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

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

# NAVIDEA BIOPHARMACEUTICALS, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

**Delaware** (State or Other Jurisdiction of Incorporation or Organization) 2835 (Primary Standard Industrial Classification Code Number) 31-1080091 (I.R.S. Employer Identification Number)

4995 Bradenton Avenue, Suite 240 Dublin, Ohio 43017 (614) 793-7500

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Jed A. Latkin
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Copies to:

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

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, as amended (the "Securities Act"), check the following box.  $\boxtimes$ 

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.  $\Box$ 

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	te by check mark whether the registrant is a large accelerated f iny. See the definitions of "large accelerated filer," "accelerated ]				
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	merging growth company, indicate by check mark if the regist ial accounting standards provided pursuant to Section 7(a)(2)(l		tended transition period	for complying with any	new or revised
	CALC	CULATION OF REGISTRATI	ION FEE		
	Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(3)	Amount of Registration Fee
Comn	non stock, \$0.001 par value per share	4,586,790 shares	\$ 2.54	\$ 11,650,446.60	\$ 1,512.23
<ul><li>(1)</li><li>(2)</li></ul>	Represents shares offered by the selling stockholder. Includ Securities Act of 1933, as amended, that may be issued to p be offered by the selling stockholder.  The amount to be registered consists of (i) 174,978 shares of	prevent dilution from stock splits, of common stock, par value \$0.00	stock dividends or simi	lar transactions that coul	d affect the shares to
(3)	upon conversion of shares of the registrant's Series C Conversion of Series C Conversion of the purpose of computing the amount of "Securities Act"), using the average of the high and low price approximately \$2.54 per share.	of the registration fee pursuant to	Rule 457(c) under the S		
furth	e Registrant hereby amends this registration statement on er amendment that specifically states that this registration 33, as amended, or until the registration statement shall bec	statement shall thereafter beco	me effective in accorda he Securities and Exch	ance with Section 8(a) o	of the Securities Act of

The information in this preliminary prospectus is not complete and may be changed. The selling stockholder may not sell these securities until the registration statement filed with the U.S. Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

### PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATEDJUNE 3, 2020



#### 4,586,790 Shares of Common Stock

This prospectus relates to the offering and resale by Keystone Capital Partners, LLC, as selling stockholder, of up to 4,586,790 shares of our common stock, par value \$0.001 per share (the "Shares"), which consists of: (i) 174,978 shares of common stock and (ii) up to 4,411,812 shares of common stock issuable upon conversion of shares of our Series C Redeemable Convertible Preferred Stock, par value \$0.001 per share ("Series C Preferred"). The prices at which the selling stockholder may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of the shares by the selling stockholder.

The selling stockholder is an "underwriter" within the meaning of the Securities Act of 1933, as amended (the 'Securities Act'). We will pay the expenses of registering these shares, but all selling and other expenses incurred by the selling stockholder will be paid by the selling stockholder.

Our common stock is listed on the NYSE American under the symbol "NAVB." On May 29, 2020, the last reported sale price of our common stock on the NYSE American was \$2.62 per share. You are urged to obtain current market quotations for our common stock.

You should read this prospectus and any prospectus supplement, together with additional information described under the headings "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information," carefully before you invest in any of our securities.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 10 of this prospectus.

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.

, 2020

The date of this prospectus is

### TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	2
PROSPECTUS SUMMARY	3
RISK FACTORS	10
THE KEYSTONE CAPITAL TRANSACTION	11
USE OF PROCEEDS	13
SELLING STOCKHOLDER	14
PLAN OF DISTRIBUTION	15
DESCRIPTION OF SECURITIES	17
PRINCIPAL STOCKHOLDERS	21
LEGAL MATTERS	23
EXPERTS	23
WHERE YOU CAN FIND ADDITIONAL INFORMATION	23
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	23
DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES	25

You should read this prospectus, including all documents incorporated herein by reference, together with additional information described under "Where You Can Find More Information."

You may obtain the information incorporated by reference without charge by following the instructions under "Where You Can Find More Information."

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholder may offer to sell, and seek offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

In this prospectus, "we," "us," "our" and "Navidea" refer to Navidea Biopharmaceuticals, Inc. and its subsidiaries.

#### ABOUT THIS PROSPECTUS

You should rely only on the information we have provided or incorporated by reference into this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the Shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

The selling stockholder is offering the Shares only in jurisdictions where such issuances are permitted. The distribution of this prospectus and the issuance of the Shares in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the issuance of the Shares and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, the Shares offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the 'SEC''), under which the selling stockholder may offer from time to time up to an aggregate of 4,586,790 Shares in one or more offerings. If required, each time the selling stockholder offers Shares, we will provide you with, in addition to this prospectus, a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to that offering. We may also use a prospectus supplement and any related free writing prospectus to add, update or change any of the information contained in this prospectus or in documents we have incorporated by reference. This prospectus, together with any applicable prospectus supplements, any related free writing prospectuses and the documents incorporated by reference into this prospectus, includes all material information relating to this offering. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in a prospectus supplement. Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under the section entitled "Incorporation of Certain Information by Reference" before buying any of the securities offered.

