

ARADIGM CORP
Form S-1
November 30, 2018
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As filed with the Securities and Exchange Commission on November 30, 2018

File No. 333-

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ARADIGM CORPORATION
(Exact name of registrant as specified in its charter)

California
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

94-3133088
(I.R.S. Employer
Identification Number)

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3929 Point Eden Way

Hayward, CA 94545

(510) 265-9000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John M. Siebert, Ph.D.

Executive Chairman, Interim Principal Executive Officer and Acting Principal Financial Officer

3929 Point Eden Way

Hayward, CA 94545

(510) 265-9000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

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If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company, and emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered(1)	Proposed maximum aggregate offering price(1)(2)	Amount of registration fee
Class A Units consisting of:		
(i) Shares of common stock, par value \$0.001 per share		
(ii) Warrants to purchase common stock		
Class B Units consisting of:		
(i) Shares of Series A Preferred Stock, par value \$0.001 per share		
(ii) Shares of common stock issuable on conversion of Series A Preferred Stock(3)		
(iii) Warrants to purchase common stock		
Common stock issuable upon exercise of warrants		

Total	\$10,000,000	\$1,212(4)
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- (1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the Securities Act). Pursuant to Rule 416 under the Securities Act the shares being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends, or similar transactions. No additional registration fee is being paid for these shares.
- (2) Includes the price of additional shares of common stock and warrants to purchase shares of common stock that the underwriters have the option to purchase to cover overallocments, if any.
- (3) No separate fee is required pursuant to Rule 457(i) under the Securities Act.
- (4) Pursuant to Rule 457(p) under the Securities Act, the registrant is offsetting \$3,580 against the amount of the registration fee payable with respect to this registration statement. The offsetting amount was originally paid by the registrant in connection with the registration statement on Form S-1 filed by the registrant on November 3, 2017, as amended (File No. 333-221352). Accordingly, no additional registration fee is being paid at this time.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale of these securities is not permitted.

Subject to Completion, Dated November 30, 2018

PRELIMINARY PROSPECTUS

Class A Units consisting of common stock and warrants and

Class B Units consisting of shares of Series A Preferred Stock and warrants

(and shares of common stock underlying shares of Series A Preferred Stock and warrants)

We are offering _____ Class A Units, with each Class A Unit consisting of _____ shares of common stock, par value \$0.001 per share and a warrant to purchase _____ shares of our common stock, together with the shares of common stock underlying such warrants, the Class A Units, at a public offering price of \$ _____ per Class A Unit. Each warrant included in the Class A Units entitles its holder to purchase _____ shares of common stock at an exercise price per share of \$ _____.

We are also offering to those purchasers whose purchase of Class A Units in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, the opportunity to purchase, if they so choose, in lieu of the number of Class A Units that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%), Class B Units. Each Class B Unit will consist of _____ shares of Series A Preferred Stock, par value \$0.001 per share, or the Series A Preferred Stock, convertible into _____ shares of common stock and warrants to purchase _____ shares of our common stock, which, together with the shares of common stock underlying such shares of Series A Preferred Stock and such warrants, we collectively refer to as the Class B Units, and, together with the Class A Units, the units, at a public offering price of \$ _____ per Class B Unit. Each warrant included in the Class B Units entitles its holder to purchase _____ shares of common stock at an exercise price per share of \$ _____.

The Class A Units and Class B Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock, Series A Preferred Stock and warrants comprising such units are immediately separable and will be issued separately in this offering. The underwriters have the option to purchase up to _____ additional shares of common stock and/or warrants to purchase shares of common stock solely to cover overallotments, if any, at the price to the public less the underwriting discounts and commissions. The overallotment option may be used to purchase shares of common stock, or warrants, or any combination thereof, as determined by

the underwriters, but such purchases cannot exceed an aggregate of 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering. The overallotment option is exercisable for 45 days from the date of this prospectus.

Our common stock is listed on The Nasdaq Capital Market under the symbol ARDM . The closing price of our common stock on November 29, 2018, as reported by The Nasdaq Capital Market, was \$0.73 per share. All share and warrant numbers of the securities being offered included in this prospectus are based on an assumed public offering price per share of \$ and an assumed conversion price of \$ per share. The recent market price used throughout this prospectus may not be indicative of the final offering price. The final public offering price will be determined through negotiation between us and the underwriter based upon a number of factors, including our history and our prospects, the industry in which we operate, our past and present operating results, the previous experience of our executive officers and the general condition of the securities markets at the time of this offering. We do not intend to apply for listing of the warrants offered hereby or the shares of Series A Preferred Stock on any securities exchange or trading system.

Investing in shares of our common stock involves a high degree of risk. See Risk Factors beginning on page 11 of this prospectus and the risks and uncertainties described in our most recent annual report on Form 10-K and any subsequently filed quarterly reports on Form 10-Q with the Securities and Exchange Commission that are incorporated in this prospectus by reference for certain risks and uncertainties relating to an investment in our securities.

	Per Class A Unit	Per Class B Unit	Total
Public offering price⁽¹⁾	\$	\$	\$
Underwriting discounts and commissions ⁽²⁾⁽³⁾	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

- (1) The public offering price and underwriting discount corresponds to (x) in respect of the Class A Units (i) a public offering price per share of common stock of \$ and (ii) a public offering price per warrant of \$ and (y) in respect of the Class B Units (i) a public offering price per share of Series A Preferred Stock of \$ and (ii) a public offering price per warrant of \$ per whole share of common stock.
- (2) We have also agreed to reimburse for certain expenses. See Underwriting.
- (3) We have granted a 45-day day option to the underwriters to purchase up to additional shares of common stock and/or warrants to purchase up to shares of common stock (up to 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering) solely to cover overallotments, if any.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation

to the contrary is a criminal offense.

Delivery of the shares of common stock is expected to be made on or about _____, 2019.

Sole Book-running Manager

Ladenburg Thalmann

This prospectus is dated _____, 2019.

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You should read this prospectus, including the information incorporated by reference herein, and any related free writing prospectus that we have authorized for use in connection with this offering.

You should rely only on the information that we have included or incorporated by reference in this prospectus and any related free writing prospectus that we may authorize to be provided to you. Neither we nor the underwriters have authorized any person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any related free writing prospectus that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any related free writing prospectus. This prospectus and any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference herein or therein is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus or any related free writing prospectus is delivered, or securities are sold, on a later date.

For investors outside the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus outside of the United States.

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This prospectus contains or incorporates by reference summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed or have been incorporated by reference as exhibits to the registration statement of which this prospectus forms a part, and you may obtain copies of those documents as described in this prospectus under the heading **Where You Can Find More Information**.

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DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements include all statements that are not historical facts and can generally be identified by the words believe, may, will, potentially, estimate, continue, anticipate, intend, could, seek, would, intend, or the negative thereof, and similar expressions that convey uncertainty of future events or outcomes.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described and incorporated by reference under the heading Risk Factors and elsewhere in this prospectus, in any free writing prospectus we may authorize for use in connection with a specific offering and in our most recent annual report on Form 10-K, as updated by our annual, quarterly and other reports and documents that are incorporated by reference into this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this prospectus and the information incorporated by reference in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus, together with the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus we have authorized for use in connection with this specific offering, completely and with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents (including, but not limited to, this prospectus) by these cautionary statements.

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SUMMARY

This summary highlights selected information about us, this offering and selected information appearing elsewhere in this prospectus and in the documents we incorporate by reference herein. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. You should read this entire prospectus carefully, including information set forth under the heading Risk Factors and our financial statements and the related notes included or incorporated by reference in this prospectus.

Unless the context otherwise requires, the terms we, us, our, Aradigm, and the Company refer to Aradigm Corporation, a California corporation, and its subsidiaries.

Aradigm Overview

We are an emerging specialty pharmaceutical company focused on the development and commercialization of products for the treatment and prevention of severe respiratory diseases. Over the last decade, we invested a large amount of capital to develop drug delivery technologies, particularly the development of a significant amount of expertise in respiratory (pulmonary) drug delivery as incorporated in our lead product candidate Apulmiq, or inhaled ciprofloxacin (formerly known as Linhaliq and Pulmaquin[®] with respect to the Food and Drug Administration, or the FDA, and known as Linhaliq for purposes of the European Medicines Agency, or EMA), that completed two Phase 3 clinical trials. We also invested considerable effort into the development of laboratory and clinical data demonstrating the performance of our AERx[®] pulmonary drug delivery platform and other proprietary technologies. The key asset we have focused our efforts on in recent years is our inhaled ciprofloxacin product candidates.

We have not been profitable since inception and expect to incur additional operating losses over at least the foreseeable future as we continue with our efforts towards regulatory approval of Apulmiq for non-cystic fibrosis bronchiectasis, or NCFBE, patients who have chronic lung infections with *Pseudomonas aeruginosa*.

Our business has focused on opportunities in the development of drugs for the treatment of severe respiratory disease. We believe that there are significant unmet medical needs in severe respiratory diseases, as well as opportunities to replace some of the existing therapies with products that are more efficacious, safer and more convenient to use by patients. In selecting our proprietary development programs, we primarily seek drugs approved by the FDA that can be reformulated for both existing and new indications in respiratory disease or drugs that have been discovered by others. Our intent is to use our pulmonary delivery methods and formulations to improve their safety, efficacy, and convenience of administration to patients. We believe that this strategy will allow us to reduce cost, development time and risk of failure when compared to the discovery of new drugs.

Inhaled Ciprofloxacin Program

Our lead development candidates are proprietary formulations of the potent antibiotic ciprofloxacin (Apulmiq (ARD-3150) and Lipoquin[®](ARD-3100)) that are delivered by inhalation for the management of infections associated with the severe respiratory diseases of cystic fibrosis, or CF, and NCFBE. Apulmiq is a proprietary, specifically developed formulation of slow release liposomally encapsulated ciprofloxacin and immediately available unencapsulated aqueous solution of ciprofloxacin for inhalation.

In January 2018, we announced that the FDA provided a Complete Response Letter, or CRL, regarding our new drug application, or NDA, stating that it could not approve the NDA in its present form and providing specific reasons for this action along with requisite recommendations pertaining to resubmission; the areas of concern include clinical data, human factors validation study and product quality. The recommendations in the CRL include an independent

third party verification of the Phase 3 results via analyses of source data as per the statistical analysis plan contained in the Phase 3 clinical trial protocols and an additional Phase 3 clinical trial or trials that demonstrates a significant treatment effect on clinically meaningful endpoints which could evaluate the co-primary endpoints of frequency and severity of exacerbations to assess for durable evidence of efficacy over a period of two years (or more, if scientifically justified). The CRL also included a request to conduct another Human Factors Study to demonstrate that the product packaging and instructions for use are effective in instructing patients how to use the product. The CRL also requested, among other things, additional microbiological product quality information and an in vitro drug release method development report. We remain confident in the efficacy, safety and quality of Apulmiq and are formally interacting with the FDA to address the issues covered in the CRL, with our

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current goal being to move towards resubmission of the Apulmiq NDA or a new NDA as soon as possible. We are committed to continue working on obtaining regulatory approval of Apulmiq in the US for NCFBE patients who suffer from this very severe disease which carries the burden of high morbidity and mortality with no available approved treatment options.

As planned, in March 2018 we submitted a marketing authorization application, or MAA, to the EMA, seeking approval for Linhaliq for the treatment of NCFBE patients suffering chronic lung infection with *P. aeruginosa*. Our submission is based on the positive Phase 3 clinical trial ARD-3150-1202 or ORBIT 4, with a primary endpoint of time to first exacerbation and the secondary endpoints of frequency of all exacerbations and severe exacerbations. Supporting evidence was provided from an identical Phase 3 trial ARD-3150-1201 or ORBIT 3, a Phase 2 study of Apulmiq and proprietary preclinical studies, as well as referencing additional information about ciprofloxacin from publicly available sources. Two previous Scientific Advice procedures indicated that the EMA would focus on the totality of clinical evidence, including primary and secondary exacerbation endpoints in their decision-making. The EMA completed its validation of the MAA and the formal start date of the MAA review procedure was March 29, 2018. We have received the list of Day 120 questions and are in the process of addressing them. The EMA review of the MAA for Linhaliq will be according to standard timelines, with an opinion of the Committee for Medicinal Products for Human Use, or CHMP, expected in the second quarter of 2019. The time needed by us to respond to EMA questions during the MAA review will trigger formal clock-stops of the procedure and add several months to the nominal duration, until the final CHMP opinion will be issued. After the adoption of a CHMP opinion, a final decision regarding the MAA assessment is carried out by the European Commission within 2-3 months.

Liposomal Ciprofloxacin for Non-Tuberculous Mycobacteria

In August 2013, the National Institute of Allergy and Infectious Diseases, or NIAID, awarded us a Small Business Initiative Research, or SBIR, Phase I grant of approximately \$278,000 to investigate the treatment of pulmonary non-tuberculous mycobacteria, or PNTM, infections with our inhaled liposomal ciprofloxacin product candidates, Apulmiq and Lipoquin. The research program was conducted in collaboration with Oregon State University, Corvallis, or OSU. Based on an epidemiological study in U.S. adults aged 65 years or older, PNTM infections are an important cause of morbidity among older adults in the United States. The current clinical paradigm is to treat patients with lung or disseminated disease with combination therapy given orally or by IV or by inhalation. Unfortunately, current therapies often fail and may have significant side effects.

In April 2015, we announced the first results from the collaboration between scientists from OSU and Aradigm. The research demonstrated that after 4 days of in vitro treatment of human macrophages infected with *M. avium* and *M. abscessus*, liposomal ciprofloxacin caused a decrease of >99% colony forming units, or CFU, at ciprofloxacin concentration of 200 mcg/ml, which is an order-of-magnitude below the peak sputum levels observed in humans in the ORBIT-3 and ORBIT-4 Phase 3 clinical trials. Liposomal ciprofloxacin at 100 mcg/ml also significantly reduced the CFU in a biofilm assay by >50%. In May 2015, we announced that scientists from OSU and Aradigm demonstrated that Aradigm's investigational drugs Lipoquin and Apulmiq significantly reduced the growth of *M. avium* after 3 weeks of once-daily respiratory tract dosing in mice. The CFUs were reduced by 79% and 77% by Lipoquin and Apulmiq, respectively ($p < 0.05$) compared to saline controls. In September 2015, we announced that scientists from OSU and Aradigm demonstrated that Aradigm's investigational drugs Lipoquin and Apulmiq significantly reduced *M. abscessus* using once daily dosing in mice that had established colonization with this microorganism. After 3 weeks of treatment, CFUs in lungs were significantly reduced ($p < 0.05$) by 95.2% and 96.1% by Lipoquin and Apulmiq, respectively; after 6 weeks, CFUs were further reduced ($p < 0.05$) by 99.7% and 99.4% for Lipoquin and Apulmiq, respectively. This collaboration between OSU and Aradigm resulted in inventions leading to several patent applications. In January 2017, Patent no. 9,532,986 titled "Liposomal Ciprofloxacin Formulations with Activity Against Non-Tuberculous Mycobacteria" was issued by the US Patent Office, with OSU and Aradigm being

the assignees.

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In August 2017, NIAID awarded us a Phase II SBIR grant to investigate the treatment of *M. avium* and *M. abscessus* with Apulmiq and Lipoquin and a novel liposomal formulation containing nanocrystalline ciprofloxacin with standard combination therapies. This novel formulation is described in Patent nos. 9,844,548 titled *Liposomal Ciprofloxacin Formulations with encapsulated ciprofloxacin nanocrystals* issued in May 2018 and 9,968,555 titled *Novel Liposomal Formulations that Form Drug Nanocrystals after Freeze-Thaw* issued in May 2018 by the US Patent Office, with Aradigm being the assignee. Aradigm will work with OSU, which will lead the laboratory research as a part of the consortium funded by this two year grant of approximately \$972,000.

Liposomal Ciprofloxacin for Biodefense Purposes: Treatment of Q Fever, Tularemia, Pneumonic Plague, Inhalation Anthrax and other biodefense purposes

In addition to bronchiectasis, CF, and PTNM, liposomal ciprofloxacin has also been tested for the prevention/treatment of inhaled bioterrorism infections. Grifols has provided us a royalty-bearing license for biodefense applications.

In September 2012, UK scientists from the Health Protection Agency, or HPA, and Defence Science and Technology Laboratory (Dstl) reported efficacy of liposomal ciprofloxacin for 7 days of treatment against Q fever. In November 2012, Dstl reported in a preliminary study that they demonstrated that a single dose of Lipoquin administered 24 hours post-exposure to a lethal dose of the *Yersinia pestis* had 100% survival in a murine model of pneumonic plague for 28 days post-exposure. Dstl also demonstrated in another series of experiments that a single dose of inhaled liposomal ciprofloxacin at 24 hours after infection had 100% survival in mice against lethal doses of inhaled *Francisella tularensis* (tularemia) infection for up to 14 days post-infection.

In October 2016, we announced Dstl received funding of up to \$6.9 million from the U.S. Defense Threat Reduction Agency, or DTRA, for *Inhalational ciprofloxacin for improved protection against biowarfare agents*. The total potential funding for Dstl is \$3.2 million (base period) and \$3.7 million (option period). The initial funding is \$1.7 million, for which Dstl and Aradigm will study the efficacy of Apulmiq and Lipoquin in mice models of tularemia, melioidosis, glanders and Q fever, which will allow broad-spectrum prophylaxis/treatment against multiple bioterrorism threats. If we can obtain sufficient additional funding, we may be able to complete the development of liposomal ciprofloxacin for approval under FDA regulations for new drugs/biologics for potentially fatal diseases where human studies cannot be conducted ethically or practically, termed the Animal Rule.

Collaboration with Grifols, S.A.

