

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 11, 2020

DIAMEDICA THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

British Columbia
(State or other jurisdiction
of incorporation)

001-36291
(Commission
File Number)

Not Applicable
(IRS Employer
Identification No.)

2 Carlson Parkway, Suite 260
Minneapolis, Minnesota
(Address of principal executive offices)

(763) 312-6755
(Registrant's telephone number, including area code)

55447
(Zip Code)

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Voting common shares, no par value per share	DMAC	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02 Results of Operations and Financial Condition.

On February 11, 2020, DiaMedica Therapeutics Inc. (Company) filed with the United States Securities and Exchange Commission (SEC) a preliminary prospectus supplement (Preliminary Prospectus Supplement) in connection with a proposed public offering of its voting common shares, no par value per share (Public Offering). The Preliminary Prospectus Supplement contains certain preliminary unaudited financial information of the Company and its subsidiaries as of and for the year ended December 31, 2019. The preliminary unaudited financial information is furnished in Exhibit 99.1 to this Current Report on Form 8-K, which is incorporated by reference into this Item 2.02 of this report.

The information contained in Item 2.02 of this report and Exhibit 99.1 to this report shall not be deemed to be “filed” with the SEC for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (Exchange Act), and shall not be incorporated by reference into any filings made by the Company under the Securities Act of 1933, as amended (Securities Act), or the Exchange Act, except as may be expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

As noted above, on February 11, 2020, in connection with the Public Offering, the Company filed the Preliminary Prospectus Supplement to its shelf registration statement on Form S-3 (File No. 333-235775), which became effective on January 9, 2020, pursuant to Rule 424(b) under the Securities Act. In addition to certain preliminary unaudited financial information of the Company and its subsidiaries as of and for the year ended December 31, 2019 referred to in Item 2.02 above, the Company included updated risk factor disclosure in the Preliminary Prospectus Supplement. The updated risk factor disclosure is filed as Exhibit 99.2 to this report and incorporated herein by reference.

This report, including the exhibits hereto, shall not constitute an offer to sell or the solicitation of an offer to buy any securities of the Company, which is being made only by means of a written prospectus meeting the requirements of Section 10 of the Securities Act, nor shall there be any sale of the Company’s securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction.

Item 9.01 Financial Statements and Exhibits.

(d) *Exhibits.*

Exhibit No.	Description
99.1	Updated Financial Information (furnished herewith)
99.2	Updated Risk Factor Disclosure (filed herewith)

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

DIAMEDICA THERAPEUTICS INC.

By: /s/ Scott Kellen
Scott Kellen
Chief Financial Officer and Secretary

Dated: February 11, 2020

Updated Financial Information

We are in the process of finalizing our results for the year ended and as of December 31, 2019. These preliminary results represent our estimates which are based only on currently available information and do not present all necessary information for an understanding of our financial condition as of December 31, 2019 or our results of operations for the year ended December 31, 2019. This financial information has been prepared by and is the responsibility of our management. Our independent registered public accounting firm has not audited, reviewed or performed any procedures with respect to this preliminary financial data or the accounting treatment thereof and does not express an opinion or any other form of assurance with respect thereto. We expect to complete our audited financial statements for the year ended December 31, 2019 subsequent to the completion of this offering. While we are currently unaware of any items that would require us to make adjustments to the financial information set forth below, it is possible that we or our independent registered public accounting firm may identify such items as we complete our audited financial statements and any resulting changes could be material. Accordingly, undue reliance should not be placed on these preliminary estimates. These preliminary estimates are not necessarily indicative of any future period and should be read together with "Risk Factors," "Cautionary Note Regarding Forward-Looking Statements," and our consolidated financial statements and related notes incorporated by reference in the Preliminary Prospectus Supplement to the Company's shelf registration statement on Form S-3 (File No. 333-235775).

(in thousands)	Year Ended December 31, 2019
Research and development expense	7,873
Cash and cash equivalents	3,883
Marketable securities	3,995
Total cash and cash equivalents and marketable securities	7,878

Updated Risk Factor Disclosure

An investment in our securities involves a high degree of risk. You should carefully consider the risks described below before making a decision about investing in our securities. The risks and uncertainties discussed below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common shares could decline and you could lose part or all of your investment.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred substantial losses since our inception and expect to continue to incur future substantial losses and may never become profitable.

We are a clinical stage biopharmaceutical company focused on the development of novel recombinant proteins. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that a product candidate will fail to prove effective, gain regulatory approval or become commercially viable. We do not have any products approved by regulatory authorities and have not generated any revenues from product sales to date, and do not expect to generate any revenue from the sale of products for several years. We have incurred significant research, development and other expenses related to our ongoing operations and expect to continue to incur such expenses. As a result, we have not been profitable and have incurred significant operating losses in every reporting period since our inception. For the year ended December 31, 2018 and 2017, we incurred a net loss of \$5.7 million and \$4.3 million, respectively. As of September 30, 2019, we had an accumulated deficit of \$54.1 million. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our shareholders' equity and working capital. We expect to continue to incur substantial operating losses as we continue our research and development (R&D) activities, planned clinical trials, regulatory activities and otherwise develop our product candidate, DM199, or any future product candidates to a point where they may be commercially sold and we begin to recognize future product sales, or receive royalty payments, licensing fees, and/or milestone payments sufficient to generate revenues to fund our continuing operations. We expect our operating losses to increase in the near term as we continue the research, development and clinical trials of, and seek regulatory approval for, our product candidates. We are unable to predict the extent of any future losses or when we will become profitable, if ever. Our failure to become and remain profitable may depress the market price of our common shares and could impair our ability to raise capital, develop products, expand our business and product offerings or continue our operations. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an ongoing basis.

We currently have no revenue from product sales and do not expect any revenue from product sales for several years. Accordingly, we will need additional funding to continue our research and development activities and other operations, which may not be available to us on acceptable terms, or at all.

Our future operations will be dependent upon our ability to develop our product candidates, obtain research grant funding, obtain required regulatory approvals, generate revenue from product sales, negotiate collaboration or license agreements or other strategic alternatives, and/or secure additional funding. As of September 30, 2019, we had cash, cash equivalents and marketable securities of \$9.7 million. We expect we will need substantial additional capital to further our R&D activities, planned clinical trials, and regulatory activities and to otherwise develop our product candidate, DM199, or any future product candidates to a point where they may be commercially sold. While we are striving to achieve these plans, there is no assurance we will be successful or that additional financing will be obtained on favorable terms or at all in furtherance of our strategic objectives. Our ability to continue as a going concern is dependent on our ability to continue obtaining sufficient funds to conduct our R&D activities and to successfully commercialize our product candidates.

We will require additional funds to finance our operations, which may not be available to us on acceptable terms, or at all. As a result, we may not complete the development and commercialization of our current DM199 product candidate or develop any new product candidates.

We require significant additional funds for further R&D activities, planned clinical trials and the regulatory approval process. We expect our cash resources of \$9.7 million in cash, cash equivalents and marketable securities as of September 30, 2019 to be sufficient to allow us to complete our current ongoing Phase II REMEDY trial in patients with AIS and the first two cohorts in the Phase II study in patients with CKD and to otherwise fund our planned operations into the fourth quarter of 2020. However, the amount and timing of future funding requirements will depend on many factors, including, among others:

- the rate of progress in the development of and the conduct of clinical trials with respect to our DM199 product candidate and any other future product candidates;
- the timing and results of our ongoing development efforts, including in particular our current Phase II clinical studies;
- the costs of our development efforts, including the conduct of clinical trials with respect to our DM199 product candidate and any other future product candidates;
- the costs associated with identifying additional product candidates and the potential expansion of our current development programs or potential new development programs;
- the costs to initiate and continue research, preclinical, and clinical development efforts for any future product candidates;
- the costs necessary to obtain regulatory approvals for our DM199 product candidate and any other future product candidates;
- the costs associated with being a public company;
- the costs we incur in the filing, prosecution, maintenance and defense of our intellectual property; and
- the costs related to general and administrative (G&A) support.

We may require significant additional funds earlier than we currently expect, and there is no assurance that we will not need or seek additional funding prior to such time. We may elect to raise additional funds even before we need them if market conditions for raising additional capital are favorable.

Since our inception, we have financed our operations from public and private sales of equity securities, the exercise of warrants and stock options, interest income on funds available for investment, and government grants and tax incentives, and we expect to continue this practice for the foreseeable future. We do not have any existing credit facilities under which we could borrow funds. We may seek to raise additional funds through various sources, such as equity and debt financings, or through strategic collaborations and license agreements. We can give no assurances that we will be able to secure additional sources of funds to support our operations, or if such funds are available to us, that such additional financing will be sufficient to meet our needs or on terms acceptable to us. This is particularly true if our clinical data is not positive or economic and market conditions deteriorate.

Although we have previously been successful in obtaining financing through our equity securities offerings, there can be no assurance that we will be able to do so in the future. To the extent we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our shareholders will be diluted. Debt financing, if available, may involve agreements that include conversion discounts or covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, or strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. It is possible that financing will not be available or, if available, may not be on favorable terms. The availability of financing will be affected by the results of our clinical studies and other scientific and clinical research; our ability to attain regulatory approvals; market acceptance of our product candidates; the state of the capital markets generally with particular reference to pharmaceutical, biotechnology, and medical companies; the status of strategic alliance agreements; and other relevant commercial considerations. If adequate funding is not available, we may be required to implement cost reduction strategies; delay, reduce, or eliminate one or more of our product development programs; relinquish significant rights to product candidates or obtain funds on less favorable terms than we would otherwise accept; and/or divest assets or cease operations through a merger, sale, or liquidation of our company.

We are exposed to financial risk related to the fluctuation of foreign currency exchange rates and the degrees of volatility of those rates.

We may be adversely affected by foreign currency exchange rate fluctuations. To date, we have been primarily funded through issuances of equity and proceeds from the exercise of warrants and stock options, which are denominated both in U.S. and Canadian dollars. Currently, the majority of our expenditures are in U.S. dollars. However, significant costs are also incurred in Canadian dollars, British pounds, and Australian dollars, and, therefore, we are subject to foreign currency exchange rate fluctuations which may, from time to time, impact our financial position and results of operations.

Risks Related to Our Business and Our Industry

We are an early stage company with no approved products and no revenue from commercialization of any products.

We are at an early stage of development of our product candidate, DM199, for the treatment of CKD and AIS. We have not completed the development of any product candidate and, accordingly, have not begun to commercialize any product candidate or generate any revenues from any product sales. DM199 requires significant additional clinical testing and investment prior to seeking marketing approval. A commitment of substantial resources by us and potential partners to continue to conduct clinical trials for DM199 will be required to meet applicable regulatory standards, obtain required regulatory approvals, and successfully commercialize this product candidate. DM199 is not expected to be commercially available for several years, if at all.

Our prospects depend on the success of our product candidate, DM199, which is at an early stage of development, and we may not generate revenue from product sales for several years, if at all, from this product candidate or any future product candidates.