This prospectus contains 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, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled "Where You Can Find More Information."

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 (the "PSLRA") provides a safe harbor for forward-looking statements made by or on behalf of the Company. Statements in this document which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways, the ability to obtain, and timing of, regulatory approvals of the Company's products, the timing and anticipated results of commercialization efforts, and anticipated markets for the Company's products, are forward-looking statements within the meaning of the PSLRA. The words "anticipate," "eblieve," "estimate," "expect," "future," "intend," "plan," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, our history of operating losses and uncertainty of future profitability, accumulated deficit, future capital needs, the outcome of any pending litigation, uncertainty of capital funding, dependence on royalties and grant revenue, limited product line and distribution channels, competition, risks of development of new products, our ability to maintain effective control over financial reporting, our ability to comply with NYSE American continued listing standards, and other risks set forth in our Form 10-K under Item 1A, "Risk Factors" and beginning on page 11 of this prospectus. Navidea undertakes no obligation to publicly update or revise any forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the impact of the global COVID-19 pandemic on our business, financial condition or prospects, including a decline in the volume of procedures using our products, potential delays and disruptions to global supply chains, manufacturing activities, clinical trials, logistics, operations, employees and contractors, the business activities of our suppliers, distributors, customers and other business partners, as well as the effects on worldwide economies, financial markets, social institutions, labor markets and healthcare systems;
- our history of operating losses and uncertainty of future profitability;
- our ability to successfully complete research and further development of our drug candidates;
- the timing, cost and uncertainty of obtaining regulatory approvals of our drug candidates;
- our ability to successfully commercialize our drug candidates;
- our ability to raise capital sufficient to fund our development programs;
- delays in receipt of anticipated proceeds from our capital funding transactions and other receivables;
- our dependence on royalties and grant revenue;
- our limited product line and distribution channels;
- advances in technologies and development of new competitive products;
- our ability to maintain effective control over financial reporting;
- the outcome of any pending litigation;
- our ability to comply with NYSE American continued listing standards;
- our ability to sell shares of Series C Preferred to Keystone Capital pursuant to the terms of the May 6, 2020 Purchase Agreement and Letter of Investment Intent (the "Purchase Agreement") with Keystone Capital and our ability to register and maintain the registration of the shares issued and issuable thereunder;
- the impact of a pandemic, epidemic or outbreak of an infectious disease;
- our anticipated use of the net proceeds from the potential sale of Series C Preferred to Keystone Capital; and
- other risk factors set forth in this report and detailed in our most recent Annual Report on Form 10-K and other SEC filings.

You should carefully read this prospectus, the documents that we incorporate by reference into this prospectus and the documents we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in any forward-looking statements, whether as a result of new information, future events or otherwise.

#### PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus or incorporated by reference into this prospectus from our filings with the U.S. Securities and Exchange Commission (the "SEC") listed in the section of the prospectus entitled "Incorporation of Certain Information by Reference." Because it is only a summary, it does not contain all of the information that should be consider before purchasing our securities in this offering and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus, the registration statement of which this prospectus is a part, and the information incorporated by reference herein in their entirety, including the "Risk Factors" and our financial statements and the related notes incorporated by reference into this prospectus, before purchasing our securities in this offering. Unless the context requires otherwise, references in this prospectus to "the Company," "Navidea," "we," "us" and "our" refer to Navidea Biopharmaceuticals, Inc. together with its wholly owned subsidiary, Navidea Biopharmaceuticals Limited, and our majority-owned subsidiary, Macrophage Therapeutics, Inc.

#### The Company

Navidea Biopharmaceuticals, Inc., a Delaware corporation (NYSE American: NAVB), is a biopharmaceutical company focused on the development and commercialization of precision immunodiagnostic agents and immunotherapeutics. Navidea is developing multiple precision-targeted products based on our Manocept™ platform to enhance patient care by identifying the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making and targeted treatment

Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on activated macrophages. The Manocept platform serves as the molecular backbone of Tc99m tilmanocept, the first product developed and commercialized by Navidea based on the platform.

In March 2017, the Company completed the sale to Cardinal Health 414, LLC ("Cardinal Health 414") of its assets related to the Company's radioactive diagnostic agent Tc99m tilmanocept, marketed under the Lymphoseek® trademark, used for lymphatic mapping, lymph node biopsy, and the diagnosis of metastatic spread to lymph nodes for staging of cancer, in Canada, Mexico and the United States.

Other than Tc99m tilmanocept, which the Company has a license to distribute outside of Canada, Mexico and the United States, none of the Company's drug product candidates have been approved for sale in any market.

Our business is focused on two primary types of drug products: (i) diagnostic substances, including Tc99m tilmanocept and other diagnostic applications of our Manocept platform, and NAV4694 (sublicensed in April 2018), and (ii) therapeutic development programs, including therapeutic applications of our Manocept platform. See Note 14 to the consolidated financial statements included in our Annual Report on Form 10-K and our Quarterly Report on Form 10-Q for more information about our business segments.