In August 2013, we partnered with Grifols, S.A., a European-based multinational pharmaceutical company, and its controlled affiliates, or Grifols, via a License and Collaboration Agreement, or the License Agreement, and granted to Grifols an exclusive, world-wide license to our inhaled liposomal ciprofloxacin product candidates for the indication of NCFBE and other indications (excluding Bio-Defense Aradigm Products, as defined in the agreement), or the Licensed Products. The license permits Grifols to commercialize the Licensed Products throughout the world. We are responsible for obtaining regulatory approval of the first indication for the product candidates in the U.S. and the EU. Grifols is responsible to use diligent efforts to commercialize the Licensed Products in countries where regulatory approval has been obtained. Under the License Agreement, Grifols pays development milestones and royalties on future commercial sales of Licensed Products. We develop the Licensed Products for NCFBE.

Under the License Agreement, Grifols makes development milestone payments of up to \$25 million upon the achievement of specified events. As of November 2018, we have earned and collected a total of \$10 million in milestone payments for certain development-related events. Up to a total of \$15 million in milestone payments may be paid to us in the future, subject to the achievement of regulatory approval milestones in specified geographic regions.

In addition, Grifols will make royalty payments on net sales of Licensed Products on a country-by-country basis for so long as there is a valid patent claim or orphan drug designation (or, if longer, 10 years after the first commercial sale) in such country. The royalty rate applicable at any time is determined as follows (subject to adjustment as described below):

The royalty rate is 12.5% if worldwide (rather than country-by-country) aggregate net sales were less than or equal to \$300 million at the time the relevant portion of net sales was made in that country, on a year-to-date basis.

The royalty rate is 20% if worldwide aggregate net sales were above \$300 million at the time the relevant portion of net sales was made in that country, on a year-to-date basis.

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Royalty payments will be reduced by 50% on a country-by-country basis (1) during such time, if any, that another inhaled liposomal product containing ciprofloxacin is being sold in that country for an indication for which we have regulatory approval or (2) if we have no valid patent claim or orphan drug protection in that country (these reductions may not be combined and the maximum reduction in royalties under the License Agreement is 50%).

Grifols is the beneficial owner of approximately 48% of the Company's common stock. For more information on the License Agreement and our agreements with Grifols, see "Certain Relationships and Related Transactions" and "Description of Securities - Common Stock."

Corporate Developments

2016 Private Placement

On April 21, 2016, we entered into a securities purchase agreement to conduct a private offering, or 2016 Private Placement, consisting of \$23 million in aggregate principal amount of 9% senior convertible notes due 2021 convertible into shares of common stock, or the Convertible Notes, and 263,436 warrants to purchase shares of the Company's common stock or the Warrants. The Convertible Notes bear interest at a rate of 9% per year, payable semiannually in arrears on November 1 and May 1 of each year commencing on November 1, 2016. The Convertible Notes mature on May 1, 2021, unless earlier redeemed or converted.

2018 Private Placements

On April 13, 2018, we entered into a senior note purchase agreement whereby the lenders signatory thereto agreed to purchase up to approximately \$7 million aggregate principal amount of our 9.0% senior promissory notes due 2021, or the Notes. We completed the first closing under the note purchase agreement on April 13, 2018, at which time we issued and sold approximately \$2 million aggregate principal amount of Notes to the lenders thereunder. We completed subsequent closings under the note purchase agreement on May 14, 2018, June 13, 2018, July 13, 2018, August 13, 2018 and September 12, 2018 pursuant to which we sold, at each such subsequent closing, Notes in the aggregate principal amount of approximately \$1 million to certain of the lenders under the note purchase agreement.

On October 25, 2018, we entered into a senior note purchase agreement under which Grifols, pursuant to which Grifols agreed to purchase approximately up to \$4 million aggregate principal amount of our senior unsecured promissory notes due 2021, or the October 2018 Notes. We completed the first closing under this note purchase agreement on October 25, 2018, at which time we issued and sold \$2 million aggregate principal amount of notes to Grifols. Subject to the satisfaction or waiver of the conditions to the closing set forth in the purchase agreement, we anticipate the sale of the remaining approximately \$2 million of the October 2018 Notes to occur in one subsequent closing, which we currently anticipate to occur prior to December 31, 2018.

Nasdaq Compliance

As previously disclosed, on March 7, 2018, we received written notice from The Nasdaq Stock Market, LLC, or Nasdaq, notifying us that we no longer complied with Nasdaq Listing Rule 5550(b)(2), or the Rule, as we had not maintained a minimum Market Value of Listed Securities, or MVLS, of \$35 million for 30 consecutive business days. In accordance with applicable Nasdaq Listing Rules, we were provided with a period of 180 calendar days, or until September 4, 2018, in which to regain compliance by evidencing a MVLS of \$35 million or more for a minimum of ten consecutive business days.

On September 5, 2018, we received written notification from Nasdaq indicating that, as we had not regained compliance with the Rule, our securities would be subject to delisting and trading in our common stock would be suspended as of the opening of business on September 14, 2018 unless we timely requested a hearing to appeal the delisting determination. Such request was timely made and such request stayed the suspension and delisting of the Company's securities pending the decision of the Nasdaq Hearings Panel. At our hearing with the Nasdaq Hearings Panel, we undertook to comply with certain conditions, including our completion of this offering, prior to February 15, 2019, in order to maintain our listing on the Nasdaq Capital Market. The Nasdaq Hearings Panel has not yet provided any formal guidance regarding our continued listing on the Nasdaq Capital Market and we cannot assure you that we will be successful in regaining compliance with Nasdaq continued listing requirements or that we will be able to meet Nasdaq listing standards going forward.

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Reverse Stock Split

Prior to the effectiveness of this registration statement, we intend to hold a special meeting of our stockholders for the purpose of obtaining stockholder approval on an amendment to our certificate of incorporation to effect a reverse stock split of our common stock at an exchange ratio between 1-for-_____ and 1-for-_____ with our Board of Directors retaining the discretion as to whether to implement the reverse stock split and the exact exchange ratio to implement.

Accordingly, prior to the effectiveness of the registration statement of which this prospectus is a part, and subject to the approval of our Board and our stockholders, we will effect a reverse stock split of our common stock upon a ratio to be determined by our Board of Directors.

Risks Relating to Our Business

We are an emerging specialty pharmaceutical company, and our business and ability to execute our business strategy are subject to a number of risks of which you should be aware before you decide to invest in this offering. In particular, you should consider the risks discussed in the **Risk Factors** section of this prospectus and documents incorporated by reference herein, including, but not limited to, the following risks:

We have incurred net losses in each year since our inception. We expect to incur net losses and negative operating cash flow for the foreseeable future, and may never achieve or maintain profitability;

We will require additional funding to fund our operations generally and such funding may not be available on acceptable terms or at all;

We are substantially dependent on the success of our leading product candidate, Apulmiq. We cannot be certain that Apulmiq will receive regulatory approval or be successfully commercialized even if we receive regulatory approval;

If we are unable to obtain the required regulatory and marketing approvals for, commercialize, obtain and maintain patent protection for, or gain sufficient market acceptance by physicians, patients and healthcare payers of, Apulmiq, or experience significant delays in doing so, our business will be materially harmed and our ability to generate revenue will be materially impaired;

If we are unable to maintain compliance with the covenants under our indebtedness, including as a result of events beyond our control, we could be deemed to be in a default under our indebtedness, including our outstanding note securities, which could materially and adversely affect the ongoing viability of our business;

It we are unable to resolve our noncompliance with the applicable continued listing requirements of The Nasdaq Capital Market, including those related to the Nasdaq Listing Rule 5550(b)(2), our common stock will be delisted from The Nasdaq Capital Market which could have a material adverse effect on our financial condition;

Apulmiq will be subject to ongoing regulatory requirements and any violations of these requirements could negatively affect our business and results of operations;

We will be substantially dependent on third-party manufacturers to manufacture Apulmiq and its key ingredients in sufficient quantities and on a timely basis, while complying with extensive FDA and EMA requirements;

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We may not be able to manage our business effectively if we are unable to attract and retain key personnel and consultants;

If we are unable to maintain valid and enforceable intellectual property rights or if our intellectual property rights are inadequate for Apulmiq, our competitive position could be harmed; and

We could face competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively.

Corporate Information

We were incorporated in California in 1991. Our principal executive offices are located at 3929 Point Eden Way, Hayward, California 94545, and our main telephone number is (510) 265-9000.

Available Information

Investors can obtain access to our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and all amendments to these reports, free of charge, on our website at www.aradigm.com as soon as reasonably practicable after such filings are electronically filed with the SEC. Information contained on our website is not part of, or incorporated by reference in, this prospectus, the registration statement of which this prospectus is a part or our other filings with the SEC. The SEC maintains an Internet site, www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

For more information as to our business, properties and financial condition, please refer to the documents cited in Where You Can Find More Information.

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Class A Units offered by us	We are offering Class A Units. Each Class A Unit consists of shares of common stock and a warrant to purchase shares of our common stock (together with the shares of common stock underlying such warrants).
Offering price per Class A Unit	\$
Class B Units offered by us	We are also offering to those purchasers whose purchase of Class A Units in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of the number of Class A Units that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding common stock, Class B Units. Each Class B Unit will consist of shares of Series A Preferred Stock, par value \$0.001 per share, convertible into a number of shares of common stock equal to and a warrant to purchase shares of our common stock (together with the shares of our common stock underlying such shares of Series A Preferred Stock and warrants).
Offering price per Class B Unit	\$
Overallotment option	The underwriters have the option to purchase up to additional shares of common stock, and/or warrants to purchase shares of common stock solely to cover overallotments, if any, at the price to the public less the underwriting discounts and commissions. The overallotment option may be used to purchase shares of common stock, or warrants, or any combination thereof, as determined by the underwriters, but such purchases cannot exceed an aggregate of 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and warrants sold in the primary offering. The overallotment option is exercisable for 45 days from the date of this prospectus.
Description of warrants	The warrants will be exercisable beginning on the date of issuance and expire on the five (5) year anniversary of the date of issuance at an initial exercise price per share equal to , subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock.
Description of Series A Preferred Stock	Each share of Series A Preferred Stock is convertible at any time at the holder's option into shares of common stock.

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The number of shares of our common stock to be outstanding after this offering is based on 15,219,793 shares of our common stock outstanding as of September 30, 2018, and excludes:

3,566,772 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2018 at a weighted-average exercise price of \$3.04 per share;

2,265,933 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan;

23,731 shares of common stock reserved for future issuance upon vesting of restricted stock and restricted stock units granted under our 2015 Equity Incentive Plan;

123,013 shares of common stock reserved for future issuance under our Employee Stock Purchase Plan; and

4,867,083 shares of common stock reserved for issuance upon the exercise of warrants outstanding and the conversion of notes outstanding.

Unless otherwise noted, the information in this prospectus reflects and assumes the following:

a 1-for- reverse stock split, which became effective on , 2018;

no exercise of outstanding options and warrants; and

no exercise of the underwriters' overallotment option to purchase additional shares of common stock and/or warrants;

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RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the risks described below and the risks set forth in the Risk Factors section of our most recent Annual Report on Form 10-K filed with the SEC, as revised or supplemented by our Quarterly Reports on Form 10-Q filed with the SEC since our most recent Annual Report on Form 10-K, each of which is incorporated by reference into this prospectus. You should also carefully consider the other information included or incorporated by reference in this prospectus before making an investment decision. Our business, financial condition, results of operations and cash flows could be materially adversely affected by any of these risks. The market or trading price of our common stock could decline due to any of these risks. In addition, please read Disclosure Regarding Forward-Looking Statements in this prospectus, where we describe additional uncertainties associated with our business and the forward-looking statements included or incorporated by reference in this prospectus. Please note that additional risks not presently known to us or that we currently deem immaterial may also impair our business and operations.

Risks Related to this Offering

Management will have broad discretion as to the use of proceeds from this offering and we may use the net proceeds in ways with which you may disagree.

We intend to use the net proceeds of this offering for working capital needs, capital expenditures, and other general corporate purposes in pursuit of advancing our commercial, clinical, and pre-clinical efforts. Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Accordingly, you will be relying on the judgment of our management on the use of net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

The offering price will be set by our Board of Directors and does not necessarily indicate the actual or market value of our common stock.

Our Board of Directors will approve the offering price and other terms of this offering after considering, among other things: the number of shares authorized in our certificate of incorporation; the current market price of our common stock; trading prices of our common stock over time; the volatility of our common stock; our current financial condition and the prospects for our future cash flows; the availability of and likely cost of capital of other potential sources of capital; and market and economic conditions at the time of the offering. The offering price is not intended to bear any relationship to the book value of our assets or our past operations, cash flows, losses, financial condition, net worth or any other established criteria used to value securities. The offering price may not be indicative of the fair value of the common stock.

The Series A Preferred Stock is an unlisted security and there is no public market for it.

There is no established public trading market for the Series A Preferred Stock, and we do not expect a market to develop. In addition, the Series A Preferred Stock is not listed, and we do not intend to apply for listing of the Series A Preferred Stock on any securities exchange or trading system. Without an active market, the liquidity of the Series A Preferred Stock is limited, and investors may be unable to liquidate their investments in the Series A Preferred Stock.

The warrants may not have any value.

The warrants will be exercisable for five years from the closing date at an initial exercise price per share of \$. In the event that the price of a share of our common stock does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

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A warrant does not entitle the holder to any rights as common stockholders until the holder exercises the warrant for shares of our common stock.

Until you acquire shares of our common stock upon exercise of your warrants, the warrants will not provide you any rights as a common stockholder. Upon exercise of your warrants, you will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs on or after the exercise date.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of shares offered in this offering at an assumed public offering price of \$ _____ per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of approximately \$ _____ per share. See Dilution below for a more detailed discussion of the dilution you will incur if you purchase our common stock in the offering. In addition, the conversion of shares of Series A Preferred Stock and exercise of the warrants will result in the issuance of additional shares of common stock that will result in significant dilution to holders of our common stock.

Issuances of shares of common stock or securities convertible into or exercisable for shares of common stock following this offering, as well as the exercise of convertible securities outstanding, will dilute your ownership interests and may adversely affect the future market price of our common stock.

We may choose to raise additional capital subject to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. If additional capital is raised through the sale of equity or convertible debt securities, or perceptions that those sales could occur, the issuance of these securities could result in further dilution to investors purchasing our common stock in this offering or result in downward pressure on the price of our common stock, and our ability to raise capital in the future.

In addition, we have a significant number of securities convertible into shares of our common stock outstanding, including options, convertible notes and warrants. If these securities are exercised, you may incur further dilution. Moreover, to the extent that we issue additional securities convertible into or exchangeable for shares of our common stock in the future and those options, warrants or other securities are exercised, converted or exchanged, you may experience further dilution.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common stock and sellers remain willing to sell the shares. All of the securities issued in the offering will be freely tradable without restriction or further registration under the Securities Act.

Risks Related to Our Business

Our cash resources will only be sufficient to fund our operations through the fourth quarter of 2018. Substantial doubt exists as to our ability to continue as a going concern. Additional funds may not be available on terms that are acceptable to us or at all.

Our independent registered public accounting firm for the fiscal year ended December 31, 2017 has indicated in its audit opinion, contained in our consolidated financial statements included in our Annual Report on Form 10-K, that our current liquidity position raises substantial doubt about our ability to continue as a going concern.

Our management believes that at September 30, 2018, the additional funds received under the first closing in October of 2018 of \$2 million along with the cash balance of \$2.9 million will be sufficient to fund our operations at least through December 31, 2018. As reflected in the accompanying condensed consolidated financial statements, we have incurred significant recurring operating losses and negative cash flows from its operations and, as of September 30, 2018, had an accumulated deficit of \$467.4 million, a total shareholders' deficit of \$23.5 million and working capital of \$0.7 million. These factors among others, raise substantial doubt about our ability to continue as a going concern. Management expects operating losses to continue for the foreseeable future including the year ending December 31, 2018. As of September 30, 2018, our current assets of \$3.5 million are more than current liabilities of \$2.8 million by approximately \$0.7 million. In February 2018, the Board of Directors, or the Board, implemented temporary measures intended to preserve our cash resources until additional sources of capital can be secured, including the reduction of cash compensation and severance benefits for certain officers and the reduction of cash compensation for members of the Board. On April 13, 2018, we entered into a note purchase agreement whereby entities affiliated with Grifols and First Eagle, our two largest shareholders beneficially owning collectively approximately 75% of our common stock as of September 30, 2018 and owning all of the Convertible Notes and Warrants described in Note 6 to the condensed consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018 agreed to purchase up to approximately \$7 million aggregate principal amount of bridge notes or the Promissory Notes. We completed the first closing under the note purchase agreement on April 13, 2018, at which time the Company issued and sold approximately \$2 million aggregate principal amount of Promissory Notes to the lenders thereunder. After the initial closing, we held five more closings monthly thereafter and received installment payments totaling an additional approximately \$5 million.

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After quarter end, we received an additional \$2 million on October 25, 2018 from Grifols under the note purchase agreement described in Note 13 to the condensed consolidated financial statements presented in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018. As noted above, our management currently believes that at September 30, 2018, the additional funds received under the first closing of \$2 million in October 2018 along with the Company's cash balance of approximately \$2.9 million will be sufficient to fund operations through at least the fourth quarter of 2018. However, because of the expected losses and negative cash flows from operations, we will continue to require additional capital through the issuance of debt or equity securities, royalty financing transactions, strategic transactions or otherwise, to fund our operations and continue the development of our lead product candidate Apulmiq. We will not be able to maintain our current level of regulatory and product development activity and there is substantial doubt about our company's ability to continue as a going concern unless we raise additional capital in 2019. We cannot assure you that the closing condition to the subsequent closing will be satisfied. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations. We cannot assure you that we will be successful in raising such additional capital on favorable terms or at all. Not achieving such funding on a timely basis would materially harm our business, financial condition and results of operations and could require us to delay or reduce the scope of all or a portion of our development programs, dispose of our assets or technology or to cease operations. Accordingly, we may not be able to continue as a going concern. For more information, see Note 11 (Going Concern) to the condensed consolidated financial statements presented in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018.