We are highly dependent on the success of DM199, and we may not be able to successfully obtain regulatory or marketing approval for, or successfully commercialize, this product candidate. To date, we have expended significant time, resources and effort on the development of DM199, including conducting preclinical and clinical trials, for the treatment of CKD and AIS. Although we intend to study the use of DM199 to treat multiple diseases, we have no other product candidates in our current clinical development pipeline. Our ability to generate revenue from product sales and to achieve commercial success in the near term will initially depend almost entirely on our ability to successfully develop, obtain regulatory approval for and then successfully commercialize DM199. Prior to commercialization of any potential product, significant additional investments will be necessary to complete the development of DM199 or any future product candidates. Preclinical and clinical trial work must be completed before DM199 or any future product candidate could be ready for use within the markets that we have identified. We may fail to develop any products, obtain regulatory approvals, complete required clinical trials successfully, or commercialize any products. Competitors may develop alternative products and methodologies to diagnose and treat the disease indications we are pursuing, thus reducing our competitive advantages. We do not know whether any of our product development efforts will prove to be effective, meet applicable regulatory standards, obtain the requisite regulatory approvals, be capable of being manufactured at a reasonable cost, or be successfully marketed. The product candidate we are currently developing is not expected to be commercially viable for several years. In addition, although no significant adverse events have occurred to date, DM199 may cause undesirable side effects. Results of early preclinical and clinical research may not be indicative of the results that will be obtained in later stages of clinical research. If regulatory authorities do not approve DM199 for the treatment of CKD and/or AIS or any future product candidates, or if we fail to maintain regulatory compliance, we will have limited ability to commercialize DM199 or any future product candidates, and our business and results of operations would be harmed. If we do succeed in developing viable products from DM199 or any future product candidates, we will face many potential obstacles, such as the need to develop or obtain manufacturing, sales and marketing, and distribution capabilities.

The clinical and commercial success of our DM199 product candidate will depend on a number of factors, many of which are beyond our control.

The clinical and commercial success of our DM199 product candidate will depend on a number of factors, many of which are beyond our control, including, among others:

- the timely initiation, continuation, and completion of our currently ongoing Phase II and future clinical trials for DM199, which will depend substantially upon requirements for such trials imposed by the FDA and other regulatory agencies and bodies;
- our ability to demonstrate the safety and efficacy of DM199 to the satisfaction of the relevant regulatory authorities;
- whether we are required by the FDA or other regulatory authorities to conduct additional clinical trials, and the scope and nature of such clinical trials, prior to approval to market our DM199 product candidate;
- the timely receipt of necessary marketing approvals from the FDA and foreign regulatory authorities, including pricing and reimbursement determinations;
- the ability to successfully commercialize our DM199 product candidate for marketing and sale, if approved by the FDA or foreign regulatory authorities, whether alone or in collaboration with others;
- our ability and the ability of third-party manufacturers to manufacture the quantities of our DM199 product candidate with quality attributes necessary to meet regulatory requirements and at a scale and yield sufficient to meet anticipated demand at a cost that allows us to achieve profitability;
- our success in educating health care providers and patients about the benefits, risks, administration, and use of our DM199 product candidate, if approved;
- acceptance of our DM199 product candidate, if approved, as safe and effective by patients and the healthcare community;
- the achievement and maintenance of compliance with all regulatory requirements applicable to our DM199 product candidate, our third-party manufacturers, and our internal operations;
- the maintenance of an acceptable safety profile of our products, if any, following any approval;
- the availability, perceived advantages, relative cost, relative safety, and relative efficacy of alternative and competitive treatments;
- our ability to provide approved product with a convenient and patient-friendly administration procedure;
- our ability to successfully enforce our intellectual property rights for our DM199 product candidate and against the products of potential competitors; and
- our ability to avoid or succeed in third-party patent interference or patent infringement claims.

We cannot assure you that we will ever be able to achieve profitability through the sale of, or royalties from, our DM199 product candidate. If we or our future collaborators are not successful in obtaining approval for and commercializing our DM199 product candidate, or are delayed in completing those efforts, our business and operations would be adversely affected.

We rely and will continue to rely on third parties to plan, conduct, and monitor our preclinical and clinical trials, and their failure to perform as required could cause substantial harm to our business.

We rely and will continue to rely on third parties to conduct a significant portion of our preclinical and clinical development activities. Preclinical activities include in vivo studies in specific disease models, pharmacology and toxicology studies, and assay development. Clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring, and project management. If there is any dispute or disruption in our relationship with third parties, or if they are unable to provide quality services in a timely manner and at a feasible cost, our active development programs may face delays. Further, if any of these third parties fails to perform as we expect or if their work fails to meet regulatory requirements, our testing could be delayed, cancelled, or rendered ineffective.

We rely on a contract manufacturer over whom we have limited control. If we are subject to quality, cost, or delivery issues with the materials supplied by this or future contract manufacturers, our business operations could suffer significant harm.

Completion of our clinical trials and commercialization of our DM199 product candidate and any future product candidates require access to, or development of, facilities to manufacture our product candidates at sufficient yields and at commercial scale. Our clinical trials must be conducted with product candidates produced under applicable current good manufacturing practices (cGMP) regulations. Failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. We rely on contract manufacturing organizations (CMOs) to manufacture DM199. We rely on CMOs for manufacturing, filling, packaging, storing, and shipping DM199 in compliance cGMP regulations applicable to DM199. The FDA ensures the quality of drug products by carefully monitoring drug manufacturers' compliance with cGMP regulations. The cGMP regulations for drugs contain minimum requirements for the methods, facilities, and controls used in the manufacturing, processing, and packing of a drug product.

We have no direct experience in manufacturing or managing third parties in manufacturing our DM199 product candidate in the volumes that are expected to be necessary to support our clinical trials and commercialization, if DM199 is approved. Our efforts to establish these capabilities may not meet our requirements as to scale-up, timeliness, yield, cost, or quality in compliance with cGMP regulations applicable to DM199. We, our future collaborators, or our experienced third-party manufacturers may encounter difficulties in production, which may include the following, among others:

- costs and challenges associated with scale-up and attaining sufficient manufacturing yields;
- supply chain issues, including the timely availability and shelf life requirements of raw materials and supplies and the lack of redundant and backup suppliers;
- quality control and assurance;
- shortages of qualified personnel and capital required to manufacture large quantities of our product candidate;
- competing capacity needs at CMOs supporting product development as quantities for supply increase;
- establishment of commercial supply capacity through binding supply agreements;
- compliance with regulatory requirements that vary in each country where a product might be sold;
- capacity limitations and scheduling availability in contracted facilities; and
- natural disasters, cyberattacks, or other force majeure events that affect facilities and possibly limit production or loss of product inventory maintained in third party storage facilities.

There can be no assurances that our current CMOs or any future CMOs will be able to meet our timetable and requirements for our DM199 product candidate or any future product candidates. If we are unable to arrange for alternative third-party manufacturing sources on commercially reasonable terms or in a timely manner, we may be delayed in the development of DM199 and any future product candidates. Further, CMOs must operate in compliance with cGMP regulations, and failure to do so could result in, among other things, the disruption of product supplies. Our dependence upon our current CMOs and any future third parties for the manufacture of our product candidates may adversely affect our ability to develop our product candidates on a timely and competitive basis and, if we are able to commercialize our product candidates, may adversely affect our revenues from product sales and profit margins.

If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we would incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct preclinical studies and extensive clinical trials in humans to demonstrate the safety and efficacy of our product candidates. Clinical testing is expensive and difficult to design and implement, can take many years to complete, and has uncertain outcomes. The outcome of preclinical studies and early clinical trials may not predict the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety profiles, notwithstanding promising results in earlier trials. We do not know whether the clinical trials we are currently conducting or may conduct in the future will demonstrate adequate efficacy and safety to result in regulatory approval to market DM199 or any future product candidates in any jurisdiction. A product candidate may fail for safety or efficacy reasons at any stage of the testing process. In addition, the patient populations in our clinical studies for DM199 often have many co-morbidities that may cause severe illness or death, which may be attributed to DM199 in a manner that negatively affects the safety profile of our DM199 product candidate. If the results of our ongoing or future clinical trials for DM199 are inconclusive with respect to efficacy, if we do not meet our clinical endpoints with statistical significance, or if there are unanticipated safety concerns or adverse events that emerge during clinical trials, we may be prevented from or delayed in obtaining marketing approval, and even if we obtain marketing approval, any sales may suffer. A major risk we face is the possibility that neither our current DM199 product candidate or any future product candidates will successfully gain market approval from the FDA or other regulatory authorities, resulting in us being unable to derive any commercial revenue from them after investing significant amounts of capital in multiple stages of preclinical and clinical testing.

If we experience delays in clinical testing, we will be delayed in commercializing our product candidates, and our business may be substantially harmed.

We cannot predict whether any clinical trials will begin as planned, will need to be restructured, or will be completed on schedule, or at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before us, which would impair our ability to successfully commercialize our product candidates and may harm our financial condition, results of operations and prospects. The commencement and completion of clinical trials for our product candidates may be delayed for a number of reasons, including among others:

- failure by regulatory authorities to grant permission to proceed or placing the clinical trial on hold;
- patients failing to enroll or remain in our trials at the rates and within the timelines we expect;
- suspension or termination of clinical trials by regulators for many reasons, including concerns about patient safety or failure of our contract manufacturers to comply with cGMP requirements;
- any changes to our manufacturing process that may be necessary or desired;
- delays or failure to obtain clinical supply from contract manufacturers of our product candidates necessary to conduct clinical trials;
- product candidates demonstrating a lack of safety or efficacy during clinical trials;
- patients choosing an alternative treatment for the indications for which we are developing any of our product candidates or participating in competing clinical trials;
- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects, or other reasons;
- reports of clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- competing clinical trials and scheduling conflicts with participating clinicians;
- clinical investigators not performing our clinical trials on their anticipated schedule, dropping out of a trial, or employing methods not consistent with the clinical trial protocol, regulatory requirements or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of our contract research organizations (CROs) to satisfy their contractual duties or meet expected deadlines;
- inspections of clinical trial sites by regulatory authorities, Institutional Review Boards (IRBs) or ethics committees finding regulatory violations that require us to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees rejecting, suspending or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- failure to reach agreement on acceptable terms with prospective clinical trial sites.

We are currently experiencing slower than expected enrollment in our pending Phase II studies for CKD. We believe that this was due to the Thanksgiving and Christmas holidays. However, if this slow enrollment continues, the completion of these studies will take longer than expected.

Our product development costs will increase if we experience delays in testing or approval or if we need to perform more or larger clinical trials than planned. Additionally, changes in regulatory requirements and policies may occur, and we may need to amend study protocols to reflect these changes. Amendments may require us to resubmit our study protocols to regulatory authorities or IRBs or ethics committees for re-examination, which may impact the cost, timing or successful completion of that trial. Delays or increased product development costs may have a material adverse effect on our business, financial condition, and prospects.

Even if we complete the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time-consuming and uncertain and may prevent us or any future collaborators from obtaining approvals for the commercialization of some or all of our product candidates. As a result, we cannot predict when or if, and in which territories, we, or any future collaborators, will obtain marketing approval to commercialize a product candidate.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive and may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved.

Our current product candidate and the activities associated with its development and commercialization, including design, research, testing, manufacture, safety, efficacy, quality control, recordkeeping, labeling, packaging, storage, approval, advertising, promotion, sale, distribution, import, export, and reporting of safety and other post-market information, are subject to comprehensive regulation by the FDA, the European Medicines Agency (EMA) and other similar foreign regulatory agencies. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-parties to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. The FDA, EMA or other regulatory authorities may determine that our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. As a result, any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

In addition, changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data is insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate.