### **Technology and Product Candidates**

Our primary development efforts over the last several years were focused on diagnostic products, including Lymphoseek, which was sold to Cardinal Health 414 in March 2017. Our more recent initiatives have been focused exclusively on diagnostic and therapeutic line extensions based on our Manocept platform.

During the ongoing COVID-19 global pandemic, the Company's primary focus is the safety of its employees, the employees of its clinical trial sites, and the patients enrolled in its clinical trials. The Company is working hard to mitigate any safety risk along with any long-term impact on its clinical development programs. To date, we do not believe there has been any appreciable impact to the Company's clinical development and regulatory timelines resulting from COVID-19. Navidea has enrolled sufficient patients in Arm 3 of the Company's ongoing Phase 2b clinical trial (NAV3-31) and is on schedule to deliver interim data in the timeframe previously communicated. The Company's pivotal Phase 3 trial for rheumatoid arthritis (NAV3-33) also remains on track for a second-half 2020 launch as previously communicated. In addition, analysis of the data from the Company's cardiovascular Phase 2b study remains on schedule. Results provided to Navidea thus far have paralleled data in our earlier published article, and these data are supportive of Navidea's hypothesis that tilmanocept can provide marked signal to background in a host of cardiovascular disease applications. Navidea continues to anticipate meeting with the FDA in the coming months to discuss upcoming clinical trial designs.

#### Manocept Platform - Diagnostics and Therapeutics Background

Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed primarily on activated macrophages. This flexible and versatile platform serves as a molecular backbone for purpose-built targeted imaging molecules that may significantly impact patient care by providing enhanced diagnostic accuracy, clinical decision-making, and target-specific treatment. This CD206-targeted drug platform is applicable to a range of diagnostic modalities, including single photon emission computed tomography ("SPECT"), positron emission tomography ("PET"), gamma-scanning (both imaging and topical) and intra-operative and/or optical-fluorescence detection, as well as delivery of therapeutic compounds that target macrophages, and their role in a variety of immune- and inflammation-involved diseases. The FDA-approved sentinel node/lymphatic mapping agent, Tc99m tilmanocept, is representative of the ability to successfully exploit this mechanism to develop powerful new products and to expand this technology into additional diagnostic and therapeutic applications.

Activated macrophages play important roles in many disease states and are an emerging target in many diseases where diagnostic uncertainty exists. Impairment of the macrophage-driven disease mechanisms is an area of increasing and proven focus in medicine. The number of people affected by all the inflammatory diseases combined is estimated at more than 40 million in the United States and up to 700 million worldwide, making macrophage-mediated diseases an area of remarkable clinical importance. There are many recognized disorders having macrophage involvement, including rheumatoid arthritis ("RA"), atherosclerosis/vulnerable plaque, nonalcoholic steatohepatitis ("NASH"), inflammatory bowel disease, systemic lupus erythematosus, Kaposi's sarcoma ("KS"), leishmaniasis, and others that span general clinical areas in oncology, autoimmunity, infectious diseases, cardiology, CNS diseases, and inflammation. For the near term, we have selected target diseases that may, if successfully developed, benefit from this technology.

The Company has developed processes for producing the first two therapeutic Manocept immuno-construct series, MT-1000 series, which is designed to specifically target and kill or modify activated CD206+ macrophages by delivering doxorubicin, and MT-2000 series, which is designed to inhibit the inflammatory activity of activated CD206+ macrophages by delivering a potent anti-inflammatory agent, dexamethasone. We have contracted with independent facilities to improve chemical syntheses and to produce sufficient quantities of the MT-1000 series and MT-2000 series agents along with the concomitant analytical standards, to provide material for planned preclinical animal studies and future clinical trials.

# <u> Manocept Platform – Immuno-Diagnostics Clinical Data</u>

#### Rheumatoid Arthritis

Two Tc99m tilmanocept dose escalation studies in RA have been completed. The first study was completed and included 18 subjects (nine with active disease and nine healthy subjects) dosed subcutaneously with 50 and 200  $\mu$ g/2mCi Tc99m tilmanocept (ClinicalTrials.gov NCT02683421). The results of this study were presented at five international meetings, including Biotechnology Innovation Organization, Society of Nuclear Medicine and Molecular Imaging ("SNMMI"), and The American College of Rheumatology ("ACR"). In addition, based on completion of extensive preclinical dosing studies pursuant to our dialog with the FDA, we have completed a Phase 1/2 study involving intravenous ("IV") dosing of 39 subjects with IV-administered Tc99m tilmanocept (ClinicalTrials.gov NCT02865434). In conjunction with this study, we have completed pharmacokinetic, pharmacodynamics and radiation dosimetry phases in human subjects as well. The majority of the costs of these studies have been supported through a Small Business Innovation Research ("SBIR") grant (NIH/NIAMSD Grant 1 R44 AR067583-01A1). Results of this Phase 1/2 study were presented at the June 2018 and June 2019 SNMMI meetings, the 2018 European League Against Rheumatism meeting and the 2018 ACR meeting. These studies have been combined and submitted for peer review publication and full published results will follow.