Changing circumstances may cause us to expend cash significantly faster than we currently anticipate, and we may need to spend more cash than currently expected because of circumstances beyond our control. For these reasons, we are unable to estimate the actual funds we will require for development and any approved marketing and commercialization activities.

We have a significant amount of debt, which may adversely affect our ability to operate our business and our financial position and our ability to secure additional financing in the future.

As of November 30, 2018, we had \$32 million in principal under our outstanding note securities. Our significant amount of outstanding indebtedness may make it difficult for us to run our business effectively or raise the capital we need to continue our operations. We are also subject to standard event of default provisions, including in the event of a material adverse change, under our outstanding note securities that, if triggered, would allow the debt to be accelerated, which could significantly deplete our cash resources, cause us to raise additional capital at unfavorable terms, require us to sell portions of our business or result in us becoming insolvent.

We have received a CRL from the FDA which states that it cannot approve the NDA for Apulmiq in its present form. Even if we resubmit the NDA for Apulmiq, the FDA may not approve Apulmiq for marketing.

We have focused primarily on the development of our lead product candidate Apulmiq for the treatment of NCFBE. In July 2017, we submitted the NDA for Apulmiq to the FDA based on the positive results from the ORBIT-4 study in the Phase 3 clinical program for Apulmiq and confirmatory evidence from the ORBIT-2 and ORBIT-3 studies. In January 2018, we received a CRL from the FDA regarding the NDA for Apulmiq which states that the FDA determined it cannot approve the NDA in its present form and provides specific reasons for this action along with recommendations needed for resubmission; the areas of concern include the lack of clinical data showing our product is more effective than a placebo, human factors validation study and product quality. The recommendations in the CRL include an independent third party verification of the Phase 3 results via analyses of source data as per the pre-approved statistical analysis plan and an additional Phase 3 clinical trial or trials that demonstrates a significant treatment effect on clinically meaningful endpoints which could evaluate the co-primary endpoints of frequency and severity of exacerbations to assess for durable evidence of efficacy over a period of two years (or more, if

scientifically justified). The CRL also included a request to conduct another Human Factors Study to demonstrate that the product packaging and instructions for use are effective, and the CRL requested, among other things, additional product quality information with respect to microbiology and a new in vitro drug release method development report. The Company has completed Type B and Type C post-action meetings with the FDA to discuss the topics covered in the CRL with the view to developing plans to move towards resubmission of the Apulmiq NDA. While we currently plan to resubmit the NDA for Apulmiq, we cannot assure you that we will be able to resubmit the NDA, that the information previously provided, or to be provided, to the FDA will be adequate to address the recommendations made in the Apulmiq CRL or that we will be successful in obtaining FDA approval of Apulmiq. Even if we resubmit an NDA for Apulmiq, the FDA could require us to complete further clinical, Human Factors or other studies, which could further delay or preclude any approval of the NDA and require us to obtain significant additional funding. In addition, the FDA may choose not to approve our NDA for any of a variety of reasons, including a decision related to the safety or efficacy data for Apulmiq, or for any other issues that it may identify related to our development of Apulmiq for the treatment of NCFBE.

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If we are unable to mitigate these or other potential risks, our revenue, operating results and financial condition may be adversely impacted.

An MAA submission was made to the EMA in early March, 2018. On March 29, 2018 Aradigm received EMA validation of the submission and the EMA review process was initiated. The list of Day 120 questions has been received and is being addressed. There is no assurance that we will be able to provide answers to the questions or that our answers will be acceptable to the EMA nor can we provide assurance as to eventual approval by the EMA.

As planned in March 2018, we submitted a marketing authorization application, or MAA, to the EMA, seeking approval for Linhaliq for the treatment of NCFBE patients suffering chronic lung infection with *P. aeruginosa*. Our submission is based on the positive ORBIT-4 clinical trial, with a primary endpoint of time to first exacerbation and the secondary endpoints of frequency of all exacerbations and severe exacerbations. Supporting evidence was provided from the identically-designed ORBIT 3 clinical trial, a Phase 2 study of Apulmiq and proprietary preclinical studies, as well as referencing additional information about ciprofloxacin from publicly available sources. Two previous Scientific Advice procedures indicated that the EMA would focus on the totality of clinical evidence, including primary and secondary exacerbation endpoints in their decision-making. The EMA completed its validation of the MAA and the formal start date of the MAA review procedure was March 29, 2018.

In July of 2018, we received the customary Day 120 letter from the EMA which requests additional analyses or clarification of clinical, non-clinical or product quality data. We are in the process of completing the analyses and responses for submission to the EMA. The EMA review of the MAA for Linhaliq will be according to standard timelines, with an opinion of the Committee for Medicinal Products for Human Use, or CHMP, expected in the second quarter of 2019. The time needed by us to respond to EMA questions during the MAA review will trigger formal clock-stops of the procedure and add several months to the nominal duration, until the final CHMP opinion will be issued. There can be no assurance our responses to the EMA questions during the process will be acceptable and approval of Linhaliq obtained. The process may continue through Day 180 outstanding issues from the EMA. There can be no assurance our answers to response to any CHMP questions will be acceptable or that we would gain approval in the time frame allotted by the EMA procedure.

If the CHMP opinion is positive, a final decision regarding the MAA assessment is carried out by the European Commission within 2-3 months. There can be no assurance the members of the European Commission would approve marketing of the product under circumstances that would be acceptable.

Changes to our management and Board of Directors may cause uncertainty regarding the future of our business, and may adversely impact employee hiring and retention, our stock price, and our revenue, operating results, and financial condition.

Since February 2018, there have been significant changes in our management and board of directors. Several members of management have departed the Company. Effective February 11, 2018, Igor Gonda, Ph.D., President and Chief Executive Officer; Juergen Froehlich, M.D., Chief Medical Officer; and Nancy Pecota, Vice President, Finance, Chief Financial Officer and Corporate Secretary resigned all offices and positions held by him or her with Aradigm. In addition, in February, 2018, Dr. Gonda and David Bell resigned from the Board of Directors. Also, in February 2018, our Board approved temporary measures intended to preserve cash resources until additional sources of capital can be secured, and a reduction in force occurred. Additionally, Dr. Gonda, Dr. Froehlich and

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Ms. Pecota were retained by the company as consultants. On May 31, 2018, Dr. Froehlich was rehired as the Company's Chief Medical Officer. Dr. Theresa Matkovits was appointed to the Board effective as of June 29, 2018. These changes, and the potential for additional changes to our management, organizational structure and strategic business plan, may cause speculation and uncertainty regarding our future business strategy and direction. These changes may cause or result in:

disruption of our business or distraction of our employees and management;

difficulty in recruiting, hiring, motivating and retaining talented and skilled personnel;

stock price volatility; and

difficulty in negotiating, maintaining or consummating business or strategic relationships or transactions.

If we are unable to mitigate these or other potential risks, our revenue, operating results and financial condition may be adversely impacted.

We have a history of net losses and a large accumulated deficit, we expect to incur net losses for at least the foreseeable future, and we may never achieve or maintain profitability.

We have never been profitable and have incurred significant net losses in each year since our inception. As of September 30, 2018, we have an accumulated deficit of approximately \$467.4 million. We have not had any direct product sales and do not anticipate receiving revenues from the sale of any of our products in 2018, if ever. We expect to incur net losses over the next several years and may never become profitable. While our agreement with our partner Grifols has resulted in reduced net operating losses and capital expenditures as a portion of our research and development expenses for the Apulmiq program was reimbursed by Grifols through 2015, we expect to continue to incur losses for the foreseeable future, including the year ending December 31, 2018, as we:

continue drug product development efforts;

conduct preclinical testing and clinical trials;

pursue additional applications for our existing delivery technologies; and

outsource the commercial-scale production of our products.

The amount of future losses is uncertain and will depend, in part, on the rate of growth of our expenses.

To achieve and sustain profitability, we must, alone or with others such as Grifols, successfully develop, obtain regulatory approval for, manufacture, market and sell our products. We expect to incur substantial expenses in our efforts to develop and commercialize products, and we may never generate sufficient product or contract research revenues to become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. We are unable to predict the timing or amount of increased expenses, or when or if we will be able to achieve or maintain profitability. Even if we are able to complete the processes described above, we anticipate incurring significant costs associated with seeking regulatory approval for our product candidates.

We are subject to extensive regulation, including the requirement of approval before any of our product candidates can be marketed. We may not obtain regulatory approval for our product candidates on a timely basis, or at all.

Drug development is an inherently uncertain process with a high risk of failure at every stage of development. We and our products are subject to extensive and rigorous regulation in the United States by the federal government, principally the FDA, by state and local government agencies, and also by governmental and regulatory agencies outside the United States, such as the EMA. Both before and after regulatory approval, the development, testing, manufacture, quality control, labeling, storage, approval, advertising, promotion, sale, distribution, and export of our potential products are subject to regulation. Pharmaceutical products that are marketed abroad are also subject to regulation by foreign governments. Our products cannot be marketed in the United States without FDA approval.

The process for obtaining FDA approval for drug products is generally lengthy, expensive and uncertain. Despite the time and expense expended, regulatory approval is never guaranteed. The FDA and foreign regulatory agencies can delay approval of, or refuse to approve, our product candidates for a variety of reasons, including failure to meet safety and/or efficacy endpoints in our clinical trials.

Regulatory authorities may delay or not approve our product candidates even if the product candidates meet safety and efficacy endpoints in clinical trials or the approvals may be too limited for us to earn sufficient revenues.

Our pharmaceutical product candidates may not be approved even if they achieve their safety and efficacy endpoints in clinical trials. Even if a product candidate is approved, it may be approved for fewer or more limited indications than requested or the approval may be subject to the performance of significant post-marketing studies that can be long and costly. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any limitation, condition or denial of approval or label changes would have an adverse effect on our business, reputation, and results of operations.

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Even if we are granted initial FDA or EMA approval for any of our product candidates, we may not be able to maintain such approval, which would reduce our revenues.

Even if we are granted initial regulatory approval for a product candidate, the FDA, the EMA and similar foreign regulatory agencies can limit or withdraw product approvals for a variety of reasons, including failure to comply with regulatory requirements, changes in regulatory requirements, problems with manufacturing facilities or processes or the occurrence of unforeseen problems, such as the discovery of previously undiscovered side effects. Failure to comply with applicable regulatory requirements can, among other things, result in warning letters, imposition of civil penalties or other monetary payments, delay in approving or refusal to approve a product candidate, suspension or withdrawal of regulatory approval, product recall or seizure, operating restrictions, interruption of clinical trials or manufacturing, injunctions and criminal prosecution. If we are able to obtain any product approvals, they may be limited or withdrawn, or we may be unable to remain in compliance with regulatory requirements. Both before and after approval we, our present and future collaborators and our products are subject to a number of additional requirements. For example, certain changes to the approved product, such as adding new indications, certain manufacturing changes and additional labeling claims are subject to additional FDA or EMA review and approval. Advertising and other promotional material must comply with FDA or EMA requirements. We, our collaborators and our manufacturers will be subject to continuing review and periodic inspections by the FDA, the EMA and other authorities, where applicable, and must comply with ongoing requirements, including the FDA's GMP requirements. Once the FDA or the EMA approves a product, a manufacturer must provide certain updated safety and efficacy information, submit copies of promotional materials to the FDA or the EMA and make certain other required reports are provided. Product approvals may be withdrawn if regulatory requirements are not complied with or if problems concerning safety or efficacy of the product occur following approval. Any limitation or withdrawal of approval of any of our products could delay or prevent sales of our products, which would adversely affect our revenues. Further continuing regulatory requirements may involve expensive ongoing monitoring and testing requirements.

We are a development-stage business and will require substantial capital to complete the development of our product candidates and commercialize them. Any such future financing could result in dilution to shareholders or increased fixed payment obligations and could also result in restrictive covenants or other operating restrictions that could adversely impact our ability to conduct our business.

We are a development-stage company, and our ability to generate revenue and become profitable depends on our ability to successfully complete the development of our product candidates. All of our potential products are in research or development, and we will need to raise additional capital prior to approval and commercialization of our lead product candidate, Apulmiq. Our potential drug products require extensive research and development, including pre-clinical and clinical testing. Our potential products also may involve lengthy regulatory reviews before they can be sold. Because none of our product candidates has yet received approval by the FDA or the EMA, we cannot assure you that our research and development efforts will be successful, any of our potential products will be proven safe and effective, or regulatory clearance or approval to sell any of our potential products will be obtained. We cannot assure you that any of our potential products can be manufactured in commercial quantities with quality systems acceptable to the regulatory authorities at an acceptable cost or marketed successfully. We may abandon the development of some or all of our product candidates at any time and without prior notice. We must incur substantial up-front expenses to develop and commercialize products and failure to achieve commercial feasibility, demonstrate safety, achieve clinical efficacy, obtain regulatory approval or successfully manufacture and market products will negatively impact our business. Running clinical trials and developing an investigational drug for commercialization involve significant expense, and any unexpected delays or other issues in the development process can result in significant additional expense.

Until we can generate a sufficient amount of revenue, we expect to finance future cash needs through public or private equity financings, royalty or debt financings, corporate alliances, joint ventures or licensing agreements. We may sell additional equity or debt securities to fund our operations, which would result in dilution to all of our shareholders or impose restrictive covenants that may adversely impact our business. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available, we may be required to delay or reduce the scope of or eliminate one or more of our research or development programs or our commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves, or cease operations and liquidate.

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We are in a highly competitive market, and our competitors have developed or may develop alternative therapies for our target indications, which would limit the revenue potential of any product we may develop.

We compete with pharmaceutical, biotechnology and drug delivery companies, hospitals, research organizations, individual scientists and nonprofit organizations engaged in the development of drugs and therapies for the disease indications we are targeting. Our competitors may succeed, and many already have succeeded, in developing competing technologies for the same disease indications, obtaining FDA or EMA approval for products or gaining acceptance for the same markets that we are targeting. If we are not first to market, it may be more difficult for us and our present and future collaborators to enter markets as second or subsequent competitors and become commercially successful.

We are aware of a number of companies that are developing or have developed therapies to address indications we are targeting, including major pharmaceutical companies such as Bayer. For example, Bayer has developed an inhaled dry powder formulation of ciprofloxacin for the treatment of respiratory infections in CF and NCFBE. Bayer filed an NDA for U.S. approval and was accepted for Priority Review. In November 2017, the FDA's Advisory Committee voted not to recommend Bayer's dry powder ciprofloxacin to be approved for the treatment of bronchiectasis. Bayer in its 2017 Annual Report have announced that they have decided to discontinue development of Cipro DPI in NCFBE for the time being and will evaluate possible further options for this asset.

There are a number of other inhaled products under development to treat respiratory infections, including a nebulized levofloxacin by Raptor (acquired by Horizon) for CF and inhaled colistin for bronchiectasis. Additionally, Inmed's drug Arikayce (amikacin liposome inhalation suspension), for the treatment of lung disease caused by a group of bacteria, *Mycobacterium avium*, was approved in a limited population of patients in September of 2018. These and many other potential competitors have greater research and development, manufacturing, marketing, sales, distribution, financial and managerial resources and experience than we have and may have products and product candidates that are on the market or in a more advanced stage of development than our product candidates. Our ability to earn product revenues and our market share would be substantially harmed if any existing or potential competitors brought a product to market before we or our present and future collaborators were able to, or if a competitor introduced at any time a product superior to or more cost-effective than ours.

In addition, we believe there are a number of additional drug candidates and pulmonary delivery technologies in various stages of development that, if approved, could compete with any future products we may develop.

Because our inhaled ciprofloxacin programs may rely on the FDA's and EMA's grant of orphan drug designation for potential market exclusivity, the product may not be able to obtain market exclusivity and could be barred from the market in the US for up to seven years or European Union for up to ten years.

The FDA has granted orphan drug designation for our liposomal ciprofloxacin drug product candidate for the management of CF and BE and to our ciprofloxacin for inhalation drug product for the management of bronchiectasis. FDA also granted orphan drug designation to our proprietary drug product of liposomal ciprofloxacin for the management of CF. Orphan drug designation is intended to encourage research and development of new therapies for diseases that affect fewer than 200,000 patients in the United States. The designation provides the opportunity to obtain market exclusivity, even in the absence of a granted patent or other intellectual property protection, for seven years from the date of the FDA's approval of an NDA. However, the market exclusivity is granted only to the first chemical entity to be approved by the FDA for a given indication. Therefore, if another similar inhaled ciprofloxacin product were to be approved by the FDA for a CF or NCFBE indication before our product, then we may be blocked from launching our product in the United States for seven years, unless we are able to demonstrate to the FDA clinical superiority of our product on the basis of safety or efficacy. For the NCFBE indication, Bayer has obtained orphan

drug status for their inhaled powder formulation of ciprofloxacin in the United States for the treatment of bronchiectasis and in the United States and European Union for the treatment of CF. Bayer filed an NDA for U.S. approval, however in November 2017 the FDA's Advisory Committee voted not to recommend Bayer's dry powder ciprofloxacin to be approved for the treatment of bronchiectasis. Bayer in its 2017 Annual Report have announced that they have decided to discontinue development of Cipro DPI in NCFBE for the time being and will evaluate possible further options for this asset.

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In August 2009, the EMA granted orphan drug designation to our inhaled liposomal ciprofloxacin drug product candidate Lipoquin (ARD-3100) for the treatment of lung infections associated with CF. Under European guidelines, Orphan Medicinal Product Designation provides 10 years of potential market exclusivity if the product candidate is the first product candidate for the indication approved for marketing in the EU. We may seek to develop additional products that incorporate drugs that have received orphan drug designations for specific indications. In each case, if our product is not the first to be approved by the FDA or European Medicines Agency for a given orphan indication, we may not be able to access the target market in the United States and/or the EU, which would adversely affect our ability to earn revenues.