We are in litigation against Pharmaceutical Research Associates Group B.V., a contract research organization, seeking to compel them to comply with the terms of a clinical trial research agreement, and their failure to perform as required could adversely affect our ability to obtain regulatory approval for DM199.

In March 2013, we entered into a clinical research agreement with Pharmaceutical Research Associates Group B.V. (PRA Netherlands) to perform a double-blinded, placebo-controlled, single-dose and multiple-dose study to evaluate the safety, tolerability, pharmacokinetics, pharmacodynamics and proof of concept of DM199 in healthy subjects and in patients with Type 2 diabetes mellitus. In one arm of this study, we enrolled 36 patients with Type 2 diabetes who were treated with two subcutaneous dose levels of DM199 over a 28-day period. This study achieved its primary endpoint and demonstrated that DM199 was well tolerated. The secondary endpoints for this study, however, were not met. We believe there were significant execution errors in Part D of the study that were caused by protocol deviations occurring at the clinical trial site that were unable to be reconciled. We believe these included dosing errors and sample mix-ups. These errors undermined our ability to interpret the secondary endpoints. To date, we have been unable to obtain the complete study records from PRA Netherlands for the arm of the study that included 36 patients with Type 2 diabetes and was intended to measure primary endpoints (safety and tolerability) and secondary endpoints (blood glucose concentration, insulin levels, glucose tolerance test and a variety of experimental biomarkers). Without these records and given our inability to reconcile the protocol deviations, we have been unable to generate a final study report. Due in part to these confounded secondary endpoints, we are not currently continuing the clinical study of DM199 for Type 2 diabetes. We have initiated litigation against PRA Netherlands to compel them to comply with the terms of the clinical research agreement, including providing full study records, and to recover damages. Litigation distracts the attention of our management from our business, is expensive and the outcome is uncertain.

Though we have entered into a litigation funding agreement to help cover the costs associated with our litigation against PRA Netherlands, there is no assurance that we will generate any recovery from the litigation and, because of the terms of the litigation funding agreement, a significant portion, if not all, of any recovery we may obtain may be due to the funder under the agreement.

On December 27, 2019, we entered into a litigation funding agreement with LEGALIST FUND II, L.P. (Funder) for the purpose of funding our currently pending lawsuit against PRA Netherlands. Our management believes, but cannot guarantee, that this litigation funding agreement will allow us to pursue this litigation more effectively. Although the Funder made its evaluation as to the likelihood of success, litigation is very uncertain, and we cannot assure you that, just because we have obtained litigation funding, we will be successful or that any recovery we may obtain will be significant.

Under the terms of the litigation funding agreement, the Funder agreed to pay up to an aggregate of \$1.0 million to fund reasonable legal fees, court costs, and other expenses incurred by us in connection with the litigation, including \$200,000 for fees and costs previously paid by us. These payments, however, are conditioned upon the transfer of venue of the litigation from Delaware to Minnesota (Transfer), and if the venue is not transferred, we will not be entitled to receive any payments under the litigation funding agreement. If the venue is transferred, we agreed to repay the Funder from any proceeds arising from the litigation (Claim Proceeds) the amount of costs actually paid or otherwise funded by the Funder in connection with the litigation, plus the reimbursement of \$10,000 for its diligence and underwriting costs. Additionally, we agreed to pay the Funder from the Claim Proceeds the greater of: (i) \$1.0 million if repayment occurs within nine months of the Transfer, \$2.0 million if repayment occurs more than nine months after the Transfer but before trial has begun, or \$3.0 million thereafter; or (ii) 20% of the Claim Proceeds. In the event the Funder has not been repaid 3½ years after the Transfer, the Funder is entitled to receive interest on the unpaid amounts equal to 20% per annum commencing on the 3½ year anniversary of the Transfer. Our obligation under the litigation funding agreement to make the foregoing payments to the Funder is non-recourse and limited only to the Claim Proceeds. As a result of the agreement, if we obtain Claim Proceeds, it is possible, depending on the amount of the Claim Proceeds, that we will receive no net recovery after all payments have been made to the Funder.

We may not be able to obtain FDA acceptance of INDs to commence future clinical trials in the United States on the timelines we expect, and even if we are able to, the FDA may not permit us to proceed in a timely manner, or at all.

Prior to commencing clinical trials in the United States for future trials of our current DM199 product candidate or any trials of future product candidates, we will be required to have an accepted IND for each product candidate and for each targeted indication. During 2019, we filed, and the FDA accepted, an IND for the Phase Ib study and the first two cohorts in the Phase II study in patients with CKD. A submission of an IND may not result in the FDA allowing further clinical trials to begin and, once begun, issues may arise that will require us to suspend or terminate such clinical trials. Additionally, even if relevant regulatory authorities agree with the design and implementation of the clinical trials set forth in an IND, these regulatory authorities may change their requirements in the future. Failure to submit or obtain acceptance of INDs may cause the development of our product candidates to be delayed or terminated, which could materially and adversely affect our business and prospects.

If we have difficulty enrolling patients in clinical trials, the completion of the trials may be delayed or not completed at all.

As DM199 and any future product candidates advance to clinical testing, and then through progressively larger and more complex clinical trials, we will need to enroll an increasing number of patients that meet our eligibility criteria. There is significant competition for recruiting patients in clinical trials, and we may be unable to enroll the patients we need to complete clinical trials on a timely basis or at all. The factors that affect our ability to enroll patients are largely uncontrollable and include, among others:

- size and nature of the patient population;
- eligibility and exclusion criteria for the trial;
- design of the study protocol;
- competition with other companies for clinical sites or patients;
- the perceived risks and benefits of the product candidate under study;
- real or perceived availability of alternative treatments;
- the patient referral practices of physicians;
- the number, availability, location, and accessibility of clinical trial sites; and
- the efforts of our physician investigators and clinical trial sites to facilitate enrollment in our clinical trials.

We are currently experiencing slower than expected enrollment in our pending Phase II studies for CKD. We believe that this was due to the Thanksgiving and Christmas holidays. However, if this slow enrollment continues, the completion of these studies will take longer than expected. We may not be able to successfully initiate or continue clinical trials if we cannot timely enroll a sufficient number of eligible patients to participate in the clinical trials required by regulatory agencies. If we have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay, limit, or terminate on-going or planned clinical trials, any of which could have a material adverse effect on our business and prospects and ability to raise additional financing to fund our operations.

We may not be able to reproduce the results of previously conducted clinical studies of other forms of KLK1, including Kailikang and Kallidinogenase, thereby preventing DM199 from displacing other forms of KLK1.

While there have been numerous studies demonstrating the efficacy of Kailikang and Kallidinogenase, we rely on the scientific and clinical knowledge and experience of other biotechnology and pharmaceutical companies and organizations in conducting those clinical studies. No assurance can be given that in our clinical trials involving DM199 we will be able to reproduce results of previously conducted studies or prove that DM199 is safe or effective and able to displace other forms of KLK1 in the market.

Negative results from clinical trials or studies of others and adverse safety events involving the targets of our product candidates may have an adverse impact on our future commercialization efforts.

From time to time, studies or clinical trials on various aspects of biopharmaceutical products are conducted by academic researchers, competitors, or others. The results of these studies or trials, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of studies or clinical trials or adverse safety events related to our product candidates, or the therapeutic areas in which our product candidates compete, could adversely affect the market price of our common shares and our ability to finance future development of our product candidates, and our business and financial results could be materially and adversely affected.

We may be required to suspend, repeat or terminate our clinical trials if they are not conducted in accordance with regulatory requirements, the results are negative or inconclusive, or the trials are not well designed.

Clinical trials must be conducted in accordance with the FDA's current Good Clinical Practices requirements, or cGCPs, or analogous requirements of applicable foreign regulatory authorities. Clinical trials are subject to oversight by the FDA, other foreign governmental agencies, and IRBs or ethics committees at the study sites where the clinical trials are conducted. In addition, clinical trials must be conducted with product candidates produced in accordance with applicable current Good Manufacturing Practices. Clinical trials may be suspended by us or by the FDA, other foreign regulatory authorities, or by an IRB or ethic committee with respect to a particular clinical trial site, for various reasons, including:

- deficiencies in the conduct of the clinical trials, including failure to conduct the clinical trial in accordance with regulatory requirements or study protocols;
- deficiencies in the clinical trial operations or trial sites;
- unforeseen adverse side effects or the emergence of undue risks to study subjects;
- deficiencies in the trial design necessary to demonstrate efficacy;
- the product candidate may not appear to offer benefits over current therapies; or
- the quality or stability of the product candidate may fall below acceptable standards.

The design and implementation of clinical trials is a complex process. As a Company, we have limited experience designing and implementing clinical trials. We may not successfully or cost-effectively design and implement clinical trials that achieve our desired clinical endpoints efficiently, or at all. A clinical trial that is not well designed may delay or even prevent initiation of the trial, can lead to increased difficulty in enrolling patients, may make it more difficult to obtain regulatory approval for the product candidate on the basis of the study results, or, even if a product candidate is approved, could make it more difficult to commercialize the product successfully or obtain reimbursement from third party payers. Additionally, a trial that is not well-designed could be inefficient or more expensive than it otherwise would have been, or we may incorrectly estimate the costs to implement the clinical trial, which could lead to a shortfall in funding.

Regulatory approval processes are lengthy, expensive, and inherently unpredictable. Our inability to obtain regulatory approval for our product candidates would substantially harm our business.

Our shareholders and investors should be aware of the risks, problems, delays, expenses, and difficulties which we may encounter in light of the extensive regulatory environment within which our business is carried out. Numerous statutes and regulations govern the preclinical and clinical development, manufacture and sale, and post-marketing responsibilities for non-therapeutic and human therapeutic products in the United States, European Union and other countries that are the intended markets for our current and future product candidates. Such legislation and regulations govern the approval of manufacturing facilities, the testing procedures, and controlled research that must be carried out, and the preclinical and clinical data that must be collected prior to marketing approval. Our R&D efforts, as well as any future clinical trials, and the manufacturing and marketing of any products we may develop, will be subject to and restricted by such extensive regulations.

The process of obtaining necessary regulatory approvals is lengthy, expensive, and uncertain. We may fail to obtain the necessary approvals to commence or continue clinical testing or to manufacture or market our potential products in reasonable time frames, if at all. In addition, governmental authorities in the United States or other countries may enact regulatory reforms or restrictions on the development of new therapies that could adversely affect the regulatory environment in which we operate or the development of any products we may develop.

Completing clinical testing and obtaining required approvals is expected to take several years and to require the expenditure of substantial resources. There can be no assurance that clinical trials will be completed successfully within any specified period of time, if at all. Furthermore, clinical trials may be delayed or suspended at any time by us or by the various regulatory authorities if it is determined at any time that the subjects or patients are being exposed to unacceptable risks.

Any failure or delay in obtaining regulatory approvals would adversely affect our ability to utilize our technology and would adversely affect our operations. Furthermore, no assurance can be given that our current or future product candidates will prove to be safe and effective in clinical trials or that they will receive the requisite regulatory approval. Moreover, any regulatory approval of a drug that is eventually obtained may be granted with specific limitations on the indicated uses for which that drug may be marketed. Furthermore, product approvals may be withdrawn if problems occur following initial marketing or if compliance with regulatory standards is not maintained.