In June 2019, the results of the Company's NAV3-21 clinical study were presented at the SNMMI Annual Meeting in Anaheim, California. The presentation, titled "A Phase 1/2 Study of Intravenously Administered Tc99m Tilmanocept to Determine Safety, Tolerability, Optimal Clinical Dose Selection, and Imaging Timepoint in Patients Clinically Diagnosed with Rheumatoid Arthritis," was delivered by Arash Kardan, M.D. In addition, an abstract of the presentation was published in the *Journal of Nuclear Medicine* (2019, Volume 60, Supplement 1). The NAV3-21 study enrolled subjects with active, moderate-to-severe RA, and healthy controls. Results from the completed trial demonstrate that Tc99m tilmanocept is well-tolerated with no serious adverse events, adverse drug reactions, or drug-related adverse events observed. Additionally, static planar images revealed joint-specific Tc99m tilmanocept localization in RA subjects to disease-involved joints of the shoulders, knees, hands, and feet, but no joint-specific localization in healthy control subjects, revealing potentially significant immunodiagnostic information about CD206-expressing synovial macrophage involvement in RA. An optimal imaging time window post-Tc99m tilmanocept IV administration, as well as optimal dosing, were also determined.

In April 2019, the Company received feedback from the FDA regarding the Company's planned clinical studies that will evaluate joint disease in patients with RA and monitor patient response to therapy. The Company's proposed RA studies were discussed with the FDA during an in-person meeting and through follow-up collaborative efforts. The FDA has communicated that the first study, a Phase 2b trial, is aligned with expectations for the studies and that they will continue to work with Navidea as we progress into a second Phase 2b trial correlating Tc99m tilmanocept uptake in RA-involved joints with CD206 immunohistochemistry findings from synovial biopsies and into the planned Phase 3 clinical trial. In May 2019, we began enrolling patients into the first Phase 2b study, entitled "Evaluation of the Precision and Sensitivity of Tilmanocept Uptake Value ("TUV") on Tc99m Tilmanocept Planar Imaging" (ClinicalTrials.gov MCT03938636). The NAV3-31 Phase 2b study has three arms: Arm 1 consists of healthy subjects, Arm 2 is comprised of patients with active, moderate-to-severe RA who are on stable therapy, and Arm 3 is a pilot arm of the upcoming Phase 3 trial assessing the ability of Tc99m tilmanocept to provide an early indicator of efficacy of anti-tumor necrosis factor ("TNF") alpha treatment in RA patients.

In October 2019, the Company performed its first interim analysis of this trial, covering subjects enrolling into Arms 1 and 2. The results of this interim analysis were in line with the Company's hypotheses that Tc99m tilmanocept can provide robust, stable imaging in healthy subjects as well as in patients with active RA, and provide the fundamental information needed to keep moving forward into the Phase 3. In May 2020, the Company completed its second interim analysis, which was designed to examine data from Arm 3 of the study in order to evaluate the magnitude of change of Tc99m tilmanocept signal localized to RA-involved joints in patients before and after treatment with an anti-TNF alpha therapy as well as to examine whether this change in localization, if any, can serve as an early, quantifiable predictor of treatment efficacy. The results of the second interim analysis support Navidea's hypotheses that Tc99m tilmanocept imaging can provide quantifiable imaging assessment of RA-involved joints that enables early prediction of clinical response as well as longitudinal monitoring of clinical status. The pivotal Phase 3 study program will assess joint disease status and monitor patient response to therapy.

### Cardiovascular Disease ("CV")

In collaboration with researchers at Massachusetts General Hospital, Navidea has completed one and has initiated a second clinical study evaluating Tc99m tilmanocept's ability to enable imaging of atherosclerotic plaques. Results of these studies provide strong preliminary evidence of the potential of Tc99m tilmanocept to accumulate specifically in and enable imaging of non-calcified atherosclerotic plaques. Non-calcified atherosclerotic plaques include plaques with morphologies indicating a high risk of rupture. Rupture of such plaques causes myocardial infarctions (heart attacks) and a significant portion of ischemic strokes. The studies compared aortic Tc99m tilmanocept uptake imaged by SPECT/CT in clinically asymptomatic subjects with intermediate Framingham Risk Scores ("FRS") who were infected with Human Immunodeficiency Virus ("HIV") as compared to healthy, uninfected, FRS and age-matched subjects. Tc99m tilmanocept SPECT/CT images were compared to aortic images of the same subjects obtained by contrast enhanced coronary computed tomography angiography and/or [18F]NaF PET/CT.

A nine-subject study to evaluate diagnostic imaging of emerging atherosclerosis plaque with the Tc99m tilmanocept product dosed subcutaneously is complete (ClinicalTrials.gov NCT02542371). The results of this study were presented at two major international meetings (Conference on Retroviruses and Opportunistic Infections ("CROI") and SNMMI, 2017) and published in early release in the *Journal of Infectious Diseases* in January 2017 (published in the circulated version, *Journal of Infectious Diseases* (2017) 215 (8): 1264-1269), confirming that the Tc99m tilmanocept product can both quantitatively and qualitatively target non-calcified plaque in the aortic arch of Acquired Immunodeficiency Syndrome ("AIDS") patients (supported by NIH/NHLBI Grant 1 R43 HL127846-01).