Our current and future dependence on collaborators and other third parties may delay or require that we terminate certain of our programs, and any such delay or termination would harm our business prospects and stock price.

We used contract research organizations, or CROs, to conduct our global Phase 3 clinical trials and are using contract research organizations for other analysis and testing activities. We may not be able to maintain satisfactory contract research arrangements, or we may have contractual disputes with such CROs that could adversely impact the timelines for the delivery of data or other materials from the CRO. If our CROs are delayed in their activities or issues are uncovered regarding the quality of the data provided by the CROs it could result in significant delays in our Apulmiq program and adversely impact our ability to obtain regulatory approval for our product candidate.

Our commercialization strategy for certain of our product candidates depends on our ability to enter into or maintain agreements with collaborators, such as our collaboration with Grifols, and to obtain assistance and funding for the development and potential commercialization of our product candidates. Supporting diligence activities conducted by potential collaborators and negotiating the financial and other terms of a collaboration agreement are long and complex processes with uncertain results. Collaborations may involve greater uncertainty for us, as we have less control over certain aspects of our collaborative programs than we would over a proprietary development and commercialization program. We may determine that continuing a collaboration under the terms provided is not in our best interest and, if we are able to under the terms of the agreement, we may terminate the collaboration. Our collaborators could delay or terminate their agreements with us, and our products subject to collaborative arrangements may never be successfully commercialized. Under our existing collaboration agreement with Grifols, we have granted Grifols exclusive rights with respect to inhaled ciprofloxacin compounds for other indications besides the treatment of NCFBE, and we have limited ability to terminate that agreement.

Further, our present or future collaborators may pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, and the priorities or focus of our collaborators may shift such that our programs receive less attention or resources than we would like, or they may be terminated altogether. Any such actions by our collaborators may adversely affect our business prospects and ability to earn revenues. In addition, we could have disputes with our present or future collaborators, such as the interpretation of terms in our agreements. Any such disagreements could lead to delays in the development or commercialization of any potential products or could result in time-consuming and expensive litigation or arbitration, which may not be resolved in our favor.

Even with respect to certain other programs that we intend to commercialize ourselves, or programs that Grifols has declined its exclusive right to fund and commercialize, we may enter into agreements with collaborators to share in the burden of conducting clinical trials, manufacturing and marketing our product candidates or products. In addition, our ability to apply our proprietary technologies to develop proprietary drugs will depend on our ability to establish and maintain licensing arrangements or other collaborative arrangements with the holders of proprietary rights to such drugs. We may not be able to establish such arrangements on favorable terms or at all, and our future collaborative arrangements may not be successful.

We depend, and will continue to depend, on contract manufacturers and collaborators: if they do not perform as expected, our revenues and customer relations will suffer.

We do not have the ability to manufacture the materials we use in our pre-clinical and clinical trials and commercial operations. Rather, we rely on various third-party contract manufacturers to produce our products. There may be long lead times to obtain materials. There can be no assurance that we will be able to identify, contract with, qualify and obtain prior regulatory approval for additional sources of materials. We may also not be able to maintain satisfactory contract manufacturing arrangements with our current contract manufacturers. If we are not, there may be a significant delay before we find an alternative contract manufacturer or we may not find an alternative contract

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manufacturer at all. If there are any interruptions in this supply for any reason, including a decision by the third parties to discontinue manufacturing, technical difficulties, labor disputes, natural or other disasters, or a failure of the third parties to follow regulations, we may not be able to obtain regulatory approvals for our investigational drug candidates and may not be able to successfully commercialize these investigational drug candidates.

Our third-party contract manufacturers and collaborative partners may encounter delays and problems in manufacturing our investigational drug candidates and future commercial products for a variety of reasons, including accidents during operation, failure of equipment, delays in receiving materials, natural or other disasters, political or governmental changes, or other factors inherent in operating complex manufacturing facilities. Supply-chain management is difficult. Commercially available starting materials, reagents, excipients, and other materials may become scarce, more expensive to procure, or not meet quality standards, and we may not be able to obtain favorable terms in agreements with subcontractors. Our third-party contract manufacturers may not be able to operate manufacturing facilities in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. If our third-party manufacturers cease or interrupt production or if our third-party manufacturers and other service providers fail to supply materials, products or services to us for any reason, such interruption could delay progress on our programs, or interrupt the commercial supply, with the potential for additional costs and lost revenues. If this were to occur, we might also need to seek alternative means to fulfill our manufacturing needs.

Further, we, our contract manufacturers and our collaborators are required to comply with the FDA's GMP requirements that relate to product testing, quality assurance, manufacturing and maintaining records and documentation. We and our contract manufacturers or our collaborators may not be able to comply with the applicable GMP and other FDA regulatory requirements for manufacturing, which could result in an enforcement or other action, prevent commercialization of our product candidates and impair our reputation and results of operations.

If any products that we or our collaborators may develop do not attain adequate market acceptance by healthcare professionals and patients, our business prospects and results of operations will suffer.

Even if we or our collaborators successfully develop one or more products, such products may not be commercially acceptable to healthcare professionals and patients, who will have to choose our products over alternative products for the same disease indications. Many of these alternative products may be more established and acceptable than ours. For our products to be commercially viable, we will need to demonstrate to healthcare professionals and patients that our products afford benefits to the patients that are cost-effective as compared to the benefits of alternative therapies. Our ability to demonstrate this depends on a variety of factors, including:

the demonstration of efficacy and safety in clinical trials;

the existence, prevalence, and severity of any side effects;

the potential or perceived advantages or disadvantages compared to alternative treatments;

the timing of market entry relative to competitive treatments;

the pricing relative to competitive products;

the relative cost, convenience, product dependability and ease of administration;

the strength of marketing and distribution support;

the sufficiency of coverage and reimbursement of our product candidates by governmental and other third-party payors;

the product labeling or product insert required by the FDA or regulatory authorities in other countries; and

the potential of patients choosing to use generic products off label.

Our product revenues will be adversely affected if, due to these or other factors, the products we or our collaborators are able to commercialize do not gain significant market acceptance.

Table of Contents***We depend upon our proprietary technologies, and we may not be able to protect our potential competitive proprietary advantage.***

Any of our pending or future patent applications may not result in the issuance of patents and any patents issued may be subjected to further proceedings limiting their scope and may in any event not contain claims broad enough to provide meaningful protection. Any patents that are issued to us or our present and future collaborators may not provide significant proprietary protection or competitive advantage and may be circumvented or invalidated. In addition, unpatented proprietary rights, including trade secrets and know-how, can be difficult to protect and may lose their value if they are independently developed by a third party or if their secrecy is lost. Further, because development and commercialization of pharmaceutical products can be subject to substantial delays, patents may expire and provide only a short period of protection, if any, following commercialization of products.

We may infringe on the intellectual property rights of others, and any litigation could force us to stop selling potential products and could be costly, divert management attention and harm our business.

We must be able to commercialize products without infringing the proprietary rights of other parties. Because the markets in which we operate involve established competitors with significant patent portfolios, including patents relating to compositions of matter, methods of use and methods of drug delivery, it could be difficult for us or our collaborator Grifols to use our technologies or commercialize products without infringing the proprietary rights of others. We may not be able to design around the patented technologies or inventions of others, and we may not be able to obtain licenses to use patented technologies on acceptable terms, or at all. If we cannot operate without infringing on the proprietary rights of others, we will not earn product revenues. For example, we are aware of patents recently issued in the U.S. and assigned to Insmad with claims covering methods of treatment with quinolone antibiotics, which includes ciprofloxacin, against pulmonary infections. We filed a post-grant review, or PGR, petition in the United States Patent and Trademark Office Patent Trial and Appeal Board, or PTAB, challenging the validity of the claims of Insmad's U.S. Patent No. 9,402,845 or the 845 Patent. In a PGR, a petitioner may request that the PTAB reconsider the validity of issued patent claims and any patent claim PTAB determines to be unpatentable is stricken from the challenged patent. In August 2017, Insmad filed a Preliminary Response to our petition. In November 2017, PTAB denied institution of our PGR of the 845 Patent. We are currently assessing the PTAB's decision.

If we or our collaborator Grifols are required to defend an infringement lawsuit, we could incur substantial costs, and the lawsuit could divert management's attention, regardless of the lawsuit's merit or outcome. These legal actions could seek damages and seek to enjoin testing, manufacturing, and marketing of the accused product or process. In addition to potential liability for significant damages, we could be required to obtain a license to continue to manufacture or market the accused product or process and any license required under any such patent may not be made available to us on acceptable terms, if at all, or we could incur significant expenses in royalty payments to a licensor.

Periodically, we review publicly available information regarding the development efforts of others in order to determine whether these efforts may violate our proprietary rights. We may determine that litigation is necessary to enforce our proprietary rights against others. Such litigation could result in substantial expense, regardless of its outcome, and may not be resolved in our favor.

Furthermore, patents already issued to us or our pending patent applications may become subject to dispute, and any disputes could be resolved against us. In addition, patent applications in the United States are currently maintained in secrecy for a period of time prior to issuance and patent applications in certain other countries generally are not published until more than 18 months after they are first filed. Publication of discoveries in scientific or patent literature often lags behind actual discoveries. Therefore, we cannot be certain that we were the first creator of inventions covered by our issued patents or pending patent applications or that we were the first to file patent

applications on such inventions. For example, we are aware of patents recently issued in the U.S. and assigned to Insmed with claims covering methods of treatment with quinolone antibiotics, which includes ciprofloxacin, against pulmonary infections.

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If our future clinical trials are delayed for any reason, we would incur additional costs and delay the potential receipt of revenues.

Before we or any current or future collaborators can file for regulatory approval for the commercial sale of our potential products, the FDA and EMA will require extensive preclinical safety testing and clinical trials to demonstrate their safety and efficacy. Completing clinical trials in a timely manner depends on many factors. Delays in completing any future clinical trials may result in increased costs, program delays, or both, and the loss of potential revenues.

If we do not continue to attract and retain key employees, our product development efforts will be delayed and impaired.

We depend on a small number of key management and technical personnel. Our success also depends on our ability to attract and retain additional highly qualified management, clinical, regulatory and development personnel. There is a shortage of skilled personnel in our industry, we face competition in our recruiting activities, and we may not be able to attract or retain qualified personnel. Our former President and Chief Executive Officer, Dr. Igor Gonda, our former Chief Medical Officer, Dr. Juergen Froehlich, and our former Chief Financial Officer, Nancy Pecota resigned on February 11, 2018. Additionally, Dr. Gonda, Dr. Froehlich and Ms. Pecota were retained by the company as consultants. On May 31, 2018 Dr. Froehlich was rehired as the Company's Chief Medical Officer. These resignations and losing any of our remaining key employees could impair our product development efforts and otherwise harm our business. Any of our employees may terminate their employment with us at will.

If we market our products in other countries, we will be subject to different laws and regulations, and we may not be able to adapt to those laws and regulations, which could increase our costs while reducing our revenues.

If we market any approved products in foreign countries, we will be subject to different laws and regulations, particularly with respect to intellectual property rights and regulatory approval. To maintain a proprietary market position in foreign countries, we may seek to protect some of our proprietary inventions through foreign counterpart patent applications. Statutory differences in patentable subject matter may limit the protection we can obtain on some of our inventions outside of the United States. The diversity of patent laws may make our expenses associated with the development and maintenance of intellectual property in foreign jurisdictions more expensive than we anticipate. We will not obtain the same patent protection in every market in which we may otherwise be able to potentially generate revenues. In addition, in order to market our products in foreign jurisdictions, we and our present and future collaborators must obtain required regulatory approvals from foreign regulatory agencies and comply with extensive regulations regarding safety and quality. We may not be able to obtain regulatory approvals in such jurisdictions, and we may have to incur significant costs in obtaining or maintaining any foreign regulatory approvals. If approvals to market our products are delayed, if we fail to receive these approvals, or if we lose previously received approvals, our business would be impaired as we could not earn revenues from sales in those countries.

We may be exposed to product liability claims, which would hurt our reputation, market position, and operating results.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates in humans and will face an even greater risk upon commercialization of any products. These claims may be made directly by consumers or by pharmaceutical companies or others selling such products. We may be held liable if any product we develop causes injury or is found otherwise unsuitable during product testing, manufacturing or sale. Regardless of merit or eventual outcome, liability claims would likely result in negative publicity, decreased demand for any products that we may develop, injury to our reputation and suspension or withdrawal of clinical trials. Any such claim

will be very costly to defend and also may result in substantial monetary awards to clinical trial participants or customers, loss of revenues and the inability to commercialize products that we develop. Although we currently have clinical trials and product liability insurance, we may not be able to maintain such insurance or obtain additional insurance on acceptable terms, in amounts sufficient to protect our business, or at all. A successful claim brought against us in excess of our insurance coverage would have a material adverse effect on our results of operations.

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If we cannot arrange for adequate third-party reimbursement for our products, our revenues will suffer.

In both domestic and foreign markets, sales of our potential products will depend in substantial part on the availability of adequate reimbursement from third-party payors such as government health administration authorities, private health insurers, and other organizations. Third-party payors often challenge the price and cost-effectiveness of medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved pharmaceutical products. Any products we are able to develop successfully may be deemed not reimbursable by third-party payors. In addition, our products may not be considered cost-effective, and adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize a profit. Legislation and regulations affecting the pricing of pharmaceuticals may change before our products are approved for marketing and any such changes could further limit reimbursement. If any products we develop do not receive adequate reimbursement, our revenues will be severely limited.

Our use of hazardous materials could subject us to liabilities, fines, and sanctions.

Our laboratory and clinical testing sometimes involves the use of hazardous and toxic materials. We are subject to federal, state and local laws and regulations governing how we use, manufacture, handle, store and dispose of these materials. Although we believe that our safety procedures for handling and disposing of such materials comply in all material respects with all federal, state and local regulations and standards, there is always the risk of accidental contamination or injury from these materials. In the event of an accident, we could be held liable for any damages that result and such liability could exceed our financial resources. Compliance with environmental and other laws may be expensive and current, or future regulations may impair our development or commercialization efforts.

If we are unable to effectively implement or maintain a system of internal control over financial reporting, we may not be able to accurately or timely report our financial results and our stock price could be adversely affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate the effectiveness of our internal control over financial reporting as of the end of each fiscal year and to include a management report assessing the effectiveness of our internal control over financial reporting in our Annual Report on Form 10-K for that fiscal year. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Reform Act, became law. The Reform Act includes a provision that indefinitely exempts companies that qualify as either a non-accelerated filer or smaller reporting company from the auditor attestation requirement of Section 404(b) of the Sarbanes-Oxley Act of 2002. For our fiscal 2017 and subsequent foreseeable fiscal years, we expect to be exempt from such requirement. However, our ability to comply with the annual internal control report requirements will depend on the effectiveness of our financial reporting and data systems and controls across our company. We expect these systems and controls to involve significant expenditures and to become increasingly complex as our business grows. To effectively manage this complexity, we will need to continue to improve our operational, financial and management controls and our reporting systems and procedures. Any failure to implement required new or improved controls, or difficulties encountered in the implementation or operation of these controls, could harm our operating results and cause us to fail to meet our financial reporting obligations, which could adversely affect our business and reduce our stock price.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

We store sensitive data, including intellectual property, our proprietary business information and personally identifiable information of our employees, on our network servers, located in our data centers. The secure maintenance of this information is critical to our operations. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance

or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, regulatory penalties, damage our reputation and adversely impact our operating results. Numerous United States federal and state laws and regulations and foreign laws and regulations, including data breach notification laws, health information privacy laws, and federal and consumer protection laws, govern the collection, use, and disclosure of health-related and other personal information. In addition, we may obtain health information from third parties (e.g., healthcare providers who prescribe our products) that are subject to privacy and security requirements under HIPAA.

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Our business and operations would suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such an event could cause interruption of our operations. For example, the loss of data from completed or ongoing clinical trials for our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

Risks Related to Our Common Stock

Our stock price is likely to remain volatile.

The market prices for securities of many companies in the drug delivery and pharmaceutical industries, including ours, have historically been highly volatile, and the market from time to time has experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. The market prices for our common stock may also be influenced by many factors, including:

the limited trading volume for shares of our common stock and the fact that a large percentage of our outstanding shares are held by a small number of shareholders;

announcements of clinical trial results, technological innovations or new commercial products by our competitors or us;

developments or disputes concerning patents or proprietary rights;

delays in the development or approval of our product candidates;

regulatory developments in both the United States and foreign countries;

sales of our stock by certain large institutional shareholders;

research analyst recommendations and our ability to meet or exceed quarterly performance expectations of analysts or investors;

fluctuations in our operating results;

failure to maintain or establish collaborative relationships;

publicity regarding actual or potential developments relating to products under development by our competitors or us;

investor perception of us;

concern of the public or the medical community as to the safety or efficacy of our products, or products deemed to have similar safety risk factors or other similar characteristics to our products;

future sales or expected sales of substantial amounts of common stock by shareholders;

our ability to raise capital; and

economic and other external factors.

In the past, class action securities litigation has often been instituted against companies promptly following volatility in the market price of their securities, and a class action securities suit was instituted against us in the first quarter of 2018 as a result of the decline in the market price of our common stock (this suit was subsequently dismissed by the court in the second quarter of 2018 with prejudice to the lead plaintiff and without prejudice to other putative class members). Any such litigation against us may, regardless of its merit, result in substantial costs and a diversion of management's attention and resources.

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Nasdaq has notified us that we are no longer in compliance with Nasdaq's continued listing requirements. If we fail to regain compliance, we will be subject to delisting by Nasdaq. If we are delisted, our stock price may decline and the liquidity of our securities and our ability to raise capital could be significantly impaired.