Any product candidate for which we obtain marketing approval could be subject to post-marketing restrictions or recall or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our product candidates, when and if any of them are approved.

The FDA and other federal and state agencies, including the U.S. Department of Justice (DOJ), closely regulate compliance with all requirements governing prescription drug products, including requirements pertaining to marketing and promotion of drugs in accordance with the provisions of the approved labeling and manufacturing of products in accordance with cGMP requirements. The FDA and DOJ impose stringent restrictions on manufacturers' communications regarding off-label use, and if we do not market our products for their approved indications, we may be subject to enforcement action for off-label marketing. Violations of such requirements may lead to investigations alleging violations of the Food, Drug and Cosmetic Act and other statutes, including the False Claims Act and other federal and state health care fraud and abuse laws as well as state consumer protection laws.

Our failure to comply with all regulatory requirements, and later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, may yield various results, including:

- litigation involving patients using our products;
- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with any potential collaborators;
- unfavorable press coverage and damage to our reputation;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance by us or any future collaborator with regulatory requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with regulatory requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

We may not achieve our publicly announced milestones according to schedule, or at all.

From time to time, we may announce the timing of certain events we expect to occur, such as the anticipated timing of initiation or completion of or results from our clinical trials. These statements are forward-looking and are based on the best estimates of management at the time relating to the occurrence of such events. However, the actual timing of such events may differ significantly from what has been publicly disclosed. The timing of events such as the initiation or completion of a clinical trial, filing of an application to obtain regulatory approval, or an announcement of additional clinical trials for a product candidate may ultimately vary from what is publicly disclosed. These variations in timing may occur as a result of different events, including the nature of the results obtained during a clinical trial or during a research phase, problems with a CMO or CRO or any other event having the effect of delaying the publicly announced timeline. We undertake no obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as otherwise required by law. Any variation in the timing of previously announced milestones could have a material adverse effect on our business plan, financial condition or operating results, and the trading price of our common shares.

Future development collaborations may be important to us. If we are unable to enter into or maintain these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We may in the future determine to seek to collaborate with pharmaceutical and biotechnology companies for the development or commercialization of our current or future product candidates. We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for any collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential development schedule or reduce the scope of research activities, or increase our expenditures and undertake discovery, nonclinical or clinical development activities at our own expense. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development activities, we may not be able to continue or further develop our current or future product candidates, and our business may be materially and adversely affected.

Future collaborations we may enter into may involve the following risks, among others:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, may divert resources or create competing priorities;
- collaborators may delay discovery, nonclinical or clinical development, provide insufficient funding for product development of targets selected by us, stop or abandon discovery, nonclinical or clinical development for a product candidate, or repeat or conduct new discovery, and nonclinical and clinical development for a product candidate;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed than our products;
- product candidates discovered in collaboration with us may be viewed by our future collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the development of our product candidates;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the discovery, preclinical or clinical development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or intellectual property rights licensed to us or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Additionally, subject to its contractual obligations to us, if a collaborator is involved in a business combination, the collaborator might deemphasize or terminate the development of any of our product candidates. If a collaborator terminates its agreement with us, we may find it more difficult to attract new collaborators and the way we are perceived in the business and financial communities could be adversely affected.

If our collaborations do not result in the successful development of our product candidates, our product candidates could be delayed and we may need additional resources to develop product candidates. All of the risks relating to product development, regulatory approval and commercialization described in this report also apply to the activities of our future collaborators.

The successful commercialization of our current or future product candidates, if approved, will depend on achieving market acceptance, and we may not be able to gain sufficient acceptance to generate significant revenue.

Even if our product candidates are successfully developed and receive regulatory approval, they may not gain market acceptance among physicians, patients, healthcare payers, such as private insurers or governments and other funding parties, and the medical community. The degree of market acceptance for any products we develop will depend on a number of factors including, among others:

- demonstration of the clinical efficacy and safety;
- the prevalence and severity of any adverse side effects;
- limitations or warnings contained in the product's approved labeling;
- cost-effectiveness and availability of acceptable pricing;
- competitive product profile versus alternative treatment methods and the superiority of alternative treatment or therapeutics;
- the effectiveness of marketing and distribution methods and support for the products; and
- coverage and reimbursement policies of government and third-party payers to the extent that our products could receive regulatory approval but not be approved for coverage by or receive adequate reimbursement from government and quasi-government agencies or other third-party payers.

Disease indications may be small subsets of a disease that could be parsed into smaller and smaller indications as different subsets of diseases are defined. This increasingly fine characterization of diseases could have negative consequences, including creating an approved indication that is so small as not to have a viable market for us. If future technology allows characterization of a disease in a way that is different from the characterization used for large, pivotal studies, it may make those studies invalid or reduce their usefulness and may require repeating all or a portion of the studies. Future technology may supply better prognostic ability, which could reduce the portion of patients projected to need a new therapy. Even after being cleared by regulatory authorities, a product may later be shown to be unsafe or not to have its purported effect, thereby preventing its widespread use or requiring withdrawal from the market.

If we fail to obtain coverage and adequate reimbursement for our products, our revenue-generating ability will be diminished, and there is no assurance that the anticipated market for our products will be sustained.

We believe that there may be many different potential applications for products successfully derived from our technologies and that the anticipated market for products under development will continue to expand. However, due to competition from existing or new products and the yet-to-be established commercial viability of our product candidates, no assurance can be given that these beliefs will prove to be correct. Physicians, patients, formularies, payers or the medical community in general may not accept or utilize any products that we may develop. Other drugs may be approved during our clinical testing, which could change the accepted treatments for the diseases we have targeted and make our product candidates obsolete.

Our ability to successfully commercialize our future products, if any, will depend, in part, on the extent to which coverage of and adequate reimbursement for such products and related treatments will be available from governmental health payer programs at the federal and state levels, including Medicare and Medicaid, private health insurers, managed care plans and other organizations. No assurance can be given that third-party coverage and adequate reimbursement will be available that will allow us to obtain or maintain price levels sufficient for the realization of an appropriate return on our investment in product development. Coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and private health insurers, managed care plans and other organizations is critical to new product acceptance by healthcare providers. There is no uniform coverage and reimbursement policy among third-party payers in the United States; however, private third-party payers may follow Medicare coverage and reimbursement policy in setting their own coverage policy and reimbursement rates. Additionally, coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Even if we obtain coverage for our product candidates, the related reimbursement rates might not be adequate to make our product attractive to providers, or may require patient cost sharing (e.g., copayments/deductibles) that patients find unacceptably high. In addition, healthcare reform and controls on healthcare spending may limit coverage of our products and the price we charge and get paid for any products and the amounts thereof that we can sell. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates.

Outside of the United States, the successful commercialization of our products will depend largely on obtaining and maintaining government coverage, because in many countries patients are unlikely to use prescription drugs that are not covered by their government healthcare programs. Negotiating coverage and reimbursement with governmental authorities can delay commercialization by 12 months or more. Coverage and reimbursement policies may adversely affect our ability to sell our products on a profitable basis. In many international markets, governments control the prices of prescription pharmaceuticals, including through the implementation of reference pricing, price cuts, rebates, revenue-related taxes and profit control, and we expect prices of prescription pharmaceuticals to decline over the life of the product or as volumes increase.

We will not be able to successfully commercialize our current or future product candidates without establishing sales and marketing capabilities internally or through collaborators.

We currently have no sales and marketing staff. We may not be able to find suitable sales and marketing staff and collaborators for our products if and when they receive required approvals. We have no prior experience in the marketing, sale and distribution of pharmaceutical products, and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, effectively manage a geographically dispersed sales and marketing team, and maintain compliance by a marketing team with complex laws and regulations applicable to product marketing. Any collaborators may not be adequate or successful or could terminate or materially reduce the effort they direct to our products. The development of a marketing and sales capability will require significant expenditures, management resources and time. The cost of establishing such a sales force may exceed any potential product revenue, or our marketing and sales efforts may be unsuccessful. If we are unable to develop an internal marketing and sales capability in a timely fashion, or at all, or if we are unable to enter into a marketing and sales arrangement with a third party on acceptable terms, we may be unable to successfully develop and seek regulatory approval for our product candidates and/or effectively market and sell approved products, if any.

We face competition from other biotechnology and pharmaceutical companies and our financial condition and operations will suffer if we fail to compete effectively.

Technological competition is intense in the industry in which we operate. Competition comes from pharmaceutical companies, biotechnology companies, and universities, as well as companies that offer non-pharmaceutical solutions in the markets we may attempt to address with our products. Many of our competitors have substantially greater financial and technical resources; more extensive R&D capabilities; and greater marketing, distribution, production, and human resources than we do. Moreover, competitors may develop products more quickly than us and may obtain regulatory approval for such products more rapidly than we do. Products and processes which are more effective than those that we intend to develop may be developed by our competitors. R&D by others may render our product candidates non-competitive or obsolete.

Our product candidates may face competition sooner than expected.

We believe that DM199 could qualify for 12 years of data exclusivity in the United States under the Biologics Price Competition and Innovation Act of 2009 (BPCIA), which was enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the ACA). Under the BPCIA, an application for a biosimilar product, or BLA, cannot be submitted to the FDA until four years, or if approved by the FDA, until 12 years, after the original brand product identified as the reference product is approved under a BLA. The BPCIA provides an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The new abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as “interchangeable” based on its similarity to an existing brand product. This law is complex and is only beginning to be interpreted and implemented by the FDA. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for any of our product candidates that are biologics. There is also a risk that the U.S. Congress could repeal or amend the BPCIA to shorten this exclusivity period, potentially creating the opportunity for biosimilar competition sooner than anticipated after the expiration of our patent protection. Moreover, the extent to which a biosimilar, once approved, will be substituted for any reference product in a way that is similar to traditional generic substitution for non-biological products is not yet clear and will depend on a number of marketplace and regulatory factors that are still developing.

Even if, as we expect, our current or future product candidates are considered to be reference products eligible for 12 years of exclusivity under the BPCIA, another company could market competing products if the FDA approves a full BLA for such product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of the products. Moreover, an amendment or repeal of the BPCIA could result in a shorter exclusivity period for our product candidates, which could have a material adverse effect on our business.