We have also commenced a second Phase 1/2 study in cooperation with Massachusetts General Hospital in subjects with HIV that expands the original study in both the scope of the drug administration as well as the diagnostic assessment of the subjects. This study will enroll up to 24 AIDS subjects and healthy controls in imaging non-calcified plaque using IV and SC-administered Tc99m tilmanocept and will expand the initial investigation to the assessment of aortic plaque as well as carotid and coronary arteries. Initial images from this study are currently being evaluated.

Navidea has also been awarded a \$225,000 phase 1 Small Business Technology Transfer grant (1R41HL147640-01A1) entitled *Gallium 68 Tilmanocept for PET Imaging of Atherosclerosis Plaques*. This grant will support a research collaboration between Navidea and Dr. Suzanne Lapi of the University of Alabama Birmingham. These efforts will evaluate [68]gallium tilmanocept for imaging plaques in an animal model of atherosclerosis and began activities in the fourth quarter of 2019.

## Kaposi's Sarcoma

We initiated and completed a study of KS in 2015 (ClinicalTrials.gov NCT022201420) and received additional funding from the National Institutes of Health ("NIH") in 2016 to continue diagnostic studies in this disease. The new support not only continues the imaging of the cutaneous form of this disease but expands this to imaging of visceral disease via IV administration of Tc99m tilmanocept (NIH/NCI 1 R44 CA192859-01A1; ClinicalTrials.gov NCT03157167). This now-escalated study includes a pathology/biopsy component as well as an imaging component to determine pathology concordance with image assessment. We received Institutional Review Board approval of the clinical protocol and initiated a Phase 1/2 clinical study in KS in 2017. This trial has completed enrollment and imaging. Data and image analysis for this study are ongoing.

### Colorectal Cancer ("CRC") and Synchronous Liver Metastases

During 2017, we initiated an imaging study in subjects with CRC and liver metastases via IV administration of Tc99m tilmanocept. This study was supported through a SBIR grant (NIH/NCI 1 R44 CA1962783-01A1; ClinicalTrials.gov NCT03029988). The trial intended to enroll up to 12 subjects with dose modification. After an interim analysis of the first three completed subjects, a decision was made to not continue with the trial and the study is now closed. An initial presentation took place at SNMMI in June of 2018. An additional report has been submitted to the National Cancer Institute ("NCI") on the early results of this study. The final study report has been completed and submitted to the FDA.

### Nonalcoholic Steatohepatitis

We have concluded a clinical study (ClinicalTrials.gov NCT03332940) that was originally designed to enroll 12 subjects with IV administration of Tc99m tilmanocept and an imaging comparator to identify and quantify the extent of NASH lesions in human patients. A semiquantitative evaluation of the images from the first six subjects indicated that imaging the remaining six subjects planned in the study may not sufficiently further our knowledge of Tc99m tilmanocept imaging in individuals with NASH to justify continuing the study using the current protocol. The study is now complete. Ongoing quantitative analyses of the images from the first six subjects will determine if future studies in subjects with NASH are likely to be productive. Initial results were presented at the NASH Summit in Boston in April 2018, and the results are available on Navidea's website.

### Tuberculosis ("TB")

In April 2019, we announced that Professor Mike Sathekge, MBChB, M. Med (Nuclear Medicine), PhD, Professor and Head of the Department of Nuclear Medicine in the Faculty of Health Sciences at the University of Pretoria/Steve Biko Academic Hospital, planned to initiate a comparative study evaluating the use of tilmanocept in patients with TB. The purpose of the study is to explore using 68Ga tilmanocept as an aid in TB patient management while contributing to the better understanding of the biology of TB granulomas. The TB granuloma plays multiple roles in tuberculous infection, although much remains unknown about its biology. Macrophages constitute one of the most abundant cell types in the TB granuloma. A molecular probe such as 68Ga-labeled tilmanocept targeting mannose receptor CD206 expressed on macrophages, therefore, holds great promise not only in understanding the behavior of TB granulomas, but may serve as a vehicle for delivering therapeutic interventions in the future. Comparing findings on 68Ga tilmanocept PET/CT and FDG PET/CT will contribute to the understanding of the biology of TB granuloma. Navidea has provided tilmanocept for use in this study, and several subjects have been injected and imaged to date. Successful completion of this study could lead to an extended claim of 68Ga-tilmanocept.

#### Biomarker Application and Qualification

In November 2017, the Company commenced the qualification of the biomarker CD206 with the FDA Biomarker Section of The Center for Drug Evaluation and Research ("CDER"). As per FDA protocol, Navidea submitted a draft letter of intent ("LOI") to CDER prior to the November 2017 meeting. According to the CDER directive, "the Biomarker Qualification Program was established to support the CDER's work with external stakeholders to develop biomarkers that aid in the drug development process. Through the FDA's Biomarker Qualification Program, an entity may request regulatory qualification of a biomarker for a particular context of use ("COU") in drug development." Following the meeting with the FDA, and because of Navidea's data sets and the general external publication database, Navidea, in conjunction with FDA, is now reviewing the LOI with the FDA's recommended consultants. Navidea has revised the LOI draft strategy in order to expedite the application process. In March 2018, Navidea had a follow-up meeting with the FDA's assigned strategist, during which the potential to further narrow the LOI elements was reviewed. Navidea is continuing the process of finalizing the COU LOI and providing the background data sets for qualification review with the FDA/CDER. Additional meetings have taken place and the pursuit of this qualification is ongoing.

