(975,000)	(2,750,000)	(4,366,617)	(16,340,136)	(45,426,861)	(107,229,669)	(238,419,836)	(403,089,904)	(512,563,640)
Gross margin	105,000	787,500	2,925,000	8,250,000	17,466,470	65,360,543	181,707,445	428,918,677	953,679,343	1,612,359,617	2,050,254,560
Overheads	(3,791,155)	(17,152,603)	(24,177,690)	(32,229,133)	(30,085,699)	(33,003,348)	(102,210,437)	(238,586,014)	(524,523,639)	(876,720,541)	(1,102,011,826)
EBITDA	(3,686,155)	(16,365,103)	(21,252,690)	(23,979,133)	(12,619,229)	32,357,194	79,497,008	190,332,663	429,155,704	735,639,076	948,242,734
Assay development, optimization	(217,500)	(1,082,500)	(520,000)	(540,000)	(580,000)	(580,000)	(4,542,686)	(10,722,967)	(23,841,984)	(40,308,990)	(51,256,364)
Capex, lab and other equipment	(120,000)	(2,605,000)	(835,000)	(835,000)	(845,000)	(845,000)	(2,271,343)	(5,361,483)	(11,920,992)	(20,154,495)	(25,628,182)
Net cash flow pre tax credits	(4,023,655)	(20,052,603)	(22,607,690)	(25,354,133)	(14,044,229)	30,932,194	72,682,979	174,248,213	393,392,728	675,175,591	871,358,188
UK tax credits	-	-	2,760,227	4,413,295	2,871,250	3,140,000	8,176,835	20,909,785	50,068,165	90,695,228	115,326,819
Financing fee recovery	500,000	1,500,000	-	-	-	-	-	-	-	-	-
Net cash flow pre tax	(3,523,655)	(18,552,603)	(19,847,462)	(20,940,838)	(11,172,979)	34,072,194	80,859,814	195,157,998	443,460,893	765,870,819	986,685,007
Gross profit NA and Europe	70%	70%	75%	75%	80%	80%	80%	80%	80%	80%	80%

These projections include UK research and development tax credits which the Company expects to be available on its R&D work, but are stated for this exercise before any charge for UK Corporation Tax.

## Overview of financial projections

### Revenue model

Breaking revenue down into components by platform and income type:

Part year											
Revenue breakdown	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
North America											
MiCK Chemo - sales	-	-	-	-	4,555,391	34,207,374	104,263,660	249,294,817	550,503,976	865,578,414	1,095,956,239
MiCK Chemo - collaborations	-	500,000	2,000,000	4,000,000	5,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
MiCK Chemo - current initiatives	150,000	250,000	650,000	2,000,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
TIRA Immunotherapy - sales	-	-	-	-	-	3,833,983	15,845,550	40,821,188	76,185,225	154,029,845	173,346,392
TIRA Immunotherapy - collaborations	-	375,000	1,250,000	5,000,000	7,500,000	10,000,000	12,500,000	12,500,000	12,500,000	12,500,000	12,500,000
Total North America	150,000	1,125,000	3,900,000	11,000,000	19,555,391	56,541,356	141,109,210	311,116,005	647,689,201	1,040,608,259	1,290,302,631
Europe revenues	-	-	-	-	2,277,696	19,020,678	60,054,605	145,058,002	313,344,600	509,804,129	634,651,316
Rest of World - clinical	-	-	-	-	-	6,138,644	25,970,491	79,974,339	231,065,377	465,037,133	637,864,254
	150,000	1,125,000	3,900,000	11,000,000	21,833,087	81,700,679	227,134,306	536,148,346	1,192,099,179	2,015,449,521	2,562,818,200

A relatively low level of income is expected through 2015 to 2018, with significant growth starting once NA and EU testing and approvals are complete, scheduled for mid-2019.

Sales relate to unit sales of the final diagnostic product, once development and approval are complete and the products launched.

Income from collaborations relate to the patient identification, stratification and study optimization, steps necessary for development of both platforms.

Income from current initiatives relates to sales of the assay during its approval period. Generally, once on the PMA Pathway, a product cannot be sold, but exceptions can be made for use on a compassionate basis. Compassionate use sales are projected at a lower price than the final assays will attract.

This sales growth in \$ terms is significant, as follows:

Revenue growth	2019	2020	2021	2022	2023	2024	2025
North America							
MiCK Chemo - sales	n/a	651%	205%	139%	121%	57%	27%
MiCK Chemo - collaborations	25%	20%	0%	0%	0%	0%	0%
MiCK Chemo - current initiatives	25%	0%	0%	0%	0%	0%	0%
TIRA Immunotherapy - sales	n/a	n/a	313%	158%	87%	102%	13%
TIRA Immunotherapy - collaborations	50%	33%	25%	0%	0%	0%	0%
Total North America	78%	189%	150%	120%	108%	61%	24%
Europe revenues	n/a	735%	216%	142%	116%	63%	24%
Rest of World - clinical	n/a	n/a	323%	208%	189%	101%	37%
	98%	274%	178%	136%	122%	69%	27%

The following table summarises unit sales from each platform and cancer type by location. No individual figures are shown for BRICS, where income is projected to arise as a proportion of NA sales, rising from 10% in 2020 to 25% of NA sales by 2025. The table shows that tests for different cancers will be launched consecutively, as their development is completed:

Product availability	2019 Number	2020 Number	2021 Number	2022 Number	2023 Number	2024 Number	2025 Number
<b>Units sold - MiCK Chemotherapy</b>							
AML	792	1,941	4,751	9,046	12,687	14,117	14,399
TNBC	510	5,277	10,638	19,934	41,120	60,252	61,217
CRC	-	2,556	9,212	17,846	36,207	41,049	46,007
Ovarian	-	-	2,886	5,519	9,007	16,078	21,866
NSCLC	-	-	-	9,959	25,396	62,169	89,421
Cancer 5	-	-	-	-	5,000	15,000	25,000
Cancer 6	-	-	-	-	-	5,000	15,000
<b>Total</b>	<b>1,302</b>	<b>9,774</b>	<b>27,487</b>	<b>62,304</b>	<b>129,417</b>	<b>213,664</b>	<b>272,911</b>
<b>Units sold - TIRA Immunotherapy</b>							
TNBC	-	-	3,217	5,404	8,680	25,822	26,236
Ovarian	-	-	2,164	3,311	4,504	6,890	9,371
NSCLC	-	-	-	7,469	15,237	31,084	38,323
CRC	-	2,556	5,183	11,029	22,369	38,890	41,634
<b>Total</b>	<b>-</b>	<b>2,556</b>	<b>10,564</b>	<b>27,214</b>	<b>50,790</b>	<b>102,687</b>	<b>115,564</b>
<b>Units sold Rest of World * MiCK</b>							
AML	-	314	763	1,852	3,497	4,864	5,367
TNBC	-	1,020	2,129	3,838	10,626	20,089	21,742
CRC	-	-	2,299	10,058	23,031	53,882	71,044
Ovarian	-	-	-	166	255	1,532	2,344
NSCLC	-	-	-	-	10,074	24,233	34,251
Cancer 5	-	-	-	-	-	n/s	n/s
Cancer 6	-	-	-	-	-	-	n/s
<b>Total</b>	<b>-</b>	<b>1,334</b>	<b>5,191</b>	<b>15,914</b>	<b>47,483</b>	<b>104,600</b>	<b>134,748</b>
<b>Units sold Rest of World* TIRA Immunotherapy</b>							
TNBC	-	-	774	1,292	1,941	4,606	8,708
Ovarian	-	-	-	166	255	1,532	2,344
NSCLC	-	-	-	-	6,045	12,117	14,679
CRC	-	-	1,724	7,543	17,273	40,412	53,283
<b>Total</b>	<b>-</b>	<b>-</b>	<b>2,498</b>	<b>9,001</b>	<b>25,513</b>	<b>58,666</b>	<b>79,014</b>
* Excluding BRICS n/s = not stated							

As the graphs above show, growth rates will be significant, part of an expanding market estimated to be worth \$15bn in annual sales today and to exceed \$25bn by 2020:

Core assumptions are:

- Approval to be earned for commercialisation in 2019 in both North America and Europe for the MiCK platform, and 2020 for the TIRA platform; Rest of World sales to commence in 2020
  - Peak market penetration at 20% - this is based upon current incidence and prevalence, growing each year at up to 2% (variable between cancers)
  - Revenues are net of commercial discounting (c 33%) and the royalty payable to Vanderbilt for the IP at c5% for use of the MiCK patents
  - The price per assay of \$3,500 used in the projections is at a discounted rate based upon the agreed Medicare reimbursement rate of between \$5,000 and \$7,000 per unit
- Revenues for Europe are projected at 50% of US sales (sales alone, not pharma collaborations or current initiatives) in each relevant year.

#### Cost of sales

In determining a suitable cost of sales, management has prepared analysis of the financial statements of a group of similar entities, which gave an average cost of sales of 33% (hence gross profit of 67%) as presented in the table below, provided by management:



Company	Type	COGS %
Myriad Gen	Device	13.3%
Medtronic	Device	24.8%
Zimmer Hold	Device	26.1%
Intuitive Sur	Device	30.4%
St. Jude	Device	28.7%
IDEX	Device	57.2%
CR Bard	Device	38.4%
Stryker Corp	Device	33.0%
Covidien	Device	40.3%
Edwards LSC	Device	26.0%
Boston Sci	Device	30.9%
Biomerieux	Device	
Varian Med	Device	57.4%
Fresenius M	Device	
Average		33.9%

Management comments that none of the companies is identical. The projected gross profit of 70% rising to 80% as the product is established is not out of line with the comparable company analysis, although we take this into consideration in setting an appropriate discount rate.

#### Cost projections

The following tables from the business plan give an overview of budgeted costs through 2025:

<u>Clinical Cost</u>	<u>Description</u>
<u>Lab validation studies</u>	50 samples per tumour Range of cost: \$1,000 (AML) to \$2,500 (TNBC) cost per sample reflecting current market costs.

<b><u>Observational studies</u></b>	150 samples for lead indications (AML, TNBC, and CRC) Not required for follow on indications derived proof of concept studies in lead indications Sample costs ~\$2,500.
<b><u>Pivotal Clinical studies</u></b>	MiCK programs call for 500 patient tumour samples (patients) per target cancer An incremental 200 patient samples where TIRA protocols are added (except AML). Sample costs ~\$2,500.
<b><u>Investigator Costs</u></b>	An incremental \$1,500 per patient/sample is budgeted to cover institution / primary investigator (PI) costs.
<b><u>CRO costs</u></b>	Costs are projected \$3 M for AML and TNBC reflecting observational + pivotal studies, all other \$2.5 M per study
<b><u>IRB Fees</u></b>	Costs are projected at \$50,000 to \$75,000 per program based upon projected trial complexity and corresponding patient volumes.
<b><u>Regulatory Filing Fees &amp; Prep</u></b>	Costs are projected at \$150,000 to \$250,000 based upon number of protocols and indications per tumour type.

Incremental Cost Elements	
<b><u>Cost of Goods</u></b>	<ul style="list-style-type: none"> <li>Current COGs are estimated at 30% of revenues based upon review of comparable companies in life sciences, diagnostics and the laboratory space.</li> <li>COGS levels are projected to decline over time given projected scale benefits and ongoing assay optimization. COGS is projected to decline to 20% over a 5 year timeframe.</li> <li>Current Company estimates indicate a direct materials per unit cost of \$325.</li> <li>Labour and overhead costs are approximated in the total COGs figures.</li> <li>We note for the Rest of the World no cost of goods is calculated; only an overall EBITDA is provided</li> </ul>
<b><u>Human Resources</u></b>	<ul style="list-style-type: none"> <li>HR is the lead cost driver in the business plan given the need for specialized and highly skilled labour in all clinical, operational and commercial initiatives.</li> <li>Total costs through 2019 are projected at \$49 Million.</li> <li>Current (2015) headcount levels in the U.S. and Canada include 31 employees over two locations.</li> <li>The business plan calls for rapid scale of headcount across all levels and functional areas to address competency, experience and industry relationship gaps. 2016 headcount is projected at 65, ramping to 136 FTE by 2020. See organization scale up section and figures below.</li> <li>HR costs are projected to ramp significantly from ~\$1.8 million in Q3 and Q4 2015 to \$7.7 million in 2016, approaching \$17 million by 2020 as the organization continues to grow and staff up.</li> <li>Incremental staff primarily required in clinical, lab operations and assay development areas</li> <li>Further incremental staffing levels required in senior executive ranks and with supporting staff in Finance, Commercial and Administration.</li> </ul>