Our relationships with customers and third-party payers will be subject to applicable fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, program exclusion, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payers will likely play a primary role in the recommendation, prescription and sale of any product candidates for which we receive marketing approval. Our future arrangements with third-party payers, customers and prescribing providers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, distribute and sell the products for which we receive marketing approval. Currently, applicable federal and state healthcare laws and regulations that may apply to our products and arrangements include the following:

- the federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. This statute may apply to our marketing practices, educational programs, pricing policies and relationships with healthcare providers in a position to prescribe or recommend our products. A person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation;
- the federal False Claims Act imposes civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. The government also may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the false claims statutes. Pharmaceutical and other healthcare companies have been prosecuted under these laws for, among other things, allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, certain marketing practices, including off-label promotion, may also violate false claims laws;

- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. There is an increasing trend for more criminal prosecutions and compliance enforcement activities for noncompliance with HIPAA as well as for data breaches involving protected individually identifiable health information. In the ordinary course of our business, we may receive protected health information from clinical study sites and clinicians. HIPAA restricts the use and disclosure of health information by most health care providers (Covered Entities) as well as by individuals and entities that perform various functions for or on behalf of Covered Entities (Business Associates). Depending on how we engage with health care providers in the development and commercialization of products, we may be deemed to be a Business Associate under HIPAA. Failure to comply with the HIPAA privacy and security standards may subject us to civil and criminal liability, and the cost of reporting and mitigating data breaches could be significant, all of which could have a material adverse effect on us and our operating results;
- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the federal Physician Payments Sunshine Act under the ACA requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) to report annually to the Centers for Medicare & Medicaid Services (CMS) information related to payments or other “transfers of value” made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and requires applicable manufacturers and group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members and payments or other “transfers of value” to such physician owners. Effective January 2022, applicable manufacturers will also be required to collect and report information on payments or “transfers of value” to physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse-midwives;
- analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payers, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures;
- the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act (PDMA) and its implementation regulations, as well as the Drug Supply Chain Security Act (DSCSA), which regulates the distribution of and tracing of prescription drugs and prescription drug samples at the federal level and sets minimum standards for the regulation of drug distributors by the states. The PDMA, its implementing regulations and state laws limit the distribution of prescription pharmaceutical product samples, and the DSCSA imposes requirements to ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market; and
- the U.S. Foreign Corrupt Practices Act of 1977, as amended (FCPA), the U.S. domestic bribery statute contained in 18 U.S.C. §201 and the U.S. Travel Act.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

The risk of our being found in violation of these laws and regulations is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. We are unable to predict what additional federal or state legislation or regulatory initiatives may be enacted in the future regarding our business or the healthcare industry in general, or what effect such legislation or regulations may have on us. Federal or state governments may impose additional restrictions or adopt interpretations of existing laws that could have a material adverse effect on us. Although we will endeavor to identify and comply with new laws and regulations and new interpretations of existing laws and regulations, it is possible that we may be unaware of new legal requirements or interpretations, which could result in our violation of these laws and/or regulations.

Laws, restrictions, and other regulatory measures are also imposed by anti-kickback prohibitions, fraud and abuse restrictions, and other healthcare laws and regulations in international jurisdictions, and in those jurisdictions, we face the same issues as in the United State regarding exposure to criminal sanctions, civil penalties, program exclusion, contractual damages, reputational harm, and diminished profits and future earnings.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. Some of these laws may have safe harbors and/or exceptions that, if met, may protect our arrangements from liability. However, failure to meet any element of a safe harbor or exception may cause an arrangement to lose safe harbor/exception protection. There may not be safe harbors or exceptions for every potential financial arrangement we may enter into, and there can be no assurances that any of our arrangements or relationships will meet an otherwise applicable safe harbor or exception.

If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Any investigation of or action against us for violation of these laws, even if we successfully defend against it, would cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

We heavily rely on the capabilities and experience of our key executives and scientists and the loss of any of them could affect our ability to develop our products.

We depend heavily on members of our management team and certain other key personnel, including in particular our clinical personnel. We also depend on our clinical collaborators and advisors, all of whom have outside commitments that may limit their availability to us. In addition, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled scientific, managerial, medical, clinical, and regulatory personnel, particularly as we continue to expand our activities and seek regulatory approvals for clinical trials and eventually our DM199 product candidate. We enter into agreements with scientific and clinical collaborators and advisors, key opinion leaders, and academic partners in the ordinary course of our business. We also enter into agreements with physicians and institutions that will recruit patients into our clinical trials on our behalf in the ordinary course of our business. Notwithstanding these arrangements, we face significant competition for these types of personnel from other companies, research and academic institutions, government entities and other organizations. We cannot predict our success in hiring or retaining the personnel we require for continued growth. The loss of the services of any of our executive officers or other key personnel could potentially harm our business, operating results, or financial condition.

We will likely need to expand our operations and increase the size of our company, and we may experience difficulties in managing growth.

As we advance DM199 and any future product candidates through preclinical testing and clinical studies, and develop our current or future product candidates, we will need to increase our product development, scientific, regulatory and compliance and administrative headcount to manage these programs. In addition, to continue to meet our obligations as a public company, we will likely need to increase our general and administrative capabilities. Our management, personnel and systems currently in place may not be adequate to support this future growth. Our need to effectively manage our operations, growth and various projects requires that we:

- successfully attract and recruit new employees with the expertise and experience we will require;

- manage our clinical programs effectively, which we anticipate being conducted at numerous clinical sites;
- develop a marketing, distribution and sales infrastructure if we seek to market our products directly; and
- continue to improve our operational, manufacturing, quality assurance, financial and management controls, reporting systems and procedures.

If we are unable to successfully manage this growth and increased complexity of operations, our business may be adversely affected.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include failure to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing and reporting standards we have established, comply with federal and state health-care fraud and abuse laws and regulations, report financial information or data accurately, or disclose unauthorized activities to us. In particular, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing, and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a substantial impact on our business and results of operations, including the imposition of substantial fines or other sanctions. Even if we are successful in defending against any such action, we would incur significant legal expenses in responding to and defending against it.

We may expand our business through the acquisition of companies or businesses or by entering into collaborations or by in-licensing product candidates, each of which could disrupt our business and harm our financial condition.

We have in the past and may in the future seek to expand our pipeline and capabilities by acquiring one or more companies or businesses, entering into collaborations, or in-licensing one or more technologies or product candidates. Our ability to grow through acquisitions, collaborations and in-licenses will depend, in part, on the availability of suitable candidates at acceptable prices, terms and conditions, our ability to compete effectively for candidates, and the availability of capital and personnel resources to carry out such transactions. Acquisitions, collaborations and in-licenses involve numerous risks, including, among others:

- substantial cash expenditures;
- adverse impact on overall profitability;
- technology development risks;
- potentially dilutive issuances of equity securities;
- reallocation of amounts of capital from other initiatives;
- incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;
- write-off of significant amounts of goodwill, other intangible assets and/or long-lived assets as a result of deterioration in the performance of an acquired business, adverse market conditions, changes in the competitive landscape, changes in laws or regulations that restrict activities of an acquired business, or as a result of a variety of other circumstances;
- difficulties in assimilating the information and financial systems, operations, processes and products of the acquired companies;
- inability to effectively manage our expanded operations;
- potential disputes regarding contingent consideration;
- diverting our management's attention away from other business concerns;

- disruption to our existing operations and plans;
- entering markets in which we have limited or no direct experience;
- potential loss of our key employees or key employees of the acquired companies or businesses;
- violation of confidentiality, intellectual property, and non-compete obligations or agreements by employees of an acquired business or lack of or inadequate formal intellectual property protection mechanisms in place at an acquired business;
- failure by acquired businesses to comply with applicable international, federal and state regulatory standards;
- infringement by acquired businesses of intellectual property rights of others;
- inaccurate assessment of additional post-acquisition or business venture investments, undisclosed, contingent or other liabilities or problems, unanticipated costs associated with an acquisition, and an inability to recover or manage such liabilities and costs; and
- incorrect estimates made in the accounting for acquisitions and incurrence of non-recurring charges.

We cannot provide assurance that any acquisition, collaboration, or in-license will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired company or business or in-licensed product candidate. In addition, our future success would depend in part on our ability to manage the growth associated with some of these acquisitions, collaborations and in-licenses. We cannot provide assurance that we would be able to successfully combine our business with that of acquired businesses, manage a collaboration or integrate in-licensed product candidates. Furthermore, the development or expansion of our business may require a substantial capital investment by us.

Our DM199 product candidate or future product candidates may cause or have attributed to them undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial scope of their approved uses, or result in significant negative consequences following any marketing approval.

Undesirable side effects caused by our DM199 product candidate or any future product candidate or that may be identified as related to our product candidates by investigators conducting our clinical trials or even related to competing products in development that use a similar mechanism of action or act through a similar biological disease pathway could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authorities, potential product liability claims or a more restrictive label. Results of our trials could reveal unacceptable side effects or unexpected characteristics which could be attributed to our DM199 product candidate or any future product candidates. This may require longer and more extensive clinical development or we could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all of our targeted indications. Drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Additionally, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by any such products, a number of potentially significant negative consequences could result, including, among others:

- we may suspend marketing of, or withdraw or recall, such product;
- regulatory authorities may withdraw approvals of such product;
- regulatory authorities may require additional warnings on the label or otherwise seek to limit the scope of the approved uses reflected in the label of such product;
- the FDA may require the use of or modification of a Risk Evaluation and Mitigation Strategy (REMS) or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, restrict distribution of our products and impose other implementation requirements on us;
- regulatory authorities may require that we conduct post-marketing studies;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate or otherwise materially harm the commercial prospects for the product candidate, if approved, and could significantly harm our business, results of operations and prospects.

We face the risk of product liability claims, which could exceed our insurance coverage and produce recalls, each of which could deplete our cash resources.

We are exposed to the risk of product liability claims alleging that use of our product candidates caused an injury or harm. These claims can arise at any point in the development, testing, manufacture, marketing, or sale of our product candidates and may be made directly by patients involved in clinical trials of our product candidates, by consumers or healthcare providers, or by individuals, organizations, or companies selling our products. Product liability claims can be expensive to defend, even if the product or product candidate did not actually cause the alleged injury or harm.

Insurance covering product liability claims becomes increasingly expensive as a product candidate moves through the development pipeline to commercialization. To protect against potential product liability risks, we have AUD \$20 million per occurrence and AUD \$20 million aggregate clinical trial insurance for the REMEDY Phase II clinical trial in Australia and USD \$5.0 million product liability insurance coverage. However, there can be no assurance that such insurance coverage is or will continue to be adequate or available to us at a cost acceptable to us or at all. We may choose or find it necessary under our collaboration agreements to increase our insurance coverage in the future. We may not be able to secure greater or broader product liability insurance coverage on acceptable terms or at reasonable costs when needed. Any liability for damages resulting from a product liability claim could exceed the amount of our coverage, require us to pay a substantial monetary award from our own cash resources and have a material adverse effect on our business, financial condition, and results of operations. Moreover, a product recall, if required, could generate substantial negative publicity about our products and business, inhibit or prevent commercialization of other products and product candidates, or negatively impact existing or future collaborations.

If we are unable to maintain product liability insurance required by our third parties, the corresponding agreements would be subject to termination, which could have a material adverse impact on our operations.

Some of our license, clinical trials and other agreements with third parties require, and in the future will likely require, us to maintain product liability insurance in at least certain specified minimum amounts. If we cannot maintain acceptable amounts of coverage on commercially reasonable terms in accordance with the terms set forth in these agreements, the corresponding agreements would be subject to termination, which could have a material adverse impact on our operations.

A risk of product liability claims, and related negative publicity, is inherent in the development of human therapeutics and other products. Product liability insurance is expensive, its availability is limited, and it may not be offered on terms acceptable to us, or at all. The commercialization of our potential products could be inhibited or prevented by an inability to maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims. A product liability claim against us or the withdrawal of a product from the market could have a material adverse effect upon us and our financial condition.

A variety of risks are associated with operating our business internationally, which could materially adversely affect our business.