#### Manocept Platform - In-Vitro and Pre-Clinical Immunotherapeutics Data

The therapeutic drug delivery model enables the Company to leverage its technology over many potential disease applications and with multiple partners simultaneously without significant capital outlays. To date, the Company has developed two lead families of therapeutic products. The MT-1000 series is designed to deplete activated macrophages via apoptosis and/or alter the phenotype of macrophages. The MT-2000 series is designed to modulate activated macrophages from a classically activated phenotype to the alternatively activated phenotype. Both families have been tested in a number of disease models in rodents.

We have already reported on the peripheral infectious disease aspects of KS, including HIV and HHV8 (CROI, Boston 2016, and KS HHV8 Summit Miami 2015). As noted, we continue this work funded by the NIH/NIAID and NCI. The Company has completed preclinical studies employing both MT 1000-class and 2000-class therapeutic conjugates of Manocept. The positive results from these studies are indicative of Manocept's specific targeting supported by its strong binding affinity to CD206 receptors. This high degree of specificity is a foundation of the potential for this technology to be useful in treating diseases linked to the over-activation of macrophages. This includes various cancers as well as autoimmune, infectious, CV, and central nervous system ("CNS") diseases.

#### Kaposi's Sarcoma

The novel MT-1000 class constructs are designed to specifically deliver doxorubicin, a chemotoxin, which can kill KS tumor cells and their tumor-associated macrophages, potentially altering the course of cancer. We have received additional funding to continue therapeutic studies in this disease with the goal of completing an investigational new drug ("IND") submission for a Manocept construct (MT-1000 class of compounds) consisting of tilmanocept linked to doxorubicin for the treatment of KS. The first part of the grant, now complete, supported analyses including *in vitro* and cell culture studies, to be followed by Parts 2 and 3 FDA-required preclinical animal testing studies. The information from these studies will be combined with other information in an IND application that will be submitted to the FDA requesting permission to begin testing the compound in selected KS subjects (supported by NIH/NCI 1 R44 CA206788-01).

#### Other Immunotherapeutic Applications

The Company continues to evaluate emerging data in other disease states to define areas of focus, development pathways and partnering options to capitalize on the Manocept platform, including ongoing studies in KS, RA and infectious diseases. The immuno-inflammatory process is remarkably complex and tightly regulated with indicators that initiate, maintain and shut down the process. Macrophages are immune cells that play a critical role in the initiation, maintenance, and resolution of inflammation. They are activated and deactivated in the inflammatory process. Because macrophages may promote dysregulation that accelerates or enhances disease progression, diagnostic and therapeutic interventions that target macrophages may open new avenues for controlling inflammatory diseases. There can be no assurance that further evaluation or development will be successful, that any Manocept platform product candidate will ultimately achieve regulatory approval, or if approved, the extent to which it will achieve market acceptance.

#### Risks Associated with Our Business and this Offering

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section of this prospectus entitled "Risk Factors" and under similarly titled headings of the documents incorporated herein by reference. You should read these risks before you invest in our securities. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business and this offering include:

- There is substantial doubt about our ability to continue as a going concern, which may affect our ability to obtain future financing and may require us to curtail our
  operations. We will need to raise additional capital to support our operations.
- We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain
- A pandemic, epidemic or outbreak of an infectious disease in the United States may adversely affect our business.
- Our product candidates must undergo rigorous clinical testing, such clinical testing may fail to demonstrate safety and efficacy and any of our product candidates could cause undesirable side effects, which would substantially delay or prevent regulatory approval or commercialization.
- We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the
  marketing of our products, our ability to commercialize products could suffer.
- If our competitors are able to develop and market products that are more effective, safer or more affordable than ours, or obtain marketing approval before we do, our commercial opportunities may be limited.
- If you purchase our securities in this offering, you will incur immediate and substantial dilution.

### **Corporate Information**

Our corporate headquarters are located at 4995 Bradenton Avenue, Suite 240, Dublin, Ohio 43017-3552, and our telephone number is (614) 793-7500. We maintain a website at www.navidea.com, to which we regularly post copies of our press releases as well as additional information about us. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are available free of charge through the investor relations page of our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

### The Offering

This prospectus covers the resale of a total of 4,586,790 Shares of our common stock, consisting of: Common stock offered by selling stockholder

(i) 174,978 Shares of common stock currently outstanding and (ii) 4,411.812 shares of common

stock issuable upon conversion of outstanding shares of Series C Preferred.

The selling stockholder will sell its Shares at prevailing market prices or privately negotiated prices. Offering price

Common stock outstanding 23,659,530 shares (as of May 29, 2020). The number of outstanding shares does not include shares

issuable upon conversion of outstanding shares of our conversion of Series C Preferred.