<b>Facilities</b>	<ul style="list-style-type: none"> <li>Current facilities expenses approximate \$100k per quarter for the U.S. and Canada.</li> <li>These costs and corresponding facilities levels increase in 2017 as The Company will require substantially increased space and equipment to manage significantly increased sample processing load as clinical studies ramp up.</li> <li>Relatively modest UK-based facilities are projected to come online by Q3 2016 at a rate of \$30k per quarter.</li> <li>Incremental facilities costs in New Jersey are projected at \$30k per quarter to support clinical teams being onboarded and ramped up currently.</li> </ul>
<b>Lab Equipment and CAPEX</b>	<ul style="list-style-type: none"> <li>The Company will ramp up levels of laboratory equipment and other capital equipment items to support the rapidly expanding sample processing activities projected.</li> <li>The majority of additional equipment will be for the Nashville facilities with secondary focus on Canada and New Jersey facilities.</li> <li>Additionally, a new UK lab facility will be developed in 2016 with projected equipment costs of \$1.8 Million.</li> <li>Additional equipment cost projections are in the annual range of \$650k to \$700k beginning in 2016 and cover acquisition of the following incremental items required to support ongoing scale up of operations: Spectrophotometry machines, Luminex and Biotek machines, additional diagnostic and related technology, refrigeration, software and other equipment.</li> </ul>

These assumptions give the following costs:

Part year											
Overheads	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Clinical development costs	87,500	4,504,924	9,200,758	14,710,985	9,570,833	10,466,667	27,256,117	69,699,285	166,893,885	302,317,428	384,422,730
HR costs	1,872,155	7,717,679	11,214,932	13,138,148	15,084,866	16,796,682	45,426,861	107,229,669	226,498,844	382,935,409	461,307,276
Facilities	230,000	755,000	880,000	1,120,000	1,340,000	1,360,000	9,085,372	13,403,709	23,841,984	30,231,743	51,256,364
Legal	250,000	875,000	700,000	700,000	800,000	800,000	4,542,686	10,722,967	23,841,984	40,308,990	51,256,364
SG&A	1,351,500	3,300,000	2,182,000	2,560,000	3,290,000	3,580,000	15,899,401	37,530,384	83,446,942	120,926,971	153,769,092
<b>Total operating overheads</b>	<b>3,791,155</b>	<b>17,152,603</b>	<b>24,177,690</b>	<b>32,229,133</b>	<b>30,085,699</b>	<b>33,003,348</b>	<b>102,210,437</b>	<b>238,586,014</b>	<b>524,523,639</b>	<b>876,720,541</b>	<b>1,102,011,826</b>
Assay development and optimization	217,500	1,082,500	520,000	540,000	580,000	580,000	4,542,686	10,722,967	23,841,984	40,308,990	51,256,364
Capex, lab and other equipment	120,000	2,605,000	835,000	835,000	845,000	845,000	2,271,343	5,361,483	11,920,992	20,154,495	25,628,182
<b>Total expenses</b>	<b>4,128,655</b>	<b>20,840,103</b>	<b>25,532,690</b>	<b>33,604,133</b>	<b>31,510,699</b>	<b>34,428,348</b>	<b>109,024,466</b>	<b>254,670,464</b>	<b>560,286,615</b>	<b>937,184,026</b>	<b>1,178,896,372</b>

#### UK research and development tax credits

The projections assume that the UK Company will be entitled to research and development tax credits at a rate of 30% of research and development expenditure in each year. No documentation exists to support this although we understand the company is taking professional advice in this respect.

In accordance with instructions, we have included R&D tax credit cash flows for the period from 2017 to 2021 within our valuation calculation.

Probability of success

The projections assume that development will be successful and approvals received. In the pharmaceutical industry, there is a raft of published information concerning the probability of a drug in development making it through each of the approval phases. Whilst IVDs still require approval, the pathway is different, largely because they either work or do not work but cannot cause any complications in humans. Drugs, on the other hand, need not only to be effective but their efficacy must outweigh any side effects.

Management has not provided any supporting research, but consider that it is 80% likely that the platforms will receive approval and be commercialised in all geographic locations for which the projections include income as the technology risk is low, with the assay being available already and the laboratories for its execution already approved under CLIA ("Clinical Lab Improvements Amendment") which ensures the accuracy, quality and reliability of laboratory test results.

Management considers the key variable to be the timing of approval, which is expected between two-and-a-half and three-and-a-half years from now.

## 5. RESEARCH

### Quoted Comparables

We have identified using [www.pmlive.com](http://www.pmlive.com) the top 10 pharma companies by oncology sales for 2014. For this sample, we have undertaken a search on the ThomsonEikon database with regard to their ratings. None of these companies is definitively comparable to DiaTech, however collectively they can be used to provide benchmarks for valuation purposes. The table below sets out a summary of the key facts and multiples:

Company name	Country	Turnover £million	Market Cap £million	Reported P/E	Current P/E	Year 1 P/E	Year 2 P/E	Beta	Business Description
Roche Holding Ag	Switzerland	30,658.1	146,252.5	20.6	17.7	16.4	n/a	0.79	Discovery, development, licensing, manufacturing, marketing, distribution and sale of biopharmaceutical products
Novartis Ag	Switzerland	34,440.5	160,486.0	17.4	17.6	16.8	14.7	0.65	Global health solutions through prescription medicines, vaccines, biologic therapies, animal health, and consumer care products.
Celgene Corp	USA	4,925.5	60,387.7	31.0	24.3	19.6	15.8	1.06	Discovery, development and commercialization of therapies for the treatment of cancer and inflammatory diseases through gene and protein regulation.
Johnson & Johnson	USA	47,788.9	171,745.3	15.7	15.4	14.8	14.0	0.60	Discovers, develops and distributes therapeutic solutions. Growth platforms include: diabetes solutions, human vaccines, innovative drugs, consumer healthcare.
Bristol-Myers Squibb Co	USA	10,196.5	65,931.6	32.5	32.5	26.8	20.2	0.39	Core competencies in the field of health care, nutrition crop science and material science.
Eli Lilly And Co	USA	12,596.0	60,798.4	29.7	25.3	23.0	20.3	0.23	Discovers, develops and provides diagnostic and therapeutic products and services from early detection and prevention of diseases to diagnosis, treatment and treatment monitoring.
Takeda Pharmaceutical Co Ltd	Japan	9,989.5	23,317.2	N/M	55.3	38.1	32.4	0.71	Creation and discovery, development, manufacture and marketing of pharmaceutical products, including vaccines, over-the-counter medicines and health-related consumer products.
Astrazeneca Plc	uk	16,756.6	51,652.5	14.7	14.7	15.2	15.3	0.58	Discovers, develops, manufactures, and sells pharmaceutical products. Products include neuroscience, endocrinology, oncology, cardiovascular products.
Merck & Co Inc	USA	27,122.1	93,710.4	14.5	14.6	13.5	13.0	0.59	Research and development, manufacture and sale of a broad range of consumer, pharmaceutical, medical devices and diagnostics products.
Amgen Inc	USA	12,883.3	73,305.1	16.9	15.2	13.8	12.0	0.69	Discovering, developing, manufacturing and delivering human therapeutics.
<b>AVERAGE</b>				<b>21.4</b>	<b>23.3</b>	<b>19.8</b>	<b>17.5</b>	<b>0.63</b>	

We have also selected a sample of companies bearing some degree of comparability to DiaTech and undertaken a separate search on the ThomsonEikon database with regard to their ratings. Again, whilst none of these companies is definitively comparable to DiaTech, they can be collectively used to provide benchmarks for valuation purposes. Those companies in bold have been identified by DiaTech as amongst their closest competitors (not all of which are listed).

Company name	Country	Turnover £million	Market Cap £million	Reported P/E	Current P/E	Year 1 P/E	Year 2 P/E	Beta	Business Description
Physiomics Plc	UK	0.3	1.3	n/m	n/m	5.3	n/m	n/m	Virtual Tumour service is used to optimize the dosing and scheduling of oncology drugs in pre-clinical trials. Developing Virtual Tumour Clinical, to predict optimal regimens for human clinical trials; Cardiac tox prediction service and Drug combinations database.
Mdxhealth Sa	Belgium	7.5	118.6	n/m	n/m	n/m	8.5	1.28	Epigenetic assays and service testing for cancer assessment and the personalized treatment of patients.
Oncodesign Sa	France	5.6	82.0	n/m	n/m	n/m	3.7	n/a	Discovers and develops therapies against cancer. Target identification, validation and cellular screens; preclinical research, in vivo screening and pharmacology; molecular pharmacology and biomarkers, pharmaco-imaging, among others. Activities include preclinical evaluation services and discovery operations.
Biocartis Group Nv	Belgium	6.6	372.3	n/m	n/m	n/m	n/m	n/a	Diagnostic systems, especially for the treatment of cancers and infectious diseases, that ensure the analysis of biomolecules associated with risk factors, early detection, treatment selection and monitoring of disease. The group has the Idylla system to deliver results within a period of between 35 to 150 minutes.
Champions Oncology Inc	USA	5.8	30.1	n/m	n/m	n/m	n/m	n/m	Advanced technology solutions and products to personalize the development and use of oncology drugs. The Company's Tumorgraft Technology Platform is an approach to personalizing cancer care.
Foundation Medicine Inc	USA	39.2	439.0	n/m	n/m	n/m	n/m	n/a	<b>Molecular information platform for analyzing specimens across various types of cancer. Provide genomic information about each patient's individual cancer, enabling physicians to optimize treatments in clinical practice and biopharmaceutical companies to develop targeted oncology therapies.</b>
Genomic Health Inc	USA	177.0	465.7	n/m	n/m	n/m	n/m	0.66	<b>Provides actionable genomic information to personalize cancer treatment decisions.</b>
Nanostring Technologies Inc	USA	30.6	200.9	n/m	n/m	n/m	n/m	n/a	<b>Detection, identification and quantification of individual target molecules in a biological sample by attaching a color coded fluorescent reporter to each target molecule of interest.</b>
AVERAGE				n/m	n/m	5.3	6.1	0.97	

In addition, we note that the historical sector beta for the Pharmaceuticals sub sector as published by the London Business School Risk Measurement Service for the quarter ending September 2015 was 0.83 on an equally weighted basis and 0.72 on a market capitalisation weighted average basis. The equivalent measures for biotechnology were 0.86 and 0.82 respectively.

In arriving at our valuation of the DiaTech IP we have used a Beta of 0.8 which is the average and median of the betas above.

### **Comparable Transactions**

The following table sets out transactions between companies showing some comparability to DiaTech since 1 January 2014 to the valuation date (Source: *ThomsonEikon*). Information regarding deals identified is summarised below. However, none of the sample has any published information that can be used to determine the multiples at which the transactions took place.