We currently conduct certain R&D operations in the United States and Australia. In the future, we expect to conduct certain clinical trials, and plan to seek regulatory approval of our product candidates, outside of the United States. Accordingly, we are subject to risks related to operating in foreign countries including, among others:

- different regulatory requirements for drug approvals in foreign countries;
- different standards of care in various countries that could complicate the evaluation of our product candidates;
- different United States and foreign drug import and export rules;

- reduced protection for intellectual property rights in certain countries;
- withdrawal from or revision to international trade policies or agreements and the imposition or increases in import and export licensing and other compliance requirements, customs duties and tariffs, import and export quotas and other trade restrictions, license obligations, and other non-tariff barriers to trade;
- unexpected changes in tariffs, trade barriers, and regulatory requirements;
- the imposition of U.S. or international sanctions against a country, company, person, or entity with whom we do business that would restrict or prohibit continued business with that country, company, person, or entity;
- different reimbursement systems and different competitive drugs indicated to treat the indications for which our product candidates are being developed;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- compliance with the Foreign Corrupt Practices Act and other anti-corruption and anti-bribery laws;
- foreign taxes, including withholding of payroll taxes;
- foreign currency exchange rate fluctuations, which could result in increased operating expenses and/or reduced revenue, and other obligations incident to doing business in another country;
- difficulties in managing and staffing international operations and increases in infrastructure costs, including legal, tax, accounting, and information technology;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- potential liability resulting from development work conducted by foreign partners;
- transportation delays and interruptions;
- business interruptions resulting from natural disasters or geopolitical actions, including war and terrorism, or systems failure, including cybersecurity breaches; and
- compliance with evolving and expansive international data privacy laws, such as the European Union General Data Protection Regulation.

Future legislation in the United States, Europe or other countries, and/or regulations and policies adopted by the FDA, the EMA or comparable regulatory authorities, may increase the time and cost required for us or our collaborator to conduct and complete clinical trials of our current or future product candidates.

The FDA and the EMA have each established regulations to govern the product development and approval process, as have other foreign regulatory authorities. The policies of the FDA, the EMA and other regulatory authorities may change. For example, in December 2016, the 21st Century Cures Act (Cures Act) was signed into law. The Cures Act, among other things, is intended to modernize the regulation of drugs and spur innovation, but not all of its provisions have yet been implemented. Additionally, in August 2017, the FDA issued final guidance setting forth its current thinking with respect to development programs and clinical trial designs for antibacterial drugs to treat serious bacterial diseases in patients with an unmet medical need. We cannot predict what if any effect the Cures Act or any existing or future guidance from the FDA or other regulatory authorities will have on the development of our product candidates.

Recently enacted and future legislation may increase the difficulty and cost for us and our future collaborators to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. For example, the ACA, which was enacted in the United States in March 2010, includes measures to change health care delivery, decrease the number of individuals without insurance, ensure access to certain basic health care services, and contain the rising cost of care. This healthcare reform movement, including the enactment of the ACA, has significantly changed health care financing by both governmental and private insurers in the United States. With respect to pharmaceutical manufacturers, the ACA increased the number of individuals with access to health care coverage, including prescription drug coverage, but it simultaneously imposed, among other things, increased liability for rebates and discounts owed to certain entities and government health care programs, fees for the manufacture or importation of certain branded drugs, and transparency reporting requirements under the Physician Payments Sunshine Act.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, as well as efforts by the current administration to repeal or replace certain aspects of the ACA. Since January 2017, two U.S. Presidential Executive Orders have been signed and other directives designed to delay the implementation of certain provisions of the ACA or otherwise remove some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based individual shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year, which is commonly referred to as the “individual mandate.” Additionally, on January 22, 2018, the U.S. President signed a continuing resolution on appropriations for fiscal year 2018. This continuing resolution delayed implementation of the tax on certain high cost employer-sponsored insurance plans until January 1, 2022, provided a moratorium on the annual fee imposed on certain health insurance providers based on market share until January 1, 2020, and extended the moratorium on the medical device excise tax on non-exempt medical devices until January 1, 2020. Further, the Bipartisan Budget Act of 2018, or the “BBA,” among other things, amended the ACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.”

In addition to the ACA, other federal health reform measures have been proposed and adopted in the United States. For example, legislation has been enacted to reduce the level of reimbursement paid to providers under the Medicare program over time, as well as to phase in alternative payment models for provider services under the Medicare program with the goal of incentivizing the attainment of pre-defined quality measures. As these measures are not fully in effect, and since the U.S. Congress could intervene to prevent their full implementation, it is unclear how payment reductions or the introduction of the quality payment program will impact overall physician reimbursement under the Medicare program. It is also unclear if changes in Medicare payments to providers would impact such providers’ willingness to prescribe and administer our products, if approved. Further, there has been heightened governmental scrutiny over the manner in which companies set prices for their marketed products. For example, there have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and patient programs, and reform government program reimbursement methodologies for drug products.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and additional downward pressure on the price that we may receive for any product, if approved. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product candidates.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for drugs. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our current or future product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA’s approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

Our inability to maintain contractual relationships with physicians could have a negative impact on our research and development.

We maintain contractual relationships with respected physicians in hospitals and universities who assist us in the design of our clinical trials and interpretation of trial results. If we are unable to enter into and maintain these relationships, our ability to develop, obtain required regulatory approvals for, and market our product candidates could be adversely affected. In addition, it is possible that U.S. federal and state and international laws requiring us to disclose payments or other transfers of value, such as free gifts or meals, to surgeons and other healthcare providers could have a chilling effect on these relationships with individuals or entities that may, among other things, want to avoid public scrutiny of their financial relationships with us.

We conduct certain research and development operations through our Australian wholly-owned subsidiary. If we lose our ability to operate in Australia, or if our subsidiary is unable to receive the research and development incentive payment allowed by Australian regulations, our business and results of operations could suffer.

We maintain a wholly-owned Australian subsidiary, DiaMedica Australia Pty Ltd., to conduct various clinical activities for our product and development candidate in Australia. Due to the geographical distance and lack of employees currently in Australia, as well as our lack of experience operating in Australia, we may not be able to efficiently or successfully monitor, develop and commercialize our lead product candidate in Australia, including conducting clinical trials. Furthermore, we have no assurance that the results of any clinical trials that we conduct for our product candidate in Australia will be accepted by the FDA or foreign regulatory authorities for development and commercialization approvals.

In addition, current Australian tax regulations provide for a refundable R&D incentive payment equal to 43.5% of qualified expenditures. We received incentive payments of approximately USD \$856,000 and USD \$621,000 during 2019 and 2018, respectively, for research expenditures made during 2019 and 2018. If our subsidiary loses its ability to operate in Australia, or if we are ineligible or unable to receive the R&D incentive payment, or the Australian government significantly reduces or eliminates the incentive program, our business and results of operation may be adversely affected.

Fluctuations in insurance cost and availability could adversely affect our operating results or risk management profile.

We hold a number of insurance policies, including product liability insurance, directors' and officers' liability insurance, property insurance, and workers' compensation insurance. The costs of maintaining adequate insurance coverage, most notably directors' and officers', have increased significantly recently and may continue to do so in the future, thereby adversely affecting our operating results. If such costs continue to increase, we may be forced to accept lower coverage and higher deductibles, which would have an adverse effect on our risk management profile and inhibit our ability to recruit qualified directors and officers. In addition, if any of our current insurance coverage should become unavailable to us or become economically impractical, we would be required to operate our business without indemnity from commercial insurance providers.

Risks Related to Intellectual Property

If we are unable to adequately protect and enforce our intellectual property, our competitors may take advantage of our development efforts or acquired technology and compromise our prospects of marketing and selling our product candidates.

We believe that patents and other proprietary rights are key to our business. Our policy is to file patent applications to protect technology, inventions, and improvements that may be important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovations, and licensing opportunities to develop and maintain our competitive position. We plan to enforce our issued patents and our rights to proprietary information and technology. We review third-party patents and patent applications, both to refine our own patent strategy and to identify useful licensing opportunities.

Our success depends, in part, on our ability to secure and protect our intellectual property rights and to operate without infringing on the proprietary rights of others or having third parties circumvent the rights owned or licensed by us. We have a number of patents, patent applications and rights to patents related to our compounds, product candidates and technology, but we cannot be certain that they will be enforceable or provide adequate protection or that pending patent applications will result in issued patents.

To the extent that development, manufacturing, and testing of our product candidates is performed by third party contractors, such work is performed pursuant to fee for service contracts. Under the contracts, all intellectual property, technology know-how, and trade secrets arising under such agreements are our exclusive property and must be kept confidential by the contractors. It is not possible for us to be certain that we have obtained from the contractors all necessary rights to such technologies. Disputes may arise as to the scope of the contract or possible breach of contract. No assurance can be given that our contracts would be enforceable or would be upheld by a court.

The patent positions of pharmaceutical and biotechnology firms, ourselves included, are uncertain and involve complex questions of law and fact for which important legal issues remain unresolved. Therefore, it is not clear whether our pending patent applications will result in the issuance of patents or whether we will develop additional proprietary products which are patentable. Part of our strategy is based on our ability to secure a patent position to protect our technology. There is no assurance that we will be successful in this approach, and failure to secure patent protection may have a material adverse effect upon us and our financial condition. Also, we may fail in our attempt to commercialize products using currently patented or licensed technology without having to license additional patents. Moreover, it is not clear whether the patents issued or to be issued will provide us with any competitive advantages or if any such patents will be the target of challenges by third parties, whether the patents of others will interfere with our ability to market our products, or whether third parties will circumvent our patents by means of alternate processes. Furthermore, it is possible for others to develop products that have the same effect as our product candidates or technologies on an independent basis or to design around technologies patented by us. Patent applications relating to or affecting our business may have been filed by pharmaceutical or biotechnology companies or academic institutions. Such applications may conflict with our technologies or patent applications and such conflict could reduce the scope of patent protection that we could otherwise obtain or even lead to the rejection of our patent applications. There is no assurance that we can enter into licensing arrangements on commercially reasonable terms or develop or obtain alternative technology in respect of patents issued to third parties that incidentally cover our products or production technologies. Any inability to secure licenses or alternative technology could result in delays in the introduction of some of our product candidates or even lead to us being prevented from pursuing the development, manufacture or sale of certain products. Moreover, we could potentially incur substantial legal costs in defending legal actions that allege patent infringement, or by initiating patent infringement suits against others. It is not possible for us to be certain that we are the creator of inventions covered by pending patent applications or that we were the first to invent or file patent applications for any such inventions. While we have used commercially reasonable efforts to obtain assignments of intellectual property from all individuals who may have created materials on our behalf (including with respect to inventions covered by our patent and pending patent applications), it is not possible for us to be certain that we have obtained all necessary rights to such materials. No assurance can be given that our patents, if issued, would be upheld by a court, or that a competitor's technology or product would be found to infringe on our patents. Moreover, much of our technology know-how that is not patentable may constitute trade secrets. Therefore, we require our employees, consultants, advisors and collaborators to enter into confidentiality agreements either as stand-alone agreements or as part of their employment or consulting contracts. However, no assurance can be given that such agreements will provide meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of confidential information. Also, while we have used commercially reasonable efforts to obtain executed copies of such agreements from all employees, consultants, advisors and collaborators, no assurance can be given that executed copies of all such agreements have been obtained.