Use of proceeds We will not receive any proceeds from the sale of the Shares in this offering. See "Use of Proceeds."

Dividend policy We have not declared or paid any cash or other dividends on our common stock, and we do not

expect to declare or pay any cash or other dividends in the foreseeable future.

Investing in our common stock involves a high degree of risk. You should carefully read and consider the information on page 10 of this prospectus set forth under the headings "Risk Factors"

and all other information set forth in this prospectus and the documents incorporated herein by

reference before deciding to invest in our common stock.

Our common stock is traded on the NYSE American under the symbol "NAVB." Market for our shares

Risk factors

As of May 29, 2020, there were 23,484,552 shares of our common stock outstanding (16,421,200 shares held by non-affiliates) excluding the 4,586,790 shares offered that have been issued or may be issuable to Keystone Capital pursuant to the Purchase Agreement). If all of such 4,586,790 shares of our common stock offered hereby were issued and outstanding as of the date hereof, such shares would represent 16.34% of the total common stock outstanding or 21.83% of the non-affiliate shares of common stock outstanding as of the date hereof. The number of shares of our common stock ultimately offered for sale by Keystone Capital is dependent upon the number of shares acquired by Keystone Capital upon conversion of the Series C Preferred.

We are registering 4,586,790 shares of our common stock under the Securities Act, which includes (i) 174,978 Shares of common stock currently outstanding and (ii) 4,411,812 shares of common stock issuable upon conversion of outstanding shares of Series C Preferred. All 4,586,790 Shares are being offered pursuant to this prospectus.

#### RISK FACTORS

Investing in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled "Risk Factors" contained in our annual report on Form 10-K for the fiscal year ended December 31, 2019 under the heading "Item 1A. Risk Factors," and as described or may be described in any subsequent quarterly report on Form 10-Q under the heading "Item 1A. Risk Factors," as well as in any applicable prospectus supplement and contained or to be contained in our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of the value of your investment.

The issuance of common stock to Keystone Capital may cause substantial dilution to our existing stockholders and the sale of such Shares acquired by Keystone Capital could cause the price of our common stock to decline.

We are registering for sale (i) 174,978 shares of common stock and (ii) up to 4,411,812 shares of common stock issuable upon conversion of shares of our Series C Preferred. The number of Shares ultimately offered for sale by Keystone Capital under this prospectus is dependent upon the number of Shares issued to Keystone Capital upon conversion of the Series C Preferred. Depending on a variety of factors, including market liquidity of our common stock, the issuance of Shares to Keystone Capital may cause the trading price of our common stock to decline.

Keystone Capital is irrevocably bound to purchase all of the Series C Preferred and, following receipt of Shares upon the conversion thereof, may sell all, some or none of such Shares. The sale of a substantial number of Shares of our common stock by Keystone Capital in this offering, or anticipation of such sales, could cause the trading price of our common stock to decline or make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise desire.

Because we do not expect to pay dividends on our common stock in the foreseeable future, stockholders will only benefit from owning common stock if it appreciates.

We have paid no cash dividends on any of our common stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, with respect to our common stock, we do not expect to pay any cash dividends in the foreseeable future, and payment of cash dividends, if any, will also depend on our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our Board of Directors. Furthermore, we are subject to various laws and regulations that may restrict our ability to pay dividends and we may in the future become subject to contractual restrictions on, or prohibitions against, the payment of dividends. Due to our intent to retain any future earnings rather than pay cash dividends on our common stock and applicable laws, regulations and contractual obligations that may restrict our ability to pay dividends on our common stock, the success of your investment in our common stock will likely depend entirely upon any future appreciation and there is no guarantee that our common stock will appreciate in value.

#### THE KEYSTONE CAPITAL TRANSACTION

### General

On May 6, 2020, Navidea entered into the Purchase Agreement with Keystone Capital, pursuant to which Navidea agreed to issue to Keystone Capital 420,000 shares of newly-designated Series C Preferred stock for an aggregate purchase price of \$4.2 million. Of the \$4.2 million aggregate gross proceeds, as of the date of this registration statement, we have received \$200,000 as payment for Series C Preferred shares, which were subsequently converted into 174,978 Shares of common stock.

The Series C Preferred have the rights set forth in the Series C Preferred Certificate (as defined below). The sale of Series C Preferred to Keystone Capital is being conducted in reliance on the exemption from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated under the Securities Act and corresponding provisions of state securities or "blue sky" laws.

Pursuant to the Purchase Agreement, Keystone Capital is irrevocably bound to purchase the Series C Preferred in amounts to be determined by it in one or more closings (each, a "Call Closing") on or before November 6, 2020 (the "Purchase Period"), provided that all of the shares of Series C Preferred under the Purchase Agreement must be purchased by Keystone Capital on or prior to such date.

Under the Purchase Agreement, Navidea also agreed to use its commercially reasonable best efforts to register under the Securities Act the resale of the Shares that may be issued to Keystone Capital upon conversion of the Series C Preferred, and to maintain the effectiveness of such registration statement until the earlier of when such Shares are sold or until all of the Shares may be sold without restriction under Rule 144 under the Securities Act.