Our common stock is listed on the Nasdaq Capital Market, or Nasdaq. In order to maintain that listing, we must sustain a minimum market value of listed securities of \$35 million or shareholder's equity of at least \$2.5 million, among other requirements for continued listing. On March 7, 2018 we received a notice from Nasdaq that we were not in compliance with Nasdaq's Listing Rule 5550(b)(1)-(3), as we had not, among other things, maintained a minimum market value of listed securities of \$35 million. The notification of noncompliance had no immediate effect on the listing or trading of the Company's common stock on Nasdaq under the symbol ARDM. Pursuant to the Nasdaq Listing Rules, we had 180 days, or until September 4, 2018, to regain compliance with the Nasdaq Listing Rules. On September 5, 2018, we received a notice from Nasdaq stating that the Company has not regained compliance with Nasdaq Listing Rule 5550(b)(2) and that the Company's securities will be delisted from Nasdaq. We have appealed this determination and our appeal hearing before a Nasdaq Hearings Panel was held on November 8, 2018.

At our hearing with the Nasdaq Hearings Panel, we undertook to comply with certain conditions, including our completion of this offering, prior to February 15, 2019, in order to maintain our listing on the Nasdaq Capital Market. The Nasdaq Hearings Panel has not yet provided any formal guidance regarding our continued listing on the Nasdaq Capital Market and we cannot assure you that we will be successful in regaining compliance with Nasdaq continued listing requirements or that we will be able to meet, and maintain compliance with, Nasdaq listing standards going forward.

If our stock is delisted from Nasdaq, this may result in a decline in our stock price and would likely impair the liquidity of our securities not only in the number of shares that could be bought and sold at a given price, which might be depressed by the relative illiquidity, but also through delays in the timing of transactions and the potential reduction in media coverage. As a result, an investor may find it significantly more difficult to dispose of our common stock, and our ability to raise future capital through the sale of the shares of our common stock or other securities convertible into or exercisable for our common stock could be materially limited. If we are delisted from Nasdaq, trading in our shares of common stock may be conducted, if available, on the OTC Bulletin Board Service or, if available, via another market.

We have implemented certain anti-takeover provisions, which may make an acquisition less likely or might result in costly litigation or proxy battles.

Certain provisions of our articles of incorporation and the California Corporations Code could discourage a party from acquiring, or make it more difficult for a party to acquire, control of our company without the approval of our Board of Directors. These provisions could also limit the price that certain investors might be willing to pay in the future for shares of our common stock. Certain provisions allow our Board of Directors to authorize the issuance, without shareholder approval, of preferred stock with rights superior to those of the common stock. We are also subject to the provisions of Section 1203 of the California Corporations Code, which requires us to provide a fairness opinion to our shareholders in connection with their consideration of any proposed interested party reorganization transaction.

We have adopted an executive officer severance plan (which was temporarily suspended in the first quarter of 2018) and entered into change of control agreements with our executive officers, both of which may provide for the payment of benefits to our officers and other key employees in connection with an acquisition. The provisions of our articles of incorporation, our severance plan and our change of control agreements, and provisions of the California Corporations Code may discourage, delay or prevent another party from acquiring us or reduce the price that a buyer is willing to pay for our common stock.

One or more of our shareholders may choose to pursue a lawsuit or engage in a proxy battle with management to limit our use of one or more of these anti-takeover protections. Any such lawsuit or proxy battle would, regardless of its merit or outcome, result in substantial costs and a diversion of management's attention and resources.

We have never paid dividends on our capital stock.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and future earnings, if any, to fund the development and growth of our business. Therefore, our shareholders may not receive any funds absent a sale of their shares and, capital appreciation, if any, of our common stock will be our shareholders' sole source of gain for the foreseeable future. We cannot assure shareholders of a positive return on their investment if they sell their shares, nor can we assure that shareholders will not lose the entire amount of their investment.

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Disputes may arise between Grifols and us that may be resolved in a manner unfavorable to our other shareholders and us.

In August 2013, we entered into several agreements with Grifols as part of the completion of a private sale of shares of common stock to Grifols, including, in particular the License and Collaboration Agreement, the Governance Agreement, and a registration rights agreement with respect to shares of common stock owned by Grifols. As a result of the various obligations under these agreements, in addition to Grifols' beneficial ownership of approximately 48% of our common stock (inclusive of shares of our common stock issuable to Grifols upon conversion of its Convertible Notes), conflicts of interest may arise between Grifols and us from time to time. Disagreements regarding the rights and obligation of Grifols under these agreements could create conflicts of interest for one of our directors, who has been designated by Grifols and subsequently nominated by us for election to our Board. Any such disagreements could also lead to actual disputes or legal proceedings that may be resolved in a manner unfavorable to our other shareholders and us. In addition, Grifols has a number of consent rights under the Governance Agreement and certain preemptive rights to participate in any future issuances of common stock (or common stock equivalents) by us or to acquire shares in the open market to maintain ownership thresholds specified in the Governance Agreement. Grifols may exercise any of these rights, or any of its other rights contained in its agreements with us, in a manner which is not necessarily in the best interest of us or our other shareholders. The result of any of these conflicts could adversely affect our business, financial condition, results of operations or the price of our common stock.

Our principal shareholders own a large percentage of our common stock and will be able to exert significant control over matters submitted to our shareholders for approval, including delaying or preventing a change in control of our company.

A small number of our shareholders own a large percentage of our common stock and can, therefore, influence the outcome of matters submitted to our shareholders for approval. Based on information known to us, our two largest shareholders, collectively, beneficially own approximately 75% of the class of our common stock as of September 30, 2018. These two shareholders purchased all of the Convertible Notes and related Warrants described in Note 6 to the condensed consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018, leading to a corresponding increase in their respective ownership on a fully-diluted basis. As a result, these shareholders have the ability to influence the outcome of matters submitted to our shareholders for approval, including certain proposed amendments to our amended and restated articles of incorporation (for example, amendments to increase the number of our authorized shares) and any other material transactions we may undertake in the future, such as a financing transaction or a merger, consolidation or sale of all or substantially all of our assets. These shareholders may support proposals and actions with which you may disagree. The concentration of ownership could delay or prevent a change in control of our company or otherwise discourage a potential acquirer from attempting to obtain control of our company, which in turn could reduce the price of our common stock.

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USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$ _____ million, based on an assumed offering price of \$ _____ per Class A Unit and \$ _____ per Class B Unit, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their overallotment option in full, we estimate that our net proceeds will be approximately \$ _____ million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We will not receive any additional proceeds from any future conversions of the Series A Preferred Stock. We will only receive additional proceeds from the exercise of the warrants issuable in connection with this offering if the warrants are exercised and the holders of such warrants pay the exercise price in cash upon such exercise and do not utilize the cashless exercise provision of the warrants.

A \$1.00 increase (decrease) in the assumed public offering price of the Class A Units (assuming no Class B Units are sold) would increase (decrease) the net proceeds to us from this offering by \$ _____ million, assuming the number of Class A Units offered by us remains the same and after deducting the estimated underwriting discounts and commissions. Similarly, each aggregate increase (decrease) of one million Class A Units (assuming no Class B Units are sold) would increase (decrease) the net proceeds to us from this offering by approximately \$ _____ million, assuming that the assumed public offering price of Class A Units remains the same and after deducting the estimated underwriting discounts and commissions.

We intend to use net proceeds from this offering for working capital needs, capital expenditures, and other general corporate purposes in pursuit of advancing our commercial, clinical, and preclinical efforts. Our management will have broad discretion in the application of our net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of these proceeds.

Table of Contents**DILUTION**

Our net tangible book value as of September 30, 2018 was approximately \$(23.5) million, or approximately \$(1.54) per share of common stock based on 15,219,793 shares outstanding. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding on that date.

After giving effect to the effect to the sale of Class A Units and Class B Units in this offering, based on an assumed offering price of \$ per Class A Unit and \$ per Class B Unit, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, we would have had a net tangible book value as of September 30, 2018 of approximately \$ million, or \$ per share of common stock. This represents an immediate increase in the net tangible book value of \$ per share to our existing stockholders and an immediate dilution in net tangible book value of \$ per share to the investor in this offering. The following table illustrates this per share dilution:

Assumed public offering price per share of common stock	\$
Net tangible book value per share as of September 30, 2018	\$ (1.54)
Increase in net tangible book value per share attributable to new investors in this offering	

As adjusted net tangible book value per share after giving effect to this offering

Dilution in net tangible book value per share to new investors in this offering	\$
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A \$1.00 increase (decrease) in the assumed public offering price of the Class A Units (assuming no Class B Units are sold) would increase (decrease) our as adjusted net tangible book value per share after this offering by \$ million, assuming the number of Class A Units offered by us remains the same and after deducting the estimated underwriting discounts and commissions. Similarly, each aggregate increase (decrease) of one million Class A Units (assuming no Class B Units are sold) would increase (decrease) the dilution to new investors by \$ per share, assuming that the assumed public offering price of Class A Units remains the same and after deducting the estimated underwriting discounts and commissions.

The number of shares of our common stock to be outstanding after this offering is based on 15,219,793 shares of our common stock outstanding as of September 30, 2018, and excludes:

3,566,772 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2018 at a weighted-average exercise price of \$3.04 per share;

2,265,933 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan;

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23,731 shares of common stock reserved for future issuance upon vesting of restricted stock and restricted stock units granted under our 2015 Equity Incentive Plan;

123,013 shares of common stock reserved for future issuance under our Employee Stock Purchase Plan; and

4,867,083 shares of common stock reserved for issuance upon the exercise of warrants outstanding and the conversion of notes outstanding.

The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares that we offer in this offering, and other terms of this offering determined at pricing. In addition, the information discussed above assumes no exercise of the underwriters' overallotment option.

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The following table shows our cash, cash equivalents and restricted cash, and our capitalization as of September 30, 2018 on:

an actual basis; and

an as adjusted basis to give effect to the sale of Class A Units and Class B Units in this offering, based on an assumed offering price of \$ per Class A Unit and \$ per Class B Unit, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	As of September 30, 2018	
	Actual	As
	(Unaudited)	Adjusted
	(in thousands, except share and per share data)	
Cash and cash equivalents	\$ 2,946	\$
Long-term debt	\$ 24,309	\$
Shareholders equity (deficit):		
Preferred stock, no par value, 5,000,000 shares authorized, no shares issued and outstanding, actual; shares issued and outstanding as adjusted		
Common stock, no par value, 50,045,765 shares authorized, 15,219,793 shares issued and outstanding, actual; shares issued and outstanding, as adjusted	443,948	
Accumulated deficit	(467,410)	
Total shareholders equity (deficit)	(\$ 23,462)	\$

The number of shares of our common stock to be outstanding after this offering is based on 15,219,793 shares of our common stock outstanding as of September 30, 2018, and excludes:

3,566,772 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2018 at a weighted-average exercise price of \$3.04 per share;

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2,265,933 shares of common stock reserved for future issuance under our 2015 Equity Incentive Plan;

23,731 shares of common stock reserved for future issuance upon vesting of restricted stock and restricted stock units granted under our 2015 Equity Incentive Plan;

123,013 shares of common stock reserved for future issuance under our Employee Stock Purchase Plan; and

4,867,083 shares of common stock reserved for issuance upon the exercise of warrants outstanding and the conversion of notes outstanding.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The following includes a summary of transactions since January 1, 2015 in which we have been a participant, or any proposed transaction, in which the amount involved in the transaction exceeded the lesser of \$120,000 or one percent of the average of our total assets at year end for the last two completed fiscal years and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change of control and other arrangements, which are described under Executive Compensation in our Annual Report on Form 10-K (which incorporates such information by reference from the section captioned Compensation in our definitive proxy statement filed on May 15, 2018), which report is incorporated by reference in this prospectus.

Collaboration with Grifols

We are party to the License Agreement with Grifols, which is the beneficial owner of approximately 48% of the Company's common stock, under which we licensed to Grifols the Licensed Products on an exclusive, world-wide basis. For more information on the License Agreement, see Summary Aradigm Overview.

Under the License Agreement, Grifols funded \$65 million for certain development expenses (which includes allocations for our internal, fully-burdened expenses). During the years ended December 31, 2017, December 31, 2016 and December 31, 2015, we recognized approximately \$14 million, \$40,000 and \$23 million, respectively, in contract revenue relating to services performed and costs incurred during the period under the License Agreement. We have utilized the full amount of the \$65 million of Grifols-funded budget provided under the License Agreement and will not be recognizing any future revenue related to the \$65 million Grifols-funded budget.

We are also party to a registration rights agreement with Grifols and a governance agreement with Grifols, or the Governance Agreement, which, among other things, grants certain rights to Grifols to maintain a target level of ownership in our company and certain preemptive rights to participate in future issuances of our capital stock. For more information on each of these agreements, see Description of Securities Common Stock.

9.0% Convertible Senior Notes due 2021

On April 21, 2016, we entered into a securities purchase agreement with various purchasers, including two entities who are beneficial owners of more than 5% of our common stock (Grifols and First Eagle), in connection with the private placement of \$23 million in aggregate principal amount of Convertible Notes to an indenture of the same date with the same purchasers and associated warrants, or the 2016 Private Placement. On May 1, 2018 and November 1, 2018, we issued additional Convertible Notes in the aggregate principal amount of \$1,035,000 and \$1,079,325, respectively. These Convertible Notes were issued to capitalize accrued but unpaid interest payable on the previously-issued Convertible Notes.

The Convertible Notes are senior unsecured and unsubordinated obligations; rank equal in right of payment to our existing and future unsecured indebtedness that is not subordinated and are effectively subordinated in right of payment to our existing and future secured indebtedness. On or after December 1, 2017, we may redeem for cash all or a portion of the Convertible Notes if the last reported sale price of our common stock is at any time equal to or greater than 200% of the conversion price then in effect for at least twenty trading days immediately preceding the date on which we provide notice of redemption, at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date. The indenture pursuant to which the Convertible Notes were issued provides for customary events of default, which may result in the

acceleration of the maturity of the Convertible Notes, including, but not limited to, cross acceleration to certain other indebtedness of ours and our subsidiaries. In the case of an event of default arising from specified events of bankruptcy or insolvency or reorganization, all outstanding Convertible Notes will become due and payable immediately without further action or notice. If any other event of default under the indenture occurs or is continuing, the trustee or holders of at least 25% in the aggregate principal amount of the then outstanding Convertible Notes may declare all the Convertible Notes to be due and payable immediately.

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The warrants have a five-year term and are exercisable at \$5.21 per share of common stock. The exercise price is subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events or upon any distributions of assets, including cash, stock or other property to our shareholders.

Grifols and First Eagle acquired an aggregate principal amount of \$19,950,000 and \$3,000,000 of Convertible Notes, respectively. No principal payments have been made, interest payments in the amounts of \$2,723,175 and \$350,250 have been made to Grifols and First Eagle, respectively, and accrued and unpaid interest amounts of \$1,835,899 and \$276,074 owed to each of Grifols and First Eagle, respectively, have been capitalized by adding such amount to the principal balance of Convertible Notes held by each of Grifols and First Eagle. In addition, First Eagle also purchased warrants exercisable for 259,117 shares of our common stock in the 2016 Private Placement at an exercise price of \$5.21 per share of common stock.

9.0% Senior Promissory Notes due 2021

On April 13, 2018, we entered into a note purchase agreement between us and certain institutional lenders, including entities affiliated with Grifols and First Eagle, two entities who are beneficial owners of more than 5% of our common stock, whereby such lenders agreed to purchase up to approximately \$7 million aggregate principal amount of our Notes. We completed the first closing under the note purchase agreement on April 13, 2018, at which time we issued and sold approximately \$2 million aggregate principal amount of Notes to the lenders thereunder. We completed subsequent closings under the note purchase agreement on May 14, 2018, June 13, 2018, July 13, 2018, August 13, 2018 and September 12, 2018 pursuant to which we sold, at each such subsequent closing, Notes in the aggregate principal amount of approximately \$1 million to certain of the lenders under the note purchase agreement.

On October 25, 2018, we entered into a senior note purchase agreement whereby Grifols agreed to purchase up to \$4 million aggregate principal amount of our 9.0% Senior Promissory Notes due 2021, or the October 2018 Notes. We refer to the sale and issuance of the October 2018 Notes as the October 2018 Private Placement. We completed the first closing under the senior note purchase agreement on October 25, 2018, at which time we issued and sold \$2 million aggregate principal amount of October 2018 Notes to Grifols. Subject to the satisfaction or waiver of the conditions of the closing set forth in the senior note purchase agreement, we anticipate the sale of the remaining approximately \$2 million of the October 2018 Notes to occur in one subsequent closing, which is anticipated to occur prior to December 31, 2018.

The Notes are senior unsecured obligations of ours and bear interest at a fixed rate of 9.0% per annum, payable semiannually in arrears on May 1 and November 1 of each year, beginning on May 1, 2018 in the case of Notes issued on April 13, 2018 and on November 1, 2018 in the case of Notes issued thereafter, unless earlier redeemed or cancelled in accordance with the terms of the Notes. The Notes rank (i) senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the Notes, (ii) equal in right of payment to any of our indebtedness that is not so subordinated, including the Convertible Notes (iii) effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness, and (iv) structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

We may, at our option, redeem for cash all or any portion of the outstanding Notes (or a pro rata basis) at any time in whole and, from time to time, in part. There is no sinking fund provided for the Notes. The redemption price for the Notes will equal 100% of the aggregate principal amount being redeemed plus accrued and unpaid interest to, but excluding, any redemption date.

The October 2018 Notes are senior unsecured obligations of ours and bear interest at a fixed rate of 9.0% per annum, payable semiannually in arrears on May 1 and November 1 of each year, beginning on November 1, 2018, in the case of October 2018 Notes issued on October 25, 2018, and on May 1, 2019, in the case of October 2018 Notes issued thereafter, unless earlier redeemed or cancelled in accordance with the terms of the October 2018 Notes. The October 2018 Notes are our senior unsecured obligations and rank (i) senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the October 2018 Notes, (ii) equal in right of payment to any of our indebtedness that is not so subordinated, including the Convertible Notes and the Notes (iii) effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness, and (iv) structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

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We may, at our option, redeem for cash all or any portion of the outstanding October 2018 Notes (on a pro rata basis) at any time in whole or from time to time in part. There is no sinking fund provided for the October 2018 Notes. The redemption price for the October 2018 Notes will equal 100% of the aggregate principal amount being redeemed plus accrued and unpaid interest to, but excluding, the redemption date.