We may require additional third-party licenses to effectively develop and manufacture our product candidates and are currently unable to predict the availability or cost of such licenses.

A substantial number of patents have already been issued to other biotechnology and pharmaceutical companies. To the extent that valid third-party patent rights cover our product candidates, we or our strategic collaborators would be required to seek licenses from the holders of these patents in order to manufacture, use, or sell these product candidates, and payments under them would reduce our profits from these product candidates. We are currently unable to predict the extent to which we may wish or be required to acquire rights under such patents, the availability and cost of acquiring such rights, and whether a license to such patents will be available on acceptable terms, or at all. There may be patents in the United States or in foreign countries or patents issued in the future that are unavailable to license on acceptable terms. Our inability to obtain such licenses may hinder or eliminate our ability to develop, manufacture and market our product candidates.

Changes in patent law and its interpretation could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other biotechnology and pharmaceutical companies, our success is heavily dependent on intellectual property rights, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves technological and legal complexity, and obtaining and enforcing biopharmaceutical patents is costly, time consuming, and inherently uncertain. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our and our licensors' or collaborators' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the U.S. Patent and Trademark Office (USPTO), the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors' or collaborators' ability to obtain new patents or to enforce existing patents and patents we and our licensors or collaborators may obtain in the future. Changes in either the patent laws or interpretation of the patent laws in the United States or other countries could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents.

Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could, therefore, be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our or our licensor's patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications will be prosecuted and also may affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent in USPTO-administered post-grant proceedings, including post-grant review, inter partes review, and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our and our licensors' or collaborators' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the U.S. Patent and Trademark Office, and similar legislative, judicial, and administrative bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors' or collaborators' ability to obtain new patents or to enforce existing patents and patents we and our licensors or collaborators may obtain in the future.

Litigation regarding patents, patent applications, and other proprietary rights may be expensive, time consuming and cause delays in the development and manufacturing of our product candidates.

Third parties may claim that we are using their proprietary information without authorization. Third parties may also have or obtain patents and may claim that technologies licensed to or used by us infringe their patents. If we are required to defend patent infringement actions brought by third parties, or if we sue to protect our own patent rights or otherwise to protect our proprietary information and to prevent its disclosure, we may be required to pay substantial litigation costs and managerial attention may be diverted from business operations even if the outcome is in our favor. In addition, any legal action that seeks damages or an injunction to stop us from carrying on our commercial activities relating to the affected technologies could subject us to monetary liability (including treble damages and attorneys' fees if we are found to have willfully infringed) and require us or any third-party licensors to obtain a license to continue to use the affected technologies. We cannot predict whether we would prevail in any of these types of actions or that any required license would be available on commercially acceptable terms or at all. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources.

Competitors may infringe our patents or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, written description or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Moreover, similar challenges may be made by third parties outside the context of litigation, e.g., via administrative proceedings such as post grant or inter partes review in the United States or via oppositions or other similar proceedings in other countries/regions.

Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation, validity or enforceability, interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation or such other proceedings could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our product candidates to market.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the market price of our common shares.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

We are a party to a license agreement relating to an expression system and cell line for use in the production of DM199 or any human KLK1, and we may need to obtain additional licenses from others to advance our R&D activities or allow the commercialization of DM199 or any other product candidates we may identify and pursue. Future license agreements may impose various development, diligence, commercialization and other obligations on us. If any of our in-licenses are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors or other third parties may gain access to technologies that are material to our business, and we may be required to cease our development and commercialization of DM199 or other product candidates that we may identify or to seek alternative manufacturing methods. However, suitable alternatives may not be available or the development of suitable alternatives may result in a significant delay in our commercialization of DM199. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including, among others:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them.

Because we rely on third parties to develop our products, we must share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, collaborative research agreements, employment or consulting agreements, or other similar agreements with our collaborators, advisors, employees, and consultants prior to beginning research or disclosing proprietary information. These agreements typically restrict the ability of our collaborators, advisors, employees, and consultants to publish data potentially relating to our trade secrets. Our academic collaborators typically have rights to publish data, provided that we are notified in advance and may delay publication for a specified time in order to secure our intellectual property rights arising from the collaboration. In other cases, publication rights are controlled exclusively by us, although in some cases we may share these rights with other parties. We also conduct joint R&D programs which may require us to share trade secrets under the terms of R&D collaboration or similar agreements. However, we cannot be certain that such agreements have been entered into with all relevant parties. Moreover, despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of these agreements, independent development, or publication of information including our trade secrets in cases where we do not have proprietary or otherwise protected rights at the time of publication. Trade secrets can be difficult to protect. If the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating any trade secrets. A competitor's discovery of our trade secrets may impair our competitive position and could have a material adverse effect on our business and financial condition.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employees' former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Risks Related to Our Common Shares and this Offering

Our management will have broad discretion and flexibility as to how to use the net proceeds from this offering and may use the net proceeds in ways with which you disagree or which may not prove effective.

We currently intend to use the net proceeds from this offering as discussed under “Use of Proceeds” in this prospectus supplement. We have not allocated specific amounts of the net proceeds from this offering for any of the purposes set forth in that section. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the net proceeds are being used appropriately. It is possible that the net proceeds will be invested in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

Purchasers of common shares in this offering will experience immediate and substantial dilution in the book value of their investment. You may experience further dilution upon exercise of our outstanding options and warrants.

The public offering price per common share in this offering is higher than the net tangible book value per common share before giving effect to this offering. Accordingly, if you purchase common shares in this offering, you will incur immediate substantial dilution of approximately \$ per share, representing the difference between the public offering price of \$ per common share, and our as adjusted net tangible book value per share as of September 30, 2019. In addition, if outstanding options or warrants are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section in this prospectus entitled “Dilution.”

Our common share price has been volatile in recent years and may continue to be volatile.

Our common shares trade on The Nasdaq Capital Market under the trading symbol “DMAC.” A number of factors could influence the volatility in the trading price of our common shares, including changes in the economy or in the financial markets, industry related developments, and the impact of material events and changes in our operations. Our quarterly losses may vary because of expenses we incur related to future research including the timing of costs for manufacturing and initiating and completing preclinical and clinical trials. Each of these factors could lead to increased volatility in the market price of our common shares. In addition, the market prices of the securities of our competitors may also lead to fluctuations in the trading price of our common shares. As a result of this volatility, you may not be able to sell your common shares at or above the public offering price.

We do not have a very active trading market for our common shares and one may never develop.

We do not have a very active trading market for our common shares, and one may never develop, even after this offering. Although we anticipate a more active trading market for our shares will develop after this offering, we can give no assurance that this will occur or that an active trading market will be sustained following this offering. If an active market for our common shares does not develop, it may be difficult for you to sell shares you purchase in this offering at a favorable price or at all.

We have never paid dividends and do not expect to do so in the foreseeable future.

We have not declared or paid any cash dividends on our common shares to date. The payment of dividends in the future will be dependent on our earnings and financial condition and on such other factors as our Board of Directors considers appropriate. Unless and until we pay dividends, shareholders may not receive a return on their shares. There is no present intention by our Board of Directors to pay dividends on our common shares. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, appreciation, if any, in the market price of our common shares will be your sole source of gain for the foreseeable future.

We may issue additional common shares resulting in share ownership dilution.

Future dilution may occur due to additional future equity financing events by us. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our shareholders will be diluted. In addition, if outstanding options, warrants, or deferred share units are exercised or otherwise converted into our common shares, our shareholders will experience additional dilution.

If there are substantial sales of our common shares, the market price of our common shares could decline.

Sales of substantial numbers of our common shares could cause a decline in the market price of our common shares. Any sales by existing shareholders or holders who exercise their warrants or stock options may have an adverse effect on our ability to raise capital and may adversely affect the market price of our common shares.

We could be subject to securities class action litigation, which is expensive and could divert management attention.

In the past, securities class action litigation has often been brought against a company following a decline or increase in the market price of its securities or certain significant business transactions. We may become involved in this type of litigation in the future. If we face such litigation, it could result in substantial costs and a diversion of management’s attention and our resources, which could harm our business.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, the market stock of our common shares and trading volume could decline.

The trading market for our common shares in the United States after this offering will depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us or provide favorable coverage. If one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause the market price of our common shares or trading volume to decline.

We are an “emerging growth company,” and the reduced disclosure requirements applicable to emerging growth companies may make our common shares less attractive to our shareholders and other investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012. We may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of our first sale of common shares pursuant to a registration statement under the Securities Act of 1933, as amended, or the “Securities Act,” until such earlier time as we have more than \$1.07 billion in annual revenue, the market value of our common shares held by non-affiliates is more than \$700 million or we issue more than \$1 billion of non-convertible debt over a three-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (Section 404) not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. Our shareholders and other investors may find our common shares less attractive as a result of our reliance on these exemptions. If some of our shareholders or other investors find our common shares less attractive as a result, there may be a less active trading market for our common shares, and the trading price of our common shares may be more volatile.

In addition, Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised financial accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we have determined to opt out of such extended transition period and, as a result, we will comply with new or revised financial accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised financial accounting standards is irrevocable.

Our shareholders and other investors may find our common shares less attractive as a result of our reliance on these exemptions. If some of our shareholders or other investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and the trading price of our common shares may be more volatile.

Our inability to comply with Nasdaq’s continued listing requirements could result in our common shares being delisted, which could affect the market price and liquidity of our common shares and reduce our ability to raise capital.

Upon completion of this offering, we will be required to meet certain qualitative and financial tests to maintain the listing of our common shares on The Nasdaq Capital Market. If we do not maintain compliance with Nasdaq’s continued listing requirements within specified periods and subject to permitted extensions, our common shares may be recommended for delisting (subject to any appeal we would file). No assurance can be provided that we will comply with these continued listing requirements. If our common shares were delisted, it could be more difficult to buy or sell our common shares and to obtain accurate quotations, and the price of our common shares could suffer a material decline. Delisting would also impair our ability to raise capital.

Any failure to maintain an effective system of internal controls may result in material misstatements of our consolidated financial statements or cause us to fail to meet our reporting obligations or fail to prevent fraud; and in that case, our shareholders or other investors could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our common shares.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; and in that case, our shareholders or other investors could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our common shares. As a result of our limited administrative staffing levels, internal controls which rely on segregation of duties in many cases are not possible. Due to resource constraints and the present stage of our development, we do not have sufficient size and scale to warrant the hiring of additional staff to address this potential weakness at this time. To help mitigate the impact of this, we are highly reliant on the performance of compensating procedures and senior management's review and approval. Even if we conclude that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with GAAP, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our future reporting obligations.

If we fail to timely achieve and maintain the adequacy of our internal control over financial reporting, we may not be able to produce reliable financial reports or help prevent fraud. Our failure to achieve and maintain effective internal control over financial reporting could prevent us from complying with our reporting obligations on a timely basis, which could result in the loss of shareholder or other investor confidence in the reliability of our consolidated financial statements, harm our business and negatively impact the trading price of our common shares.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we will be required to furnish a report by our management on our internal control over financial reporting, and after we are no longer an emerging growth company, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will have to engage in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. There is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Risks Related to Our Jurisdiction of Organization

It may be difficult for non-Canadian shareholders or other investors to obtain and enforce judgments against us because of our organization as a British Columbia corporation and presence.