Date Announced	Target Name	Target Business Description	Acquirer Name	Value of Transaction (\$mil)	Ratio of Deal Value to Net Income	Ratio of Enterprise Value to EBITDA
<b>Deals identified from ThomsonEikon</b>						
11-May-15	Stage Cell Therapeutics GmbH	Provides biotech services in cell therapy area.	Juno Therapeutics Inc	232	n/p	n/p
11-Nov-14	MaSTherCell SA	Cell therapy manufacturing services. Include cell therapy services, production facilities, quality management systems, project management, technology transfer, process & Assay development, process & validation.	Orgenesis Inc	23	n/p	n/p
13-Oct-14	GenCell Biosystems Ltd	Develops automated systems for biological analysis.	Becton Dickinson & Co	0	n/p	n/p
02-Oct-14	Immutep SA	Biotechnology company focused in the treatment of cancer.	Prima Biomed Ltd	28	n/p	n/p
04-Mar-14	Activiomics Ltd	Biotechnology company has developed mass spectrometry technologies to identify and quantify, proteins and phosphoproteins that correlate with the progression of disease and/or administration of drugs.	Retroscreen Virology Group PLC	6	n/p	n/p
27-Jan-14	Trianta Immunotherapies GmbH	Develops immunotherapy platforms; programs in clinical development to treat tumors.	MediGene AG	10	n/p	n/p
18-Dec-14	OncoEthix SA	Specializes in the development and research of cancer drugs.	Merck & Co Inc	375	n/p	n/p
19-Nov-14	Vertical Pharma Resources Ltd	Supplier of bespoke medicines, standard drug compounds adapted to meet the needs of individual patients.	Investor Group	0	n/p	n/p
22-Apr-14	GlaxoSmithKline PLC-Oncology Business	Oncology business of GlaxoSmithKline PLC, a London-based manufacturer and developer of prescription pharmaceuticals and consumer health products.	Novartis AG	16,000	n/p	n/p
<b>Deals identified from other news reports</b>						
04-Sep-14	Allegro Diagnostics Corp *	Develop genomic tests to improve pre-operative diagnosis of lung cancer	Veracyte	21.0	pre-revenue	pre-revenue
21-Oct-15	Clariant Inc *	Provider of comprehensive cancer diagnostic testing	Neo Genomics	275.0	2.2	21.2
25-Jun-15	Synlab *	Medical laboratory operator	Cinven (PE)	1,960.0	3.0	8.0
16-Sep-15	NovioGendix *	Liquid biopsy technology for diagnosing prostate cancer	MDx Health	8.8	n/p	n/p
28-Aug-14	Corgenix *	Provider of diagnostic tests for bone and joint disorders, vascular diseases and immunology disorders	Orgentec Diagnostika	16.0	n/p	n/p
01-Apr-15	Foundation Medicine	<b>Cancer specimen analysis</b>	<b>Roche (c55% stake)</b>	<b>1,200.0</b>	<b>35.8</b>	<b>n/p</b>
02-Oct-15	Response Genetics *	Development of molecular diagnostic tests that help determine a patient's response to cancer therapy - has one CLIA certified and CAP accredited laboratory	Cancer Genetics - purchase after Response filed for Chapter 11 - approved	14.0	n/p	n/p
* Intended transaction				<b>AVERAGE</b>	<b>13.6</b>	<b>14.6</b>

We have also looked at the listing documents of Genomic Health, Nanostring and Foundation Medicine, companies identified by DiaTech as close competitors which are listed companies. At the time of listing, none of the companies was profitable, so cannot be used to provide any data on transaction multiples at that time. Since listing, a 55% stake in Foundation Medicine has been taken by Roche, at an income multiple of 35.8, which we consider to be higher than a long term multiple as Foundation Medicine is a relatively early-stage business.

## 6. VALUATION METHODOLOGY

We are estimating the value of a Business Segment in a company whose products remain in development and where main sales are not expected to commence for several years. There are various approaches which can be adopted in these circumstances, depending on the information available. These are:

- Cost
- Market
- Income

We summarise these approaches below and in addition give our preferred approach and methodology for this appraisal. In determining the appropriate methodology to adopt, it is necessary to recognise the attributes that affect the valuation of the Company and the IP and to have regard to the facts pertaining to the asset in question.

### Cost Approach

The use of a cost approach involves the valuer ascertaining the cost to create or recreate the subject asset. The cost to create the asset to date, or to recreate a similar asset with identical functionality can, in certain circumstances, be considered as a simile for value, particularly in the absence of credibly observed economic performance.

Any valuation under this methodology needs to be tempered by the valuer taking a view as to the obsolescence of the asset created. The greater the obsolescence, the lower the value. This is usually expressed as a percentage applied to the total cost.

Cost approaches are often used in the valuation of assets such as workforces and software. However, in certain instances a cost approach can serve as a useful basis in gauging the value of other intangible assets, for example where the asset is not being marketed or at a stage when commercialisation is a realistic prospect.

### Income approach

The underlying premise of an income-based methodology is that the value of an asset can be measured by the present value of the net economic benefit to be received over the life of that asset. This can be done either by using a Discounted Cashflow Methodology ("DCF") or by applying a multiple derived from the market to a maintainable profit figure.

A DCF approach takes the value of the forecast cashflows of a business on a 100% control basis and brings this back to a present value at the valuation date via the application of a discount rate. DCF methodologies are frequently used to capture the value of businesses that are in an early stage of their development or are experiencing abnormal growth.

For a profitable business, the value can usually be measured satisfactorily by the application of an appropriate multiple to a profit figure. Multiples can be derived from the market in several ways. A valuer may look at:

- Similar quoted assets in the market place;
- Industry 'rules of thumb';
- Comparable transactions in the market, involving similar assets and taking place around the valuation date.

There are several multiple-based approaches which can be used.

- Price/Earnings ("P/E") ratios directly value the equity of a business by capitalising the maintainable post-tax earnings of that business. These are easily obtainable from the ratings of quoted companies and transactions.
- EBIT (Earnings before Interest and Tax) or EBITDA (Earnings before Interest, Tax, Depreciation and Amortisation) multiples capitalise the profits of a business without taking into account the funding of a business to arrive at an Enterprise Value. The Net Debt of the business is then deducted from the Enterprise Value to give a valuation for the equity of the business.

When considering a minority holding in a business, a minority discount is normally considered appropriate – conversely a valuation for a 100% or controlling shareholding in a business would attract a control premium, adjusted, if appropriate, for marketability, size, diversity and illiquidity.

Multiples derived from market benchmarks typically require adjustment to take account of the relative size/diversity/growth prospects of the subject business compared to its market benchmarks, as well as to reflect the value of control.

Multiples derived from transactions usually contain a control premium if the transaction involves a controlling stake in the company. However, control is often offset by the illiquidity of controlling shareholdings, such that some companies do not achieve a premium on acquisition. Transaction multiples are also typically available on a Reported basis only, calculated on the basis of the last published accounts of the target company.