Grifols and First Eagle acquired an aggregate principal amount of \$5,950,000 and \$1,050,000 of Notes, respectively. No principal payments have been made and accrued and unpaid interest amounts of \$181,426 and \$51,925 owed to each of Grifols and First Eagle, respectively, have been capitalized by adding such amount to the principal balance of Notes held by each of Grifols and First Eagle.

Grifols acquired an aggregate principal amount of \$2 million of October 2018 Notes and no principal payments have been made on the October 2018 Notes. We have elected to accrue all interest due on the October 2018 Notes and no principal payments have been made.

Other Transactions

In 2016 we engaged the law firm Hogan Lovells US LLP, or Hogan Lovells, to provide legal services to the Company. An immediate family member of Virgil Thompson, one of our directors and our former Chairman, previously served as a partner at Hogan Lovells. We incurred \$605,400 and \$752,000 for services performed by Hogan Lovells during the years ended December 31, 2016 and 2017, respectively. For January 1, 2018 through November 1, 2018, we have incurred approximately \$564,000 for services performed by Hogan Lovells.

Review, Approval or Ratification of Transactions with Related Persons

The Board has adopted, in writing, a policy and procedures for the review of related person transactions. Any related person transaction we propose to enter into must be reported to our Principal Financial Officer and, unless otherwise reviewed and approved by the Board, shall be reviewed and approved by the Audit Committee in accordance with the terms of the policy, prior to effectiveness or consummation of any related person transaction, whenever practicable. The policy defines a related person transaction as any financial transaction, arrangement or relationship (including any indebtedness or guarantee of indebtedness), or any series of similar transactions, arrangements or relationships in which (i) we were or are to be a participant, (ii) the amount involved exceeds \$120,000 and (iii) a Related Person (as defined therein) had or will have a direct or indirect material interest. In addition, any related person transaction previously approved by the Audit Committee or otherwise already existing that is ongoing in nature shall be reviewed by the Audit Committee annually to ensure that such related person transaction has been conducted in accordance with the previous approval granted by the Audit Committee, if any, and that all required disclosures regarding the related person transaction are made. Transactions involving compensation of executive officers shall be reviewed and approved by the Compensation Committee in the manner specified in the charter of the Compensation Committee. As appropriate for the circumstances, the Audit Committee shall review and consider the Related Person's interest in the related person transaction, the approximate dollar value of the amount involved in the related person transaction, the approximate dollar value of the amount of the Related Person's interest in the transaction without regard to the amount of any profit or loss, whether the transaction was undertaken in the ordinary course of business, whether the transaction with the Related Person is proposed to be, or was, entered into on terms no less favorable to the Company than terms that could have been reached with an unrelated third party, the purpose of, and the potential benefits to us of the transaction and any other information regarding the related person transaction or the Related Person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

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The following table sets forth certain information regarding the ownership of our common stock as of November 27, 2018, except where noted otherwise, by: (i) each current director of our company; (ii) each of our named executive officers (which may include former executive officers); (iii) all current executive officers and directors of our company as a group; and (iv) all those persons known by us to be beneficial owners of more than five percent (5%) of our common stock.

Beneficial ownership is determined according to the rules of the Securities and Exchange Commission and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, including options that are currently exercisable or exercisable within 60 days of November 27, 2018. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown that they beneficially own.

Our calculation of the percentage of beneficial ownership prior to this offering is based on 15,219,793 shares of our common stock outstanding as of November 27, 2018. The percentage ownership information under the column entitled **Beneficial Ownership after this offering** gives effect to the sale of units in this offering, assuming the sale of units and no sale of any Class B units in this offering, and assumes no exercise of the underwriter's option to purchase additional securities and no exercise of the common warrants issued pursuant to this offering.

Shares of our common stock subject (i) to convertible notes currently convertible or convertible within 60 days of November 27, 2018 or (ii) stock options currently exercisable or exercisable within 60 days of November 27, 2018, are deemed to be outstanding for computing the percentage ownership of the person holding these options and the percentage ownership of any group of which the holder is a member but are not deemed outstanding for computing the percentage of any other person.

	Beneficial Ownership before this offering(1)		Beneficial Ownership after this offering(1)	
	Number of Shares	Percentage of Total (%)	Number of Shares	Percentage of Total (%)
5% Stockholders				
Grifols, S.A.(2) Avinguda de la Generalitat, 152-158 Parc de Negocis Can Sant Joan Sant Cugat del Valles 08174, Barcelona, Spain	9,245,851	48.1		
First Eagle Investment Management, LLC(3) 1345 Avenue of the Americas New York, NY 10105	4,263,173	26.2%		
Executive Officers and Directors				
Igor Gonda(4)	433,526	2.8%		
Nancy Pecota(5)	57,750	*		
Juergen K. Froehlich(6)	364,712	2.4%		
Virgil D. Thompson(7)	262,651	1.7%		
John M. Siebert(8)	344,587	2.2%		

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Edwin H. Gordon	148,661	*
Frederick M. Hudson	225,652	1.5%
Theresa Matkovits	25,000	*
All current executive officers and directors as a group (6 persons)(9)	1,371,263	8.4%

* Less than one percent.

(1) This table is based upon information supplied by officers, directors and principal shareholders and information contained in Forms 3, 4 and 5 and Schedules 13D and 13G filed with the SEC and our records. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, each of the shareholders

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named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 15,219,793 shares of our common stock outstanding on November 27, 2018. Beneficial ownership is determined in accordance with SEC rules. In computing the number of shares beneficially owned by an entity or person and the percentage of ownership of that entity or person, shares of our common stock (a) that would be issued upon the conversion of our outstanding senior convertible notes due 2021, or the Notes, as of September 30, 2018 (except as otherwise noted), (b) that would be issued upon the exercise of our outstanding warrants, and (c) subject to options held by that person that will be vested and exercisable within 60 days of November 27, 2018 are deemed outstanding. Such shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the address of each person on this table is c/o Aradigm Corporation, 3929 Point Eden Way, Hayward, California, 94545.

- (2) The information shown in the table above and in this footnote 2 with respect to beneficial ownership of our common stock by Grifols reflects information available to us as of September 30, 2018. Grifols holds sole voting power and sole dispositive power over 5,244,363 shares of common stock. Grifols shares voting power and dispositive power over 4,001,488 shares of common stock with Grifols Worldwide Operations Limited, a company organized under the laws of Ireland and a wholly-owned subsidiary of Grifols. The aggregate amount of shares of common stock shown includes 4,001,488 shares of common stock issuable upon conversion of Notes held by Grifols Worldwide Operations Limited. The address of the principal office of Grifols is Avinguda de la Generalitat, 152-158, Parc de Negocis Can Sant Joan, Sant Cugat del Valles 08174, Barcelona, Spain, and of Grifols Worldwide is Grange Castle Business Park, Grange Castle, Clondalkin, Dublin 22, Ireland.
- (3) Based upon information contained in a Schedule 13D/A filed with the SEC on April 20, 2018, Form 4s filed after that date and the company's records. First Eagle Investment Management, LLC, or FEIM (formerly Arnhold and S. Bleichroeder Advisors, LLC), an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, may be deemed to beneficially own 4,263,173 shares of our common stock, as a result of acting as investment advisor to various clients. Clients of FEIM have the right to receive and the ultimate power to direct the receipt of dividends from, or the proceeds of the sale of, such securities. FEIM may be deemed to share beneficial ownership of certain shares with First Eagle Value in Biotechnology Master Fund, Ltd., a Cayman Islands company for which FEIM acts as investment adviser, and 21 April Fund Ltd., a Cayman Islands company for which FEIM also acts as an investment adviser. The aggregate amount of shares of common stock shown includes (a) 628,803 shares of common stock issuable upon the conversion of Notes and (b) 259,117 shares issuable upon the conversion of warrants.
- (4) Includes 279,230 stock options which are exercisable within 60 days of November 27, 2018. Dr. Gonda ceased service with us on February 11, 2018. As of June 5, 2017, which is the last date on which Dr. Gonda filed a Form 4 with the SEC with respect to shares of our common stock, Dr. Gonda held 146,766 shares of our common stock.
- (5) Includes 7,500 stock options which are exercisable within 60 days of November 27, 2018. Ms. Pecota ceased service with us on February 11, 2018. As of June 5, 2017, which is the last date on which Ms. Pecota filed a Form 4 with the SEC with respect to shares of our common stock, Ms. Pecota held 110,827 shares of our common stock.
- (6) Includes 212,176 stock options which are exercisable within 60 days of November 27, 2018.
- (7) Includes 237,402 stock options which are exercisable within 60 days of November 27, 2018.
- (8) Includes 332,046 stock options which are exercisable within 60 days of November 27, 2018.
- (9) See footnotes (5) through (8) above.

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DESCRIPTION OF SECURITIES

The following description of our common stock and preferred stock summarizes the material terms and provisions of the common stock and preferred stock that we may issue in connection with this offering. It may not contain all the information that is important to you. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation, as amended and restated, and our amended and restated bylaws, which were filed as exhibits to the registration statement of which this prospectus forms a part.

Common Stock

Under our restated certificate of incorporation, as of September 30, 2018, we had authority to issue 50,045,765 shares of our common stock, no par value. As of September 30, 2018, 15,219,793 shares of our common stock were issued and outstanding. All shares of our common stock will, when issued, be duly authorized, fully paid and nonassessable.

Voting Rights. For all matters submitted to a vote of stockholders, each holder of our common stock is entitled to one vote for each share registered in his or her name. Except as may be required by law and in connection with some significant actions, such as mergers, consolidations, or amendments to our certificate of incorporation that affect the rights of stockholders, holders of our common stock vote together as a single class. There is no cumulative voting in the election of our directors, which means that, subject to any rights to elect directors that are granted to the holders of any class or series of preferred stock, a plurality of the votes cast at a meeting of stockholders at which a quorum is present is sufficient to elect a director.

Liquidation. In the event we are liquidated, dissolved or our affairs are wound up, after we pay or make adequate provision for all of our known debts and liabilities, each holder of our common stock will be entitled to share ratably in all assets that remain, subject to any rights that are granted to the holders of any class or series of preferred stock.

Dividends. Subject to preferential dividend rights of any other class or series of stock, the holders of shares of our common stock are entitled to receive dividends, including dividends of our stock, as and when declared by our board of directors, subject to any limitations imposed by law and to the rights of the holders, if any, of our preferred stock. We have never paid cash dividends on our common stock. We do not anticipate paying periodic cash dividends on our common stock for the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon our earnings, if any, capital requirements, operating and financial conditions and on such other factors as the board of directors deems relevant.

Other Rights and Restrictions. Subject to the preferential rights of any other class or series of stock, all shares of our common stock have equal dividend, distribution, liquidation and other rights, and have no preference, appraisal or exchange rights, except for any appraisal rights provided by California law. Furthermore, holders of our common stock have no conversion, sinking fund or redemption rights, or preemptive rights to subscribe for any of our securities. Our certificate of incorporation and our bylaws do not restrict the ability of a holder of our common stock to transfer his or her shares of our common stock.

The rights, powers, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock which we may designate and issue in the future.

Shareholders

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As of November 29, 2018, there were 15,279,793 shares of common stock issued and outstanding, which shares were held by 58 shareholders of record. A greater number of holders of common stock are street name or beneficial holders, whose shares are held of record by banks, brokers and other financial institutions.

Listing. Our common stock is listed on The Nasdaq Capital Market under the symbol ARDM.

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Transfer Agent and Registrar. The transfer agent and registrar for our common stock is ComputerShare Trust Company, N.A.

Reverse Stock Split

At a special meeting of our stockholders to be held on _____, we are seeking the approval of our stockholders holding a majority of our outstanding voting power authorized an amendment to our certificate of incorporation to effect a reverse stock split of our common stock at an exchange ratio between 1-for-_____ and 1-for-_____ with our Board of Directors retaining the discretion as to whether to implement the reverse stock split and the exact exchange ratio to implement. We anticipate that immediately prior to the effectiveness of the registration statement of which this prospectus forms a part, our Board of Directors will determine the reverse stock split ratio.

Preferred Stock

Under our restated certificate of incorporation, we have authority, subject to any limitations prescribed by law and without further stockholder approval, to issue from time to time up to 5,000,000 shares of preferred stock, par value \$0.001 per share, in one or more series. As of September 30, 2018, no shares of preferred stock were issued and outstanding.

Pursuant to our restated certificate of incorporation, we are authorized to issue blank check preferred stock, which may be issued from time to time in one or more series upon authorization by our board of directors. Our board of directors, without further approval of the stockholders, is authorized to fix the designation, powers, preferences, relative, participating optional or other special rights, and any qualifications, limitations and restrictions applicable to each series of the preferred stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes could, among other things, adversely affect the voting power or rights of the holders of our common stock and, under certain circumstances, make it more difficult for a third party to gain control of us, discourage bids for our common stock at a premium or otherwise adversely affect the market price of the common stock.

Description of the Series A Preferred Stock Included in the Class B Units

In connection with this offering, our board of directors will designate shares of our preferred stock as Series A Preferred Stock. The preferences and rights of the Series A Preferred Stock will be as set forth in a Certificate of Designation, or Series A Certificate of Designation, filed as an exhibit to the registration statement of which this prospectus forms a part.

In the event of a liquidation, the holders of Series A Preferred Stock will be entitled to participate on an as-converted-to-common-stock basis with holders of the common stock in any distribution of assets of the Company to the holders of the common stock. The Series A Certificate of Designation will provide, among other things, that we shall not pay any dividends on shares of common stock (other than dividends in the form of common stock) unless and until such time as we pay dividends on each share of Series A Preferred Stock on an as-converted basis. Other than as set forth in the previous sentence, the Series A Certificate of Designation will provide that no other dividends shall be paid on shares of Series A Preferred Stock and that we shall pay no dividends (other than dividends in the form of common stock) on shares of common stock unless we simultaneously comply with the previous sentence. The Series A Certificate of Designation will not provide for any restriction on the repurchase of Series A Preferred Stock by us while there is any arrearage in the payment of dividends on the Series A Preferred Stock. There will be no sinking fund provisions applicable to the Series A Preferred Stock.

With certain exceptions, as described in the Series A Certificate of Designation, the Series A Preferred Stock will have no voting rights. However, as long as any shares of Series A Preferred Stock remain outstanding, the Series A Certificate of Designation will provide that we shall not, without the affirmative vote of holders of a majority of the then-outstanding shares of Series A Preferred Stock, (a) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock or alter or amend the Series A Certificate of Designation, (b) amend our certificate of incorporation or other charter documents in any manner that adversely affects any rights of the holders of Series A Preferred Stock, (c) increase the number of authorized shares of Series A Preferred Stock or (d) enter into any agreement with respect to any of the foregoing.

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Each share of Series A Preferred Stock will be convertible at any time at the holder's option into 250 shares of common stock, which conversion ratio will be subject to adjustment for stock splits, stock dividends, distributions, subdivisions and combinations. Notwithstanding the foregoing, the Series A Certificate of Designation will further provide that we shall not effect any conversion of the Series A Preferred Stock, with certain exceptions, to the extent that, after giving effect to an attempted conversion, the holder of Series A Preferred Stock (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of Common Stock in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the shares of our common stock then outstanding after giving effect to such exercise (the Preferred Stock Beneficial Ownership Limitation).

Additionally, subject to certain exceptions, at any time after the issuance of the Series A Preferred Stock, subject to the Preferred Stock Beneficial Ownership Limitation, we will have the right to cause each holder of the Series A Preferred Stock to convert all or part of such holder's Series A Preferred Stock in the event that (i) the volume weighted average price of our common stock for 30 consecutive trading days (the Measurement Period) exceeds 300% of the conversion price of the preferred stock issued in this offering (subject to adjustment for forward and reverse stock splits, recapitalizations, stock dividends and similar transactions), (ii) the average daily trading volume for such Measurement Period exceeds \$500,000 per trading day and (iii) certain other equity conditions are met, and subject to the Preferred Beneficial Ownership Limitation. Our right to cause each holder of the Series A Preferred Stock to convert all or part of such holder's Series A Preferred Stock shall be exercised ratably among the holders of the then outstanding Series A Preferred Stock.

We do not intend to apply for listing of the Series A Preferred Stock on any securities exchange or other trading system.

The transfer agent for our Series A Preferred Stock will be ComputerShare Trust Company, N.A.

Description of Warrants Included in the Units

The material terms and provisions of the warrants being offered pursuant to this prospectus are summarized below. This summary of some provisions of the warrants is not complete. For the complete terms of the warrants, you should refer to the form of warrant filed as an exhibit to the registration statement of which this prospectus forms a part. Pursuant to a warrant agency agreement between us and American Stock Transfer & Trust Company, LLC, as warrant agent, the warrants will be issued in book-entry form and shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian, on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

Each Class A Unit includes a warrant to purchase one share of our common stock and each Class B Unit issued in this offering includes a warrant to purchase _____ shares of our common stock at a price equal to \$ _____ per share at any time for up to five years after the date of the closing of this offering. The warrants issued in this offering will be governed by the terms of a global warrant held in book-entry form. The holder of a warrant will not be deemed a holder of our underlying common stock until the warrant is exercised.

Subject to certain limitations as described below the warrants are immediately exercisable upon issuance on the closing date and expire on the five year anniversary of the closing date. Subject to limited exceptions, a holder of warrants will not have the right to exercise any portion of its warrants if the holder (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of common stock in excess of 4.99% (or, at the election of the purchaser prior to the date of issuance, 9.99%) of the shares of our Common Stock then outstanding after giving effect to such exercise.