We are a corporation governed under the British Columbia Business Corporations Act. Two of our directors and all or a substantial portion of their assets, and a portion of our assets, are located outside the United States. Consequently, it may be difficult for holders of our securities who reside in the United States to effect service within the United States upon those directors and experts who are not residents of the United States. It may also be difficult for holders of our securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers, and experts under the United States federal securities laws. Our shareholders and other investors should not assume that Canadian courts (i) would enforce judgments of United States courts obtained in actions against us or such directors, officers, or experts predicated upon the civil liability provisions of the United States federal securities laws or the securities or "blue sky" laws of any state or jurisdiction of the United States, or (ii) would enforce, in original actions, liabilities against us or such directors, officers, or experts predicated upon the United States federal securities laws or any securities or "blue sky" laws of any state or jurisdiction of the United States. In addition, the protections afforded by Canadian securities laws may not be available to our shareholders or other investors in the United States.

Canadian laws differ from the laws in effect in the United States and may afford less protection to holders of our securities.

We are a corporation governed under and are subject to the BCBCA and applicable Canadian securities laws as a Canadian reporting issuer, which laws may differ from those governing a company formed under the laws of a United States jurisdiction. The provisions under the BCBCA and other relevant laws may affect the rights of shareholders differently than those of a company governed by the laws of a United States jurisdiction, and may, together with our notice of articles and articles, have the effect of delaying, deferring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance.

We are governed by the corporate laws in British Columbia, Canada which in some cases have a different effect on shareholders than the corporate laws in Delaware, United States.

The material differences between the BCBCA as compared to the Delaware General Corporation Law (DGCL), which may be of most interest to shareholders include the following: (i) for material corporate transactions (such as mergers and amalgamations, other extraordinary corporate transactions, amendments to our notice of articles), the BCBCA generally requires two-thirds majority vote by shareholders, whereas DGCL generally only requires a majority vote of shareholders for similar material corporate transactions; (ii) under the BCBCA, a holder of 5% or more of our common shares can requisition a special meeting at which any matters that can be voted on at our annual meeting can be considered, whereas the DGCL does not give this right; (iii) our Articles require two-thirds majority vote by shareholders to pass a resolution for one or more directors to be removed, whereas DGCL only requires the affirmative vote of a majority of the shareholders; however, many public company charters limit removal of directors to a removal for cause; and (iv) our Articles may be amended by resolution of our directors to alter our authorized share structure, including to (a) consolidate or subdivide any of our shares and (b) create additional classes or series of shares, whereas under DGCL, a majority vote by shareholders is generally required to amend a corporation's certificate of incorporation and a separate class vote may be required to authorize alterations to a corporation's authorized share structure. We cannot predict if investors will find our common shares less attractive because of these material differences. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares, and our share price may be more volatile.

Our shareholder rights plan may delay or prevent an acquisition of us that shareholders may consider favorable or may prevent efforts by our shareholders to change our directors or our management, which could decrease the value of your common shares.

On December 21, 2017, our shareholders approved the renewal of a shareholder rights plan agreement through the annual general meeting to be held by DiaMedica in 2020. The shareholder rights plan is designed to provide adequate time for our Board of Directors and shareholders to assess an unsolicited takeover bid for our company, to provide our Board of Directors with sufficient time to explore and develop alternatives for maximizing shareholder value if a takeover bid is made, and to provide shareholders with an equal opportunity to participate in a takeover bid and receive full and fair value for their common shares. The shareholder rights plan is set to expire at the close of our annual meeting of shareholders in 2020. The rights will become exercisable only when a person, including any party related to it, acquires or attempts to acquire 20% or more of our outstanding common shares without complying with the "permitted bid" provisions of the plan or without approval of our Board of Directors. Should such an acquisition occur or be announced, each right would, upon exercise, entitle a rights holder, other than the acquiring person and related persons, to purchase common shares at a 50% discount to the market price at the time. Under the plan, a "permitted bid" is a bid made to all holders of our common shares and which is open for acceptance for not less than 60 days. If at the end of 60 days at least 50% of the outstanding common shares, other than those owned by the offeror and certain related parties have been tendered, the offeror may take up and pay for the common shares but must extend the bid for a further 10 days to allow other shareholders to tender.

While we believe our rights plan enables our Board of Directors to help ensure that our shareholders are not deprived of the opportunity to realize the full and fair value of their investments, the rights plan may inhibit a change in control of our company by a third party in a transaction not approved by our Board of Directors. If a change in control is inhibited or delayed in this manner, it may adversely affect the market price of our common shares.

We may be classified as a “passive foreign investment company,” which may have adverse U.S. federal income tax consequences for U.S. shareholders.

Generally, for any taxable year in which 75% or more of our gross income is passive income, or at least 50% of the average quarterly value of our assets (which may be determined in part by the market value of our common shares, which is subject to change) are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company (PFIC) for U.S. federal income tax purposes. The average percentage of a corporation’s assets that produce or are held for the production of passive income generally is determined on the basis of the fair market value of the corporation’s assets at the end of each quarter (which may be determined in part by the market value of our common shares, which is subject to change).

The tests for determining PFIC status for any taxable year are dependent upon a number of factors, some of which are beyond our control, including the value of our assets, the market price of our common shares, and the amount and type of our gross income. Based on these tests, (i) we believe that we were a PFIC for the taxable year ended December 31, 2016, and (ii) we do not believe that we were a PFIC for the taxable years ended December 31, 2019, 2018 and 2017. Our status as a PFIC is a fact-intensive determination made for each taxable year, and we cannot provide any assurance regarding our PFIC status for the taxable year ending December 31, 2020 or for subsequent taxable years. U.S. shareholders who own our common shares for any period during which we are a PFIC will be required to file IRS Form 8621 for each tax year during which they hold our common shares.

If we are a PFIC for any year during a non-corporate U.S. shareholder’s holding period of our common shares, and the U.S. shareholder does not make a “qualified electing fund” election (QEF election) or a “mark-to-market” election, both as described below, then such non-corporate U.S. shareholder generally will be required to treat any gain realized upon a disposition of our common shares, or any so-called “excess distribution” received on our common shares, as ordinary income, rather than as capital gain, and the preferential tax rate applicable to dividends received on our common shares would not be available. This income generally would be allocated over a U.S. shareholder’s holding period with respect to our common shares, and the amount allocated to prior years will be subject to tax at the highest tax rate in effect for that year, and an interest charge would be imposed on the amount of deferred tax on the income allocated to prior taxable years. Pursuant to the specific provisions of the PFIC rules, a taxpayer may realize gain on the disposition of common shares if (i) the securities are disposed of by a holder whose securities are attributed to the U.S. shareholder, or (ii) the securities are pledged as security for a loan, transferred by gift or death, or are subject to certain corporate distributions. Additionally, if we are a PFIC, a U.S. shareholder who acquires our common shares from a decedent would be denied normally available step-up in tax basis for our common shares to fair market value at the date of death but instead would have a tax basis equal to the lower of the fair market value of such common shares or the decedent’s tax basis in such common shares.

A U.S. shareholder may avoid these adverse tax consequences by making a timely and effective QEF election. A U.S. shareholder who makes a QEF election generally must report, on a current basis, its share of our ordinary earnings and net capital gains, whether or not we distribute any amounts to our shareholders, and would be required to comply with specified information reporting requirements. Any gain subsequently recognized upon the sale by that U.S. shareholder of the common shares generally would be taxed as capital gain and the denial of the basis step-up at death described above would not apply. The QEF election is available only if the company characterized as a PFIC provides a U.S. shareholder with certain information regarding its earnings and capital gains, as required under applicable U.S. Treasury regulations. We intend to provide all information and documentation that a U.S. shareholder making a QEF election is required to obtain for U.S. federal income tax purposes (e.g., the U.S. shareholder’s pro rata share of ordinary income and net capital gain, and a “PFIC Annual Information Statement” as described in applicable U.S. Treasury regulations).

As an alternative to a QEF election, a U.S. shareholder may also mitigate the adverse tax consequences of PFIC status by timely making a “mark-to-market” election. A U.S. shareholder who makes the mark-to-market election generally must include as ordinary income each year the increase in the fair market value of the common shares and deduct from gross income the decrease in the value of such shares during each of its taxable years. Losses would be allowed only to the extent of the net mark-to-market gain accrued under the election. If a mark-to-market election with respect to our common shares is in effect on the date of a U.S. shareholder’s death, the tax basis of the common shares in the hands of a U.S. shareholder who acquired them from a decedent will be the lesser of the decedent’s tax basis or the fair market value of the common shares. A mark-to-market election may be made and maintained only if our common shares are regularly traded on a qualified exchange, including Nasdaq. Whether our common shares are regularly traded on a qualified exchange is an annual determination based on facts that, in part, are beyond our control. Accordingly, a U.S. shareholder might not be eligible to make a mark-to-market election to mitigate the adverse tax consequences if we are characterized as a PFIC.

Certain economic risks are inherent in making either a QEF election or a mark-to-market election. If a QEF election is made, it is possible that a small but significant amount of earned income will be reported to a U.S. shareholder as taxable income as long as the company invests its cash reserves, and income taxes will be due and payable on such an amount. A U.S. shareholder of our common shares may pay tax on such “phantom” income, i.e., income reported to it pursuant to the QEF election, but not actually received. There is no assurance that any distribution or profitable sale will ever be made regarding our common shares, so the tax liability may result in a net economic loss. A mark-to-market election may result in significant share price gains in one year causing a significant income tax liability. This gain may be offset in another year by significant losses. If a mark-to-market election is made, this highly variable tax gain or loss may result in substantial and unpredictable changes in taxable income. The amount included in income under a mark-to-market election may be substantially greater than the amount included under a QEF election. Both the QEF and mark-to-market elections are binding on the U.S. shareholder for all subsequent years that the U.S. shareholder owns our stock unless permission to revoke the election is granted by the IRS.

Although we generally will continue to be treated as a PFIC as to any U.S. shareholder if we are a PFIC for any year during a U.S. shareholder’s holding period, if we cease to satisfy the requirements for PFIC classification, the U.S. shareholder may avoid PFIC classification for subsequent years if the U.S. shareholder elects to make a so-called “purging election,” by recognizing income based on the unrealized appreciation in the common shares through the close of the tax year in which we cease to be a PFIC.

RULES RELATING TO A PFIC ARE VERY COMPLEX. YOU SHOULD CONSULT YOUR TAX ADVISER CONCERNING THE RELATIVE MERITS AND THE ECONOMIC AND TAX IMPACT OF PFIC RULES TO YOUR INVESTMENT IN OUR COMMON SHARES AS A NON-ELECTING U.S. SHAREHOLDER, A U.S. SHAREHOLDER MAKING A QEF ELECTION, OR A U.S. SHAREHOLDER MAKING A MARK-TO-MARKET ELECTION.

Should we be classified as a PFIC during a U.S. shareholder’s holding period for our common shares, each such U.S. shareholder should consult their own tax advisors with respect to the possibility of making these elections and the U.S. federal income tax consequences of the acquisition, ownership and disposition of our common shares. In addition, the possibility of us being classified as a PFIC may deter certain U.S. investors from purchasing our common shares, which could have an adverse impact on the market price of our common shares and our ability to raise additional financing by selling equity securities, including our common shares.