Multiples derived from the ratings of quoted companies are based on trades involving small uninfluential minority stakes – typically under 1% of the company. Quoted company multiples are available on a Reported basis and also on a Current basis (reflecting analysts' expectations for the outturn of the company's current financial year) and a Forecast basis (reflecting analysts' expectations for the outturn of future reporting years).

#### Market approach

The market approach considers how the market views the business or asset concerned. As set out above, multiples derived from market benchmarks can be used in an income approach, and the income and market approaches are often intertwined.

If there have been recent transactions in the subject business or asset, then this can provide a good indication of the value which the market places on that business.

#### Our Approach

In this instance we have income and expenditure projections for the period to 2025 and therefore in common with best valuation practice worldwide for these types of asset, we have adopted an income approach via DCF as our primary valuation methodology and have also considered a multiple-based cross-check, using EBITDA multiples for valuing the whole Company.

As is common practice in the pharmaceutical industry, we have adopted a "risk-adjusted" net present value approach, adapted to be appropriate to an in-vitro device. This method takes into consideration the likelihood (expressed as a probability) of the platforms receiving regulatory approval. This probability is applied to relevant cash flows prior to discounting.

---

## 7. VALUATION ASSUMPTIONS

### Cashflows

We have used the following assumptions to arrive at the cashflows used in our DCF model:

- We consider only cash flows relating to the Business Segment and treat it as a stand-alone business. These cash flows only relate to the MiCK and TIRA platforms although the Business Segment intends to develop further platforms over time
- We assume all necessary approvals to be received in all relevant territories in time for revenues to be generated as projected
- We have taken the cash flows for Q3 2015 to 2025 from the Business Plan financial projections provided to us for the Business Segment
- As instructed, we have assumed that the Business Segment continues to derive revenues from the MiCK and TIRA platforms to 2035, using available approvals for an expanding number of cancers which will be introduced over time.
- We assume that sales continue to be made from the MiCK and TIRA platforms after the period of the projections with the growth rate being half of that in the prior year until a long term inflation rate of 2% is seen through to 2035
- As advised by management, we assume for each platform and for the Business Segment as a whole that the probability of achieving approvals and hence being able to commercialise the platform is 80%
- We understand that the Business Segment expects to be eligible for UK research and development tax credits, which will be receivable as cash. Whilst our valuation is prepared on a pre-tax basis, we have included as cash receivable management's expected R&D tax credits for the period to 2021

- We assume that the patent licence from Vanderbilt University will not be withdrawn and that all relevant costs of the licence are included within the Business Segment's costs. The existence of the patents provides protection to the DiaTech segment, with no other organisation having access to the technology
- Our valuation is prepared on a pre-tax basis, in accordance with instructions.

### Discount Rate

We have for the purposes of this valuation, assumed DiaTech to be purely funded by equity, funding may take the form of equity, non-equity shares and / or loans. We have calculated the Cost of Equity using the Capital Asset Pricing Model ("CAPM").

This can be simply stated as follows:

$$C_e = R_f + (\beta * R_e)$$

Where

$C_e$	=	Cost of Equity
$R_f$	=	Risk Free Rate of Return from the market
$\beta$	=	Beta
$R_e$	=	Excess return to equity from the market over the risk-free rate

Each of these parameters can be quantified as follows:

- **The Risk Free Rate of Return.** The best available approximation to this is the yield on UK 20 year government bonds (source: [www.ft.com](http://www.ft.com)) that stood at approximately 2.5% as at 2 November 2015.
- **The Beta.** The Beta is a measure of the stock's sensitivity to market movements. The best method of obtaining the Beta is to normally use the Beta for companies in a similar field. We have used the average Beta derived in Section 5 above of 0.8.
- **The Equity premium.** (source: Duff & Phelps). We have adopted 7.00% as per the most recently published data to 31 December 2014.

Given the assumptions above the Cost of Equity can be calculated as:

$$C_e = R_f + (\beta * R_e)$$

$$C_e = 2.5\% + (0.8 * 7\%) = \mathbf{8.1\%}$$

We consider the discount rate of 8.1% produced by the calculation to be lower than that applicable to the cash flows projected to be derived by DiaTech, for the following reasons:

- The MiCK platform has been proven in test circumstances, but significant development activity remains to be carried out to achieve market approval
- The TIRA platform has yet to be developed and approved in any territory
- Whilst we have probability-adjusted the likelihood of success, by applying an 80% probability to cash flows as advised by management, this cannot be compared to market experience and there remains uncertainty over the timing of approval and launches
- In the financial projections, the number of treatments and hence income shows strong growth, meaning successful uptake of the platform amongst medical practitioners, which cannot yet be confirmed
- The financial projections are based upon expected income and expenditure, with no contracts in place for either, and no costs or volumes yet agreed. Cost of sales is projected at a slightly higher level than that of comparable entities.
- The financial projections assume the Company to continue in business once the platforms have been developed and approved. In reality, management expect the Business Segment to be sold to a large pharmaceutical company once approvals have been received and sales start to gain traction
- Investment in a small, unlisted company is inherently more risky to investors than an investment in a quoted company

Taking the above points into consideration, we have adopted a discount rate of 20% for the valuation of the Company's probability-adjusted income streams.

## 8. VALUATION CALCULATIONS

### DCF Calculation

#### The Business Segment

We set out the DCF calculation for the Business Segment below, split into two tables for presentation purposes:

To 2025:

Discount rate	20%											
Growth	2%											
												29%
<b>Year end 31 December</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	
	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>
Net pre tax cash flow	(4,024)	(20,053)	(22,608)	(25,354)	(14,044)	30,932	72,683	174,248	393,393	675,176	871,358	
R&D tax credits 5 years	-	-	2,760	4,413	2,871	3,140	6,807					
<b>Post tax royalty pre-probability</b>	<b>(4,024)</b>	<b>(20,053)</b>	<b>(19,847)</b>	<b>(20,941)</b>	<b>(11,173)</b>	<b>34,072</b>	<b>79,490</b>	<b>174,248</b>	<b>393,393</b>	<b>675,176</b>	<b>871,358</b>	
Adjusted for probability of success	80%	(3,219)	(16,042)	(15,878)	(16,753)	(8,938)	27,258	63,592	139,399	314,714	540,140	697,087
Part Year	0.2	1.0	1.0	1	1	1	1	1	1	1	1	1
PV months	1.0	8.0	20	32	44	56	68	80	92	104	116	
PV Years	0.1	0.7	1.7	2.7	3.7	4.7	5.7	6.7	7.7	8.7	9.7	
PV Factor	0.985	0.886	0.738	0.615	0.512	0.427	0.356	0.297	0.247	0.206	0.172	
<b>PV Cashflows</b>	<b>(528)</b>	<b>(14,206)</b>	<b>(11,717)</b>	<b>(10,302)</b>	<b>(4,581)</b>	<b>11,641</b>	<b>22,631</b>	<b>41,341</b>	<b>77,779</b>	<b>111,242</b>	<b>119,638</b>	
<b>Sum of Post Tax Cashflows</b>	<b>\$'000</b>		<b>986,680</b>									



2025 to 2030

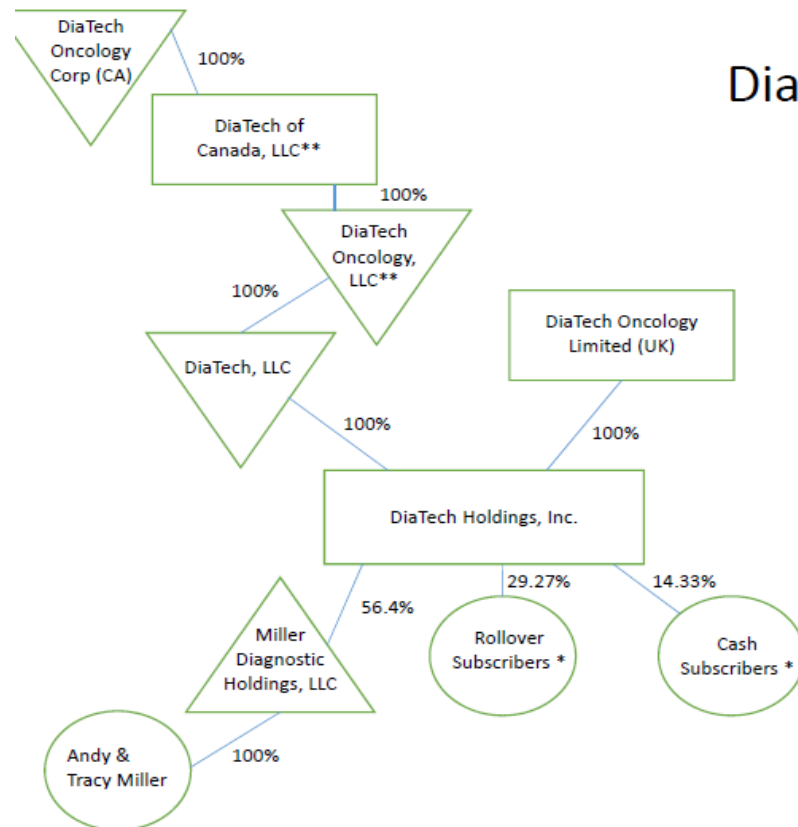
Discount rate	20%									
Growth	2%									
	15%	7%	4%	2%	2%	2%	2%	2%	2%	2%
Year end 31 December	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Net pre tax cash flow	997,951	1,070,444	1,109,323	1,131,510	1,154,140	1,177,223	1,200,767	1,224,782	1,249,278	1,274,264
R&D tax credits 5 years										
Post tax royalty pre-probability	997,951	1,070,444	1,109,323	1,131,510	1,154,140	1,177,223	1,200,767	1,224,782	1,249,278	1,274,264
Adjusted for probability of success	80%	798,361	856,355	887,459	905,208	923,312	941,778	960,614	979,826	999,422
Part Year	1	1	1	1	1	1	1	1	1	1
PV months	128	140	152	164	176	188	200	212	224	236
PV Years	10.7	11.7	12.7	13.7	14.7	15.7	16.7	17.7	18.7	19.7
PV Factor	0.143	0.119	0.099	0.083	0.069	0.057	0.048	0.040	0.033	0.028
PV Cashflows	114,182	102,064	88,143	74,921	63,683	54,131	46,011	39,109	33,243	28,256
<b>Sum of Post Tax Cashflows</b>										

A company enterprise valuation of US\$985million (rounded) based upon cash flows to 2035 implies an EBITDA multiple of around 16 in 2021 but falling to around 2 by 2024. The early multiple is higher than the average year 2 multiple of 6.1 for similar companies but lower than the 17.5 for large pharmaceuticals in Section 5 above which is not surprising given the rapid growth foreseen in the cash flows to be derived from an asset which is not yet fully developed. Comparison of PE ratios for earlier years is not meaningful, given that DiaTech will see large cash outflows as development continues.

### Conclusion

On the basis of the information available to us, the assumption that funding will be raised on a timely basis, which we understand may be in more than one tranche, at different times and our own research into the market, we are of the opinion that the **market value of the DiaTech Business Segment as at 3 November 2015 is in the region of \$985million on a pre-tax basis.**

APPENDIX A DIATECH CERTIFIED FAMILY TREE



# DiaTech Certified Family Tree as of October 23, 2015

Name: Stephen A. Turner

Signature:

Qualification: Certified Public Accountant

Name of Practice of Solicitors or Accountants: LBMC, PC

\*See attached schedule for the names and ownership % of minority owners.

\*\*Entity will be dissolved as part of the overall transaction.