The exercise price and the number of shares issuable upon exercise of the warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications, reorganizations or similar events affecting our common stock. The warrant holders must pay the exercise price in cash upon exercise of the warrants, unless such warrant holders are utilizing the cashless exercise provision of the warrants. On the expiration date, unexercised warrants will automatically be exercised via the cashless exercise provision.

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In addition, in the event we consummate a merger or consolidation with or into another person or other reorganization event in which our common shares are converted or exchanged for securities, cash or other property, or we sell, lease, license, assign, transfer, convey or otherwise dispose of all or substantially all of our assets or we or another person acquire 50% or more of our outstanding shares of common stock, then following such event, the holders of the warrants will be entitled to receive upon exercise of such warrants the same kind and amount of securities, cash or property which the holders would have received had they exercised their warrants immediately prior to such fundamental transaction. Any successor to us or surviving entity shall assume the obligations under the warrants. Additionally, as more fully described in the warrants, in the event of certain fundamental transactions, the holders of the warrants will be entitled to receive consideration in an amount based on the Black Scholes (as defined therein) value of the warrants on the date of consummation of such transaction.

Upon the holder's exercise of a warrant, we will issue the shares of common stock issuable upon exercise of the warrant within two trading days following our receipt of a notice of exercise, provided that payment of the exercise price has been made (unless exercised via the cashless exercise provision). Prior to the exercise of any warrants to purchase common stock, holders of the warrants will not have any of the rights of holders of the common stock purchasable upon exercise, including the right to vote, except as set forth therein.

Warrant holders may exercise warrants only if the issuance of the shares of common stock upon exercise of the warrants is covered by an effective registration statement, or an exemption from registration is available under the Securities Act and the securities laws of the state in which the holder resides. We intend to use commercially reasonable efforts to have the registration statement, of which this prospectus forms a part, effective when the warrants are exercised. The warrant holders must pay the exercise price in cash upon exercise of the warrants unless there is not an effective registration statement or, if required, there is not an effective state law registration or exemption covering the issuance of the shares underlying the warrants (in which case, the warrants may only be exercised via a cashless exercise provision).

We do not intend to apply for listing of the warrants on any securities exchange or other trading system.

Outstanding Warrants

Prior to this offering, as of September 30, 2018, we issued warrants to purchase 263,436 shares of our common stock with an exercise price of \$5.21 per share of common stock. Such warrants are subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events or upon any distributions of assets, including cash, stock or other property to the Company's shareholders and have expiration dates ranging from April 2023 through July 2023.

Certain Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval. We may issue these additional shares for a variety of corporate purposes, including future public or private offerings to raise additional capital or to facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved preferred stock may enable our board of directors to issue shares of preferred stock with terms that could render more difficult or discourage a third-party attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise, thereby protecting the continuity of our management. In addition, if we issue additional preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that holders of common stock will receive dividend payments or payments upon liquidation.

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Governance Agreement

In connection with the License Agreement with Grifols, we entered into the Governance Agreement that sets forth certain rights and obligations of both parties concerning, among other things, certain corporate governance matters, certain limitations on future acquisitions of shares of common stock by Grifols and certain rights by Grifols to maintain a target level of ownership in the Company. The Governance Agreement also provides Grifols with certain preemptive rights to participate in future issuances of our common stock or equivalents of our common stock, or the right to acquire shares of our common stock from third parties or on the open market to maintain its target level of ownership in the Company. We entered into an amendment of the Governance Agreement to increase Grifols' target level of ownership and a waiver of Grifols' preemptive rights in connection with our offering of notes and warrants in 2016.

Registration Rights

In connection with the sale of a total of 333,968,104 shares of our common stock pursuant to a Stock Purchase Agreement dated May 20, 2013 (with such total number of shares not giving effect to the forty to one reverse stock split that occurred on May 23, 2014), we also entered into a registration rights agreement, or the Grifols Registration Rights Agreement, pursuant to which we agreed to provide registration rights to Grifols with respect to the shares of our common stock to be acquired by Grifols. Under this agreement, Grifols is entitled to require us to file with the SEC certain registration statements under the Securities Act, with respect to the resale of our shares of common stock acquired by Grifols up to 3 times on a Form S-1 and up to 6 times on a Form S-3, and to include Grifols' shares of common stock in any registration we propose for its own account or for the account of one or more of our shareholders. We entered into a waiver of the Grifols Registration Rights Agreement in connection with our offering of notes and warrants in 2016.

California Anti-Takeover Law and Provisions of Our Certificate of Incorporation and Bylaws

Certain provisions of our amended and restated articles of incorporation and amended and restated bylaws discourage a party from acquiring, or make it more difficult for a third party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing shareholders or another party to effect a change in management. In addition, these provisions may have the effect of deterring hostile takeovers or delaying changes in our control or management. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our stock and, as a consequence, they also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 1203 of the California Corporations Code, or the CCC, includes provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of our company. Other provisions of the CCC could also make it more difficult for a third party to acquire a majority of our outstanding voting stock by discouraging a hostile bid, or delaying, preventing or deterring a merger, acquisition or tender offer in which our shareholders could receive a premium for their shares, or effect a proxy contest for control of the company or other changes in our management.

Table of Contents**UNDERWRITING**

We have entered into an underwriting agreement dated _____, 2019 with Ladenburg Thalmann & Co. Inc., as the representative of the underwriters named below, or the representative, and the sole book-running manager of this offering. Subject to the terms and conditions of the underwriting agreement, the underwriters have agreed to purchase the number of our securities set forth opposite its name below.

Underwriters	Class A Units	Class B Units
Ladenburg Thalmann & Co. Inc.		
Total		

A copy of the underwriting agreement will be filed as an exhibit to the registration statement of which this prospectus forms a part.

We have been advised by the underwriters that they propose to offer the units directly to the public at the public offering price set forth on the cover page of this prospectus. The underwriters may sell Class A Units or Class B Units separately to purchasers or may sell a combination of Class A Units and Class B Units to purchasers in any proportion. Any securities sold by the underwriters to securities dealers will be sold at the public offering price less a selling concession not in excess of \$ _____ per share and \$ _____ per warrant.

The underwriting agreement provides that subject to the satisfaction or waiver by the representative of the conditions contained in the underwriting agreement, the underwriters are obligated to purchase and pay for all of the units offered by this prospectus.

No action has been taken by us or the underwriters that would permit a public offering of the units, or the shares of common stock, shares of preferred stock, shares of common stock underlying the preferred stock and warrants to purchase common stock included in the units, in any jurisdiction outside the United States where action for that purpose is required. None of our securities included in this offering may be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sales of any of the securities offered hereby be distributed or published in any jurisdiction except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons who receive this prospectus are advised to inform themselves about and to observe any restrictions relating to this offering of securities and the distribution of this prospectus. This prospectus is neither an offer to sell nor a solicitation of any offer to buy the securities in any jurisdiction where that would not be permitted or legal.

The underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Table of Contents**Underwriting Discount and Expenses**

The following table summarizes the underwriting discount and commission to be paid to the underwriters by us.

	Per Class A Unit ⁽¹⁾	Per Class B Unit ⁽¹⁾	Total
Public offering price			
Underwriting discount to be paid to the underwriters by us ⁽²⁾			
Proceeds to us (before expenses)			

- (1) The public offering price and underwriting discount corresponds to (x) in respect of the Class A Units (i) a public offering price per share of common stock of \$ _____ and (ii) a public offering price per warrant of \$ _____ and (y) in respect of the Class B Units (i) a public offering price per share of Series A Preferred Stock of \$ _____ and (ii) a public offering price per warrant of \$ _____.
- (2) We have granted a 45 day option to the underwriters to purchase up to _____ additional shares of common stock and/or warrants to purchase shares of common stock (up to 15% of the number of shares of common stock (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock) and the number of shares of common stock underlying the warrants sold in the primary offering) at the public offering price per share of common stock and the public offering price per warrant set forth above less the underwriting discounts and commissions, solely to cover overallocments, if any.

We estimate the total expenses payable by us for this offering to be approximately \$ _____ million, which amount includes (i) an assumed underwriting discount of \$ _____ (\$ _____ if the underwriters' overallocment option is exercised in full) and (ii) reimbursement of the accountable expenses of the representative equal to \$ _____, including the legal fees of the representative being paid by us and (iii) other estimated company expenses of approximately \$ _____, which includes legal, accounting and printing costs and various fees associated with the registration and listing of our shares.

The securities we are offering are being offered by the underwriters subject to certain conditions specified in the underwriting agreement.

Overallocment Option

We have granted to the underwriters an option exercisable not later than 45 days after the date of this prospectus to purchase up to a number of additional shares of common stock and/or warrants to purchase shares of common stock not to exceed 15% of the number of shares of common stock sold in the primary offering (including the number of shares of common stock issuable upon conversion of shares of Series A Preferred Stock, but excluding shares of common stock underlying the warrants issued in this offering and any shares of common stock issued upon any exercise of the underwriters' overallocment option) and/or 15% of the warrants sold in the primary offering at the public offering price per share of common stock and the public offering price per warrant set forth on the cover page hereto less the underwriting discounts and commissions. The underwriters may exercise the option solely to cover overallocments, if any, made in connection with this offering. If any additional shares of common stock and/or warrants are purchased pursuant to the overallocment option, the underwriters will offer these shares of common stock and/or warrants on the same terms as those on which the other securities are being offered.

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Determination of Offering Price

Our common stock is currently traded on The Nasdaq Capital Market under the symbol ARDM. On _____, 2018 the closing price of our common stock was \$ _____ per share. We do not intend to apply for listing of the Series A Preferred Stock or the warrants on any securities exchange or other trading system.

The public offering price of the securities offered by this prospectus will be determined by negotiation between us and the underwriters. Among the factors that will be considered in determining the public offering price of the securities:

our history and our prospects;

the industry in which we operate;

our past and present operating results;

the previous experience of our executive officers; and

the general condition of the securities markets at the time of this offering.

The offering price stated on the cover page of this prospectus should not be considered an indication of the actual value of the shares of common stock or shares of preferred stock sold in this offering. That price is subject to change as a result of market conditions and other factors and we cannot assure you that the shares of common stock sold in this offering can be resold at or above the public offering price.

Lock-up Agreements

Our officers, directors and certain shareholders have agreed with the representative to be subject to a lock-up period of 90 days following the date of this prospectus. This means that, during the applicable lock-up period, such persons may not offer for sale, contract to sell, sell, distribute, grant any option, right or warrant to purchase, pledge, hypothecate or otherwise dispose of, directly or indirectly, any shares of our common stock or any securities convertible into, or exercisable or exchangeable for, shares of our common stock. Certain limited transfers are permitted during the lock-up period if the transferee agrees to these lock-up restrictions. We have also agreed, in the underwriting agreement, to similar lock-up restrictions on the issuance and sale of our securities for 90 days following the effectiveness of the underwriting agreement, although we will be permitted to issue stock options or stock awards to directors, officers and employees under our existing plans. The lock-up period is subject to an additional extension to accommodate for our reports of financial results or material news releases. The representative may, in its sole discretion and without notice, waive the terms of any of these lock-up agreements.

Other Relationships

Upon completion of this offering, in certain circumstances we have granted the representative a right of first refusal to act as sole bookrunner or exclusive placement agent in connection with any subsequent public or private offering of equity securities or other capital markets financing by us. This right of first refusal extends for 12 months from the

closing date of this offering. The terms of any such engagement of the representative will be determined by separate agreement.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is ComputerShare Trust Company, N.A.

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Stabilization, Short Positions and Penalty Bids

The underwriters may engage in syndicate covering transactions stabilizing transactions and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of our common stock:

Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Such a naked short position would be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specific maximum and are engaged in for the purpose of preventing or retarding a decline in the market price of the shares of common stock while this offering is in progress.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These syndicate covering transactions, stabilizing transactions, and penalty bids may have the effect of raising or maintaining the market prices of our securities or preventing or retarding a decline in the market prices of our securities. As a result the price of our common stock may be higher than the price that might otherwise exist in the open market. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on The Nasdaq Capital Market, in the over-the-counter market or on any other trading market and, if commenced, may be discontinued at any time.

In connection with this offering, the underwriters also may engage in passive market making transactions in our common stock in accordance with Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of the distribution. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for that security. However, if all independent bids are lowered below the passive market maker's bid that bid must then be lowered when specific purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Neither we, nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the prices of our securities. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transactions, once commenced will not be discontinued without notice.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including certain liabilities arising under the Securities Act or to contribute to payments that the underwriters may be required to make for these liabilities.

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LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Hogan Lovells US LLP, San Francisco, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

OUM & Co. LLP, independent registered public accounting firm, has audited our consolidated financial statements as of December 31, 2017 and 2016. Our financial statements are incorporated by reference herein in reliance on OUM & Co. LLP's reports, given on their authority as experts in accounting and auditing.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate information into this prospectus by reference, which means that we can disclose important information to you by referring you to another document that we file separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus. These documents contain important information about our financial condition, business and results.

We are incorporating by reference the filings listed below:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on March 23, 2018;

our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2018, June 30, 2018 and September 30, 2018 filed with the SEC on May 15, 2018, August 14, 2018 and November 15, 2018, respectively;

our Current Reports on Form 8-K filed with the SEC on January 30, 2018, February 14, 2018, February 28, 2018, March 5, 2018, March 12, 2018, March 28, 2018, April 18, 2018, April 23, 2018, May 7, 2018, May 17, 2018, June 6, 2018, June 14, 2018, July 6, 2018, July 17, 2018, August 16, 2018, September 10, 2018, September 17, 2018, October 30, 2018, November 1, 2018 and November 6, 2018;

all documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of initial filing of the registration statement of which this prospectus forms a part and prior to the effectiveness of such registration statement; and

all documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date of this prospectus and before the offering of securities under this prospectus is terminated. Information filed under Items 2.02 or 7.01 (or corresponding information furnished under Item 9.01 or included as an exhibit) in any past or future Current Report on Form 8-K that we file with the SEC, unless otherwise specified in such report, is not incorporated by reference into this prospectus.

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We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Aradigm Corporation, Attention: Corporate Secretary, 3929 Point Eden Way, Hayward, CA 94545; telephone: (510) 265-9000. In addition, copies of any or all of the documents incorporated herein by reference may be accessed at our website at www.aradigm.com. The information on our website is not a part of, or incorporated by reference in, this prospectus, the registration statement of which this prospectus is a part or any of our other filings with the SEC.

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The most recent information that we file with the SEC automatically updates and supersedes older information. The information contained in any such filing will be deemed to be a part of this prospectus, commencing on the date on which such filing was made.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. SEC filings are available at the SEC's website at www.sec.gov.

This prospectus forms part of a registration statement on Form S-1, as amended, filed by us with the SEC under the Securities Act. As permitted by the SEC, this prospectus does not contain all the information in the registration statement filed with the SEC. For a more complete understanding of this offering, you should refer to the complete registration statement on Form S-1, as amended, including the exhibits thereto that may be obtained as described above. Statements contained or incorporated by reference in this prospectus about the contents of any contract or other document are not necessarily complete. If we have filed any contract or other document as an exhibit to the registration statement or any other document incorporated by reference in the registration statement of which this prospectus forms a part, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract or other document is qualified in its entirety by reference to the actual document.

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**Class A Units consisting of common stock and warrants and
Class B Units consisting of shares of Series A Preferred Stock and warrants
(and shares of common stock underlying shares of Series A Preferred Stock and warrants)**

Sole Book-running Manager

Ladenburg Thalmann

This prospectus is dated , 2019.

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The following table sets forth an estimate of the fees and expenses, other than the underwriting discounts payable by us in connection with the issuance and distribution of the securities being registered. All the amounts shown are estimates, except for the SEC registration fee, Nasdaq Capital Market fee, and the FINRA filing fee.

SEC Registration Fee	\$ 1,212
Nasdaq Capital Market Fee	\$
FINRA Filing Fee	\$ 2,000
Legal Fees and Expenses	\$
Transfer Agent and Registrar Fees and Expenses	\$
Printing and Miscellaneous Fees and Expenses	\$
Total	\$

Item 14. Indemnification of Directors and Officers

Section 317 of the California General Corporation Law provides that a California corporation may indemnify any persons who are, or are threatened to be made, parties to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided that such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. Section 317 of the California General Corporation Law further authorizes a corporation to purchase and maintain insurance on behalf of any indemnified person against any liability asserted against and incurred by such person in any indemnified capacity, or arising out of such person's status as such, regardless of whether the corporation would otherwise have the power to indemnify such person under the California General Corporation Law.

As permitted by Section 204(a)(10) of the California General Corporation Law, our articles of incorporation, as amended, or our Articles, provide that the Company's directors shall not be personally liable to the Company or its shareholders for monetary damages for breach of their fiduciary duties as a director, except for liability for any:

breach of the duty of loyalty to the Company or its shareholders;

act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

unlawful payment of dividends or redemption of shares; or

transaction from which the director derives an improper personal benefit.

Our Articles authorize us to, and our bylaws provide that we must, indemnify our directors and officers to the fullest extent authorized by the California General Corporation Law and also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified under this section or otherwise.

As permitted by the California General Corporation Law, we have entered into indemnification agreements with each of our directors and certain of our officers. These agreements require us to indemnify these individuals to the fullest extent permitted under California law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

We have an insurance policy covering our officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act and otherwise.

Table of Contents**Item 15. Recent Sales of Unregistered Securities**
2016 Note Financing

On April 21, 2016, we entered into a securities purchase agreement with certain securityholders in connection with a private placement conducted pursuant to Regulation D under the Securities Act, or the 2016 Private Placement, of \$23 million in aggregate principal amount of our Convertible Notes to be issued pursuant to an indenture agreement with our trustee dated April 25, 2016, or the Indenture, and common stock purchase warrants to purchase 263,436 shares of our common stock. We completed the first closing under the securities purchase agreement for the sale and issuance of \$20 million in aggregate principal amount of the Convertible Notes and accompanying warrants on April 25, 2016. We completed the second closing of the additional \$3 million in aggregate principal amount of the Convertible Notes and the accompanying warrants pursuant to the securities purchase agreement on July 14, 2016. The Convertible Notes are senior unsecured obligations of ours and bear interest at a fixed rate of 9.0% per annum, with a maturity date of May 1, 2021, and are convertible into 4,414,587 shares of common stock based upon an initial conversion price of \$5.21 per share.

On April 18, 2018, following receipt of the requisite consent of holders of the Convertible Notes, we entered into a Supplemental Indenture, or the Supplemental Indenture, dated as of April 18, 2018, between the Company and U.S. Bank National Association, amending the terms of the Indenture governing the Convertible Notes. The amendments introduced by the Supplemental Indenture include, among other things, (i) the addition of provisions permitting us to make future payments of interest on the Convertible Notes by increasing the outstanding principal amount of the Convertible Notes in the amount of the accrued interest being so paid and (ii) the removal of the Convertible Note holders' option to require us to repurchase the Convertible Notes upon the occurrence of certain events, any of which constituted a Fundamental Change as defined in the Indenture.

On May 1, 2018, we issued additional Convertible Notes in the aggregate principal amount of \$1,079,325. The additional Convertible Notes were issued under to capitalize accrued but unpaid interest payable on previously-issued Notes. Such additional Convertible Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 9.0% per annum, with a maturity date of May 1, 2021, and are convertible into 198,656 shares of common stock based upon an initial conversion price of \$5.21 per share.

On November 1, 2018, we issued additional Convertible Notes in the aggregate principal amount of \$1,035,000. The additional Convertible Notes were issued under to capitalize accrued but unpaid interest payable on previously-issued Convertible Notes. Such additional Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 9.0% per annum, with a maturity date of May 1, 2021, and are convertible into 207,164 shares of common stock based upon an initial conversion price of \$5.21 per share.

2018 Note Financing

On April 13, 2018 we entered into a senior note purchase agreement with certain securityholders in connection with a private placement conducted pursuant to Regulation D under the Securities Act, or the 2018 Private Placement, of up to approximately \$7 million in aggregate principal amount of the Notes. We completed the first closing under the senior note purchase agreement for the sale and issuance of approximately \$2 million in aggregate principal amount of the Notes on April 13, 2018. We completed subsequent closings under the senior note purchase agreement on May 14, 2018, June 13, 2018, July 13, 2018 and September 12, 2018 pursuant to which we sold, at each such subsequent closing, Notes in the aggregate principal amount of \$1 million to certain of the lenders under the note purchase agreement. The Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 9.0% per annum, with a maturity date of May 1, 2021.

On November 1, 2018, we issued additional Notes in the aggregate principal amount of \$226,663. The additional Notes were issued under to capitalize accrued but unpaid interest payable on previously-issued Notes by adding the applicable portion of such accrued interest to the principal balance of the applicable Note. Such additional Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 9.0% per annum, with a maturity date of May 1, 2021.

October 2018 Note Financing

On October 25, 2018, we entered into a senior note purchase agreement under which Grifols, pursuant to which Grifols agreed to purchase approximately up to \$4 million aggregate principal amount of the October 2018 Notes. We completed the first closing under this note purchase agreement on October 25, 2018, at which time we issued and sold \$2 million aggregate principal amount of October 2018 Notes to Grifols. Subject to the satisfaction or waiver of the conditions to the closing set forth in the purchase

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agreement, we anticipate the sale of the remaining approximately \$2 million of the October 2018 Notes to occur in one subsequent closing, which we currently anticipates to occur prior to December 31, 2018. The October 2018 Notes were sold in a private placement conducted pursuant to Regulation D under the Securities Act.

Item 16. Exhibits and Financial Statement Schedules

The following exhibits are included herein or incorporated herein by reference.

EXHIBIT INDEX

Exhibit No.	Description
1.1*	Form of Underwriting Agreement.
3.1(1)	Amended and Restated Articles of Incorporation of the Company. (P)
3.2(3)	<u>Certificate of Determination of Series A Junior Participating Preferred Stock of the Company.</u>
3.3(4)	<u>Amended and Restated Certificate of Determination of Preferences of Series A Convertible Preferred Stock.</u>
3.4(3)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.5(3)	<u>Certificate of Amendment of Certificate of Determination of Series A Junior Participating Preferred Stock.</u>
3.6(5)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.7(5)	<u>Certificate of Amendment of Certificate of Determination of Series A Junior Participating Preferred Stock of the Company.</u>
3.8(6)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.9(33)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.10(14)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.11(19)	<u>Certificate of Amendment of Articles of Incorporation of the Company.</u>
3.12(34)	<u>Certificate of Correction to Certificate of Amendment of Articles of Incorporation of the Company.</u>
3.13(22)	<u>Certificate of Amendment to Amended and Restated Articles of Incorporation.</u>
3.14(30)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.15(2)	<u>Amended and Restated Bylaws of the Company, as amended.</u>
3.16(24)	<u>Certificate of Amendment to the Amended and Restated Bylaws of the Company.</u>
3.17(37)	<u>Certificate of Amendment of Amended and Restated Articles of Incorporation of the Company.</u>
3.18*	Form of Series A Certificate of Designation.
4.1	Reference is made to Exhibits 3.1, <u>3.2</u> , <u>3.3</u> , <u>3.4</u> , <u>3.5</u> , <u>3.6</u> , <u>3.7</u> , <u>3.8</u> , <u>3.9</u> , <u>3.10</u> , <u>3.11</u> , <u>3.12</u> , <u>3.13</u> and

3.14 .

4.2(35) Specimen common stock certificate.

4.3(31) Indenture, dated as of April 25, 2016, between the Company and U.S. Bank National Association, as trustee.

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4.4	<u>Form of 9.0% Senior Convertible Note due May 1, 2021 (included in Exhibit 4.3).</u>
4.5	<u>Form of Warrant (included in Exhibit 10.37).</u>
4.6(38)	<u>Supplemental Indenture, dated as of April 18, 2018, between the Company and U.S. Bank National Association, as trustee.</u>
4.7(39)	<u>Form of 9.0% Convertible Senior Notes due 2021.</u>
4.8(40)	<u>Form of 9.0% Senior Promissory Note due 2021.</u>
4.9(43)	<u>Form of 9.0% Senior Promissory Note due 2021.</u>
4.10(45)	<u>Form of 9.0% Convertible Senior Notes due 2021.</u>
4.11*	Form of Warrant.
5.1*	Opinion of Hogan Lovells US LLP.
10.1(1)+	Form of Indemnity Agreement between the Company and its directors and officers. (P)
10.2(1)+	Form of the Company s Incentive Stock Option Agreement under the 2005 Equity Incentive Plan. (P)
10.3(1)+	Form of the Company s Non-statutory Stock Option Agreement under the 2005 Equity Incentive Plan. (P)
10.4(1)+	1996 Non-Employee Directors Stock Option Plan. (P)
10.5(1)+	Form of the Company s Non-statutory Stock Option Agreement under the 1996 Non-Employee Directors Stock Option Plan. (P)
10.6(1)+	Form of the Company s Employee Stock Purchase Plan Offering Document. (P)
10.7(6)+	<u>Form of the Company s Restricted Stock Bonus Agreement under the 2005 Equity Incentive Plan.</u>
10.8(7)+	<u>Employment Agreement, dated July 14, 2006, with Dr. Igor Gonda.</u>
10.9(8)	<u>Lease Agreement for the property located in Phase V of the Britannia Point Eden Business Park in Hayward, California, dated January 28, 1998, between the Company and Britannia Point Eden, LLC.</u>
10.10(9)	<u>Sublease, dated July 11, 2007, by and between the Company and Mendel Biotechnology, Inc. under the Lease Agreement by and between the Company and Hayward Point Eden I Limited Partnership, as successor-in-interest to Britannia Point Eden, LLC, as amended.</u>
10.11(10)+	<u>2005 Equity Incentive Plan, as amended.</u>
10.12(11)+	<u>Employee Stock Purchase Plan, as amended.</u>
10.13(12)	<u>Amended and Restated Rights Agreement, dated as of September 5, 2008 by and between the Company and ComputerShare Trust Company, N.A.</u>
10.14(13)+	<u>Aradigm Corporation Executive Officer Severance Benefit Plan (amended and restated).</u>
10.15(15)+	<u>Aradigm Corporation Executive Officer Severance Benefit Plan (amended and restated).</u>
10.16(15)+	<u>Amended and Restated Change of Control Agreement, dated as of April 5, 2011, by and between the Company and Igor Gonda.</u>

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10.17(15)+	<u>Amended and Restated Change of Control Agreement, dated as of April 5, 2011, by and between the Company and Nancy Pecota.</u>
10.18(15)+	<u>Form of Indemnification Agreement between the Company and its directors and senior officers.</u>
10.19(16)	<u>Securities Purchase Agreement, dated as of December 11, 2012, among the Company and the investors party thereto.</u>
10.20(16)	<u>Registration Rights Agreement, dated as of December 11, 2012 among the Company and the buyers party thereto.</u>
10.21(17)	<u>Form of License and Collaboration Agreement by and among the Company and Grifols, S.A.</u>
10.22(17)	<u>Form of Option Agreement by and among the Company and Grifols, S.A.</u>
10.23(17)	<u>Form of Governance Agreement by and among the Company and Grifols, S.A.</u>
10.24(17)	<u>Form of Registration Rights Agreement by and among the Company and Grifols, S.A.</u>
10.25(17)	<u>Form of Registration Rights Agreement by and among the Company and the buyers party thereto.</u>
10.26(18)	<u>Clinical Supply and Commercial Manufacturing Services Agreement, dated as of August 27, 2013, by and between SIGMA-TAU Pharmasource Inc. and the Company.</u>
10.27(20)+	<u>Change of Control Agreement, dated as of November 5, 2013, by and between the Company and Dr. Juergen Froehlich.</u>
10.28(20)+	<u>Offer Letter, dated November 5, 2013, by and between the Company and Dr. Juergen Froehlich.</u>
10.29(21)	<u>Assignment, Assumption, Waiver and Consent, effective as of February 28, 2014, by and among Aradigm Royalty Financing LLC, the Company, R&D Bauer Ventures, LP and SG-PBS LLC.</u>
10.30(23)+	<u>Form of Non-statutory Stock Option Agreement, by and between the Company and Igor Gonda.</u>
10.31(25)	<u>Board Observer Rights Agreement, dated July 20, 2015, between the Company and Grifols, S.A.</u>
10.32(28)+	<u>Aradigm Corporation 2015 Equity Incentive Plan.</u>
10.33(26)+	<u>Form of Stock Option Agreement pursuant to Aradigm Corporation 2015 Equity Incentive Plan.</u>
10.34(29)+	<u>Aradigm Corporation Employee Stock Purchase Plan.</u>
10.35(27)+	<u>Form of Amendment to the Stock Option Agreement.</u>
10.36(27)	<u>Supply Agreement by and between the Company and Grifols, S.A., dated October 22, 2015.</u>
10.37(31)	<u>Securities Purchase Agreement, dated as of April 21, 2016.</u>
10.38(31)	<u>Amendment to Governance Agreement, dated as of April 21, 2016, by and between the Company, and Grifols, S.A.</u>
10.39(31)	<u>Escrow Agreement, dated as of April 25, 2016, by and between the Company and U.S. Bank National Association, as Escrow Agent, and U.S. Bank National Association, as Trustee.</u>

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10.40(32)	<u>Fifth Amendment to Lease, dated as of July 18, 2017, by and between Hayward Point Eden I Limited Partnership and the Company.</u>
10.41(36)	<u>Employment Agreement between Aradigm Corporation and John Siebert, March 22, 2018</u>
10.42(40)	<u>Senior Note Purchase Agreement, dated April 13, 2018, among Aradigm Corporation, Grifols Worldwide Operations Ltd., 21 April Fund, Ltd., 21 April Fund, LP and First Eagle Value in Biotechnology Master Fund, Ltd.</u>
10.43(41)+	<u>Employment Agreement between Aradigm Corporation and Juergen Froehlich, dated May 31, 2018.</u>
10.44(41)+	<u>Change of Control Agreement between Aradigm Corporation and Juergen Froehlich, dated May 31, 2018.</u>
10.45(42)+	<u>Aradigm Corporation Employee Stock Purchase Plan, as amended.</u>
10.46(43)	<u>Senior Note Purchase Agreement, dated October 25, 2018, by and between Aradigm Corporation and Grifols Worldwide Operations Ltd.</u>
10.47(44)	<u>Change of Control Agreement between Aradigm Corporation and John Siebert, dated as of October 31, 2018.</u>
21.1(23)	<u>List of Subsidiaries of the Company.</u>
23.1	<u>Consent of OUM & Co. LLP, Independent Registered Public Accounting Firm.</u>
23.2*	Consent of Hogan Lovells US LLP (included in Exhibit 5.1).
24.1	<u>Power of Attorney (signature page).</u>

* To be filed by amendment

+ Represents a management contract or compensatory plan or arrangement.

Portions of this exhibit have been omitted pursuant to a request for confidential treatment and the non-public information has been filed separately with the Securities and Exchange Commission.

(P) Paper exhibits

- (1) Incorporated by reference to the Company s Form S-1 (No. 333-04236) filed on April 30, 1996.
- (2) Incorporated by reference to the Company s Form 10-Q (No. 000-28402) filed on August 14, 1998.
- (3) Incorporated by reference to the Company s Form 10-K (No. 333-72037) filed on March 29, 2002.
- (4) Incorporated by reference to the Company s Form S-3 (No. 333-76584) filed on January 11, 2002.
- (5) Incorporated by reference to the Company s Form 10-Q (No. 333-72037) filed on August 13, 2004.
- (6) Incorporated by reference to the Company s Form 10-K (No. 000-28402) filed on March 31, 2006.
- (7) Incorporated by reference to the Company s Form S-1 (No. 333-138169) filed on October 24, 2006, as amended.
- (8) Incorporated by reference to the Company s Form 10-K (No. 000-28402) filed on March 24, 1998, as amended.
- (9) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on July 24, 2007.
- (10) Incorporated by reference to the Company s Form S-8 (No. 333-187947) filed on April 16, 2013.
- (11) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on May 21, 2009.
- (12) Incorporated by reference to the Company s Form 10-Q (No. 000-28402) filed on November 12, 2008.
- (13) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on January 8, 2009.
- (14) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on September 20, 2010.
- (15) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on April 18, 2011.

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- (16) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on December 13, 2012.
- (17) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on May 24, 2013.
- (18) Incorporated by reference to the Company s Form 10-Q (No. 000-28402) filed on October 28, 2013.
- (19) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on February 4, 2014.
- (20) Incorporated by reference to the Company s Form S-1 (No. 333-193751) filed on February 4, 2014.
- (21) Incorporated by reference to the Company s Form 8-K (No. 000-28402) filed on March 10, 2014.
- (22) Incorporated by reference to the Company s Form 10-Q (No. 000-28402) filed on May 14, 2014.
- (23) Incorporated by reference to the Company s Form 10-K (No. 001-36480) filed on March 13, 2014.
- (24) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on September 4, 2015.
- (25) Incorporated by reference to the Company s Form 10-Q (No. 001-36480) filed on November 12, 2015.
- (26) Incorporated by reference to the Company s Form S-8 (No. 333-205613) filed on July 10, 2015.
- (27) Incorporated by reference to the Company s Form 10-K (No. 001-36480) filed on March 30, 2016.
- (28) Incorporated by reference to the Company s Proxy Statement (No. 001-36480) filed on April 19, 2017, as Exhibit B.
- (29) Incorporated by reference to the Company s Proxy Statement (No. 001-36480) filed on April 19, 2017, as Exhibit A.
- (30) Incorporated by reference to the Company s Form S-1/A (No. 333-211329) filed on July 7, 2016.
- (31) Incorporated by reference to the Company s Form 8-K/A (No. 001-36480) filed on April 28, 2016.
- (32) Incorporated by reference to the Company s Form 10-Q (No. 001-36480) filed on November 3, 2017.

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- (33) Incorporated by reference to the Company s Form 10-Q (No. 000-28402) filed on August 8, 2008.
- (34) Incorporated by reference to the Company s Form 8-K/A (No. 000-28402) filed on February 18, 2014.
- (35) Incorporated by reference to the Company s Form S-1/A (No. 333-04236) filed on June 11, 1996.
- (36) Incorporated by reference to the Company s Form 8-K/A (No. 001-36480) filed on March 28, 2018.
- (37) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on July 6, 2018.
- (38) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on April 23, 2018.
- (39) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on May 7, 2018.
- (40) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on April 18, 2018.
- (41) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on June 6, 2018.
- (42) Incorporated by reference to the Company s Form 10-Q (No. 001-36480) filed on August 14, 2018.
- (43) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on October 30, 2018.
- (44) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on November 1, 2018.
- (45) Incorporated by reference to the Company s Form 8-K (No. 001-36480) filed on November 6, 2018.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that subparagraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those subparagraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Exchange Act, that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(6) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

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(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(7) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(8) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act), that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the city of Hayward, State of California, on this 30th day of November, 2018.

ARADIGM CORPORATION

By: /s/ John M. Siebert
 Name: John M. Siebert
 Title: Executive Chairman, Interim Principal
 Executive Officer and Acting Principal
 Financial Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John M. Siebert and Juergen Froehlich as his or her true and lawful attorney-in-fact and agent, with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and any other registration statements for the same offering pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ John M. Siebert John M. Siebert	Executive Chairman, Interim Principal Executive Officer and Acting Principal Financial Officer	November 30, 2018
/s/ Edwin H. Gordon Edwin H. Gordon	Director	November 30, 2018
/s/ Frederick M. Hudson Frederick M. Hudson	Director	November 30, 2018
/s/ Virgil D. Thompson Virgil D. Thompson	Director	November 30, 2018
/s/ Theresa Matkovits		

Theresa Matkovits

Director

November 30, 2018