**APPENDIX B**

**GRANTED AND PENDING PATENTS RELATING TO THE MICK PLATFORM**

The following data has been replicated from the Company's business plan:

Docket No.	Serial No.	Filing Date	Title (Inventors)	Assignee	Case Status
DTO-001PR	61/641,610	5/2/2012	Systems and Methods for Automated Determination of the Relative Effectiveness of Anti-Cancer Drug Candidates (Mathieu Perree, Allan E. Halkquist, Olivier Petit)	Diatech Oncology	<b>EXPIRED.</b>
DTO-001	13/803,623	3/14/2013	"		<b>PENDING.</b> Published as US2014/0141462 on 05/22/2014.
DTO-001PC	PCT/US2013/039189	5/2/2013	"		<b>NATIONALIZED.</b> Published as WO2013/166233 on 11/07/2013.
DTO-001AU	2013256248	5/2/2013	"		<b>PENDING.</b>
DTO-001BR	BR 11 2014027287-5	5/2/2013	"		<b>PENDING.</b>
DTO-001CA	2,872,109	5/2/2013	"		<b>PENDING.</b>
DTO-001CL	201402981	5/2/2013	"		<b>PENDING.</b>
DTO-001CN	201380035279.0	5/2/2013	"		<b>PENDING.</b>
DTO-001CO	14-265,404	5/2/2013	"		<b>PENDING.</b>
DTO-001CR	2014-0551	5/2/2013	"		<b>PENDING.</b>
DTO-001CU	2014-0125	5/2/2013	"		<b>PENDING.</b>
DTO-001EG	PCT 1753/2014	5/2/2013	"		<b>PENDING.</b>
DTO-001EP	13784507.9	5/2/2013	"		<b>PENDING.</b>
DTO-001GC	24296	5/4/2013	Systems and Methods for Automated Determination of the Relative Effectiveness of Anti-Cancer Drug Candidates (Mathieu Perree, Allan E. Halkquist, Olivier Petit)		<b>PENDING.</b>
DTO-001GT	A-2014-000237	5/2/2013	"		<b>PENDING.</b>
DTO-001HK	15104231.4	5/2/2013	"		<b>PENDING.</b>
DTO-001HN	1882	5/2/2013	"		<b>PENDING.</b>
DTO-001HD	P-00201407551	5/2/2013	"		<b>PENDING.</b>
DTO-001IL	235455	5/2/2013	"		<b>PENDING.</b>
DTO-001IN	8734/CHENP/2014	5/2/2013	"		<b>PENDING.</b>
DTO-001JP	2015-510444	5/2/2013	"		<b>PENDING.</b>
DTO-001KR	10-2014-7033937	5/2/2013	"		<b>PENDING.</b>
DTO-001MX	MX/a/2014/013271	5/2/2013	"		<b>PENDING.</b>
DTO-001MY	PI 2014003092	5/2/2013	"		<b>PENDING.</b>

Docket No.	Serial No.	Filing Date	Title (Inventors)	Assignee	Case Status
DTO-002EP	13790721.8	3/14/2013	"		PENDING.
DTO-002GC	24383	5/13/2013	"		PENDING.
DTO-002GT	A-2014-00255	3/14/2013	"		PENDING.
DTO-002HN	1955/2014	3/14/2013	"		PENDING.
DTO-002IN	9582/DELNP/2014	3/14/2013	Tumor Cell Isolation/Purification Process and Methods of Use Thereof (Cary Presant, Mathieu Perree, Allan Halkquist)		PENDING.
DTO-002IL	235709	3/14/2013	"		PENDING.
DTO-002JP	512640/15	3/14/2013	"		PENDING.
DTO-002KR	10-2014-7032343	3/14/2013	"		PENDING.
DTO-002MX	MX/a2014/013939	3/14/2013	"		PENDING.
DTO-002NZ	701953	3/14/2013	"		PENDING.
DTO-002SG	11201407497T	3/14/2013	"		PENDING.
DTO-002TH	1401006788	3/14/2013	"		PENDING.
DTO-002TW	102116888	5/13/2013	"		PENDING.
DTO-002ZA	2014/08401	3/14/2013	"		PENDING.
DTO-003PR	61/984,304	4/25/2014	Intertumoral Homogeneity Determined by MiCK Assay (Cary Presant, Mathieu Perree, Allan Halkquist)		EXPIRED.
DTO-003PC	PCT/US2015/027210	4/23/2015	"		PENDING.
DTO-004PR	61/990,268	5/8/2014	Synergism and Antagonism Between Multiple Anti-Cancer Agents Determined by MiCK Assay (Cary Presant, Mathieu Perree, Allan Halkquist)	Diatech Oncology, LLC	EXPIRED.
DTO-004PC	PCT/US2015/029589	5/7/2015	"	Diatech Oncology, LLC	PENDING.
DTO-004GC	29368	5/10/2015	"		PENDING.

Docket No.	Serial No.	Filing Date	Title (Inventors)	Assignee	Case Status
DTO-001NI	2014-00128	5/2/2013	"		PENDING.
DTO-001NZ	702526	5/2/2013	"		PENDING.
DTO-001PA	90402	5/2/2013	Systems and Methods for Automated Determination of the Relative Effectiveness of Anti-Cancer Drug Candidates (Mathieu Perree, Allan E. Halkquist, Olivier Petit)		PENDING.
DTO-001PE	224-2014	5/2/2013	"		PENDING.
DTO-001PH	1-2014-502687	5/2/2013	"		PENDING.
DTO-001RU	2014148543	5/2/2013	"		PENDING.
DTO-001SG	11201407141V	5/2/2013	"		ALLOWED.
DTO-001SV	2014004841	5/2/2013	"		PENDING.
DTO-001TH	1401006567	5/2/2013	"		PENDING.
DTO-001TW	102115445	4/30/2013	"		PENDING.
DTO-001ZA	201408844	5/2/2013	"		PENDING.
DTO-002PR	61/647,248	5/15/2012	Tumor Cell Isolation/Purification Process and Methods of Use Thereof (Cary Presant, Mathieu Perree, Allan Halkquist)		EXPIRED.
DTO-002	14/400,446	11/11/2014	"	Diatech Oncology	PENDING. Published as US2015/0160193 on 06/11/2015.
DTO-002PC	PCT/US2013/031300	3/14/2013	"		NATIONALIZED. Published as WO2013/172955 on 11/21/2013.
DTO-002AU	2013263337	3/14/2013	"		PENDING.
DTO-002BR	112014028396-6	3/14/2013	"		PENDING.
DTO-002CA	2,873,180	3/14/2013	"		PENDING.
DTO-002CN	201380037542X	3/14/2013	"		PENDING.
DTO-002CO	14-273304	3/14/2013	"		PENDING.
DTO-002CR	2014-0575	3/14/2013	"		PENDING.