As of May 29, 2020, there were 23,484,552 shares of our common stock outstanding (16,421,200 shares held by non-affiliates) excluding the 4,586,790 Shares that have been issued or may be issuable to Keystone Capital pursuant to the Purchase Agreement. If all of such 4,586,790 Shares offered hereby were issued and outstanding as of the date hereof, such shares would represent 16.34% of the total common stock outstanding or 21.83% of the non-affiliate shares of common stock outstanding as of the date hereof.

Pursuant to the Purchase Agreement, we are registering 4,586,790 Shares under the Securities Act, which includes shares of common stock that may be issuable to Keystone Capital after this registration statement is declared effective under the Securities Act upon conversion of Series C Preferred, as well as 174,978 Shares that have already been issued to Keystone Capital upon its conversion of 20,000 shares of Series C Preferred prior to the date of this registration statement. All 4,586,790 Shares are being offered pursuant to this prospectus.

## **Description of Series C Preferred**

For a description of the Series C Preferred, see "Description of Securities—Description of Series C Preferred."

#### No Short-Selling or Hedging by Keystone Capital

Keystone Capital has agreed that neither it nor any of its affiliates acting on its behalf or pursuant to any understanding with it, will execute any "short sales" of Navidea's common stock as defined in Rule 200 of Regulation SHO under the Exchange Act during the Purchase Period.

### Effect of Performance of the Purchase Agreement on Our Stockholders

The Purchase Agreement does not limit the ability of Keystone Capital to convert the Series C Preferred or to sell any or all of the 4,586,790 Shares registered in this offering. The sale by Keystone Capital of a significant number of Shares registered in this offering at any given time could cause the market price of our common stock to decline and/or to be highly volatile. Keystone Capital may ultimately acquire all, some or none of the 4,411,812 shares of Shares not yet issued but registered for resale in this offering. After it has acquired such Shares, it may sell all, some or none of such Shares. Therefore, sales of Series C Preferred, and the issuance of the underlying shares of common stock, to Keystone Capital by us pursuant to the Purchase Agreement also may result in substantial dilution to the interests of other holders of our common stock.

### Percentage of Outstanding Shares of Common Stock After Giving Effect to the Purchased Shares Issued to Keystone Capital

Pursuant to the terms of the Purchase Agreement, we will issue to Keystone Capital 420,000 shares of our Series C Preferred, which will be convertible into a number of fully paid and nonassessable shares of common stock equal to \$10.00 divided by 90% of the then-current fair market value of common stock (subject to the adjustments set forth in the Purchase Agreement, the "Conversion Rate").

The number of shares ultimately offered for sale by Keystone Capital in this offering is dependent upon, among other things, the number of Shares received by Keystone Capital upon exercise of the Series C Preferred. The following table sets forth the maximum number and percentage of outstanding common stock to be held by Keystone Capital after giving effect to the sale of Series C Preferred and the issuance of shares of common stock issuable to Keystone Capital upon conversion thereof, based on varying average trading prices:

		Total Number of			
		Number of	Shares	Percentage of	
Assumed	Assumed	Shares to be	Outstanding	Outstanding	
Average Market	Average	Issued Upon	After	Shares After	
 Price	Conversion Price	Conversion	Conversion(1)	Conversion(1)	
\$ 1.00	\$ 0.90	4,586,790	28,071,342	16.34%	
\$ 1.50	\$ 1.35	3,111,111	26,595,663	11.70%	
\$ 2.00	\$ 1.80	2,333,333	25,817,885	9.04%	
\$ 2.50	\$ 2.25	1,866,667	25,351,219	7.36%	
\$ 3.00	\$ 2.70	1,555,556	25,040,108	6.21%	
\$ 3.50	\$ 3.15	1,333,333	24,817,885	5.37%	
\$ 4.00	\$ 3.60	1,166,667	24,651,219	4.73%	
\$ 4.50	\$ 4.05	1,037,037	24,521,589	4.23%	
\$ 5.00	\$ 4.50	933,333	24,417,885	3.82%	

<sup>(1)</sup> Based on 23,484,552 shares of common stock outstanding as of May 29, 2020, which excludes 174,978 Shares already issued to Keystone upon conversion of 20,000 shares of Series C Preferred.

### USE OF PROCEEDS

This prospectus relates to Shares of our common stock that may be offered and sold from time to time by Keystone Capital. We will not receive any proceeds upon the sale of Shares by Keystone Capital.

However, we expect to receive aggregate gross proceeds of \$4.2 million from the sale of Series C Preferred under the Purchase Agreement. Of the \$4.2 million aggregate gross proceeds, as of the date of this registration statement, we have received \$200,000 as payment for 20,000 Series C Preferred shares, which were subsequently converted into 174,978 Shares of common stock. We expect to use the proceeds for the advancement of our research and development activities, working capital and general corporate purposes. This anticipated use of net proceeds from the sale of our Series C Preferred Stock to Keystone Capital under the Purchase Agreement represents our intentions based upon our current plans and business conditions.

Keystone Capital will pay any discounts, commissions, and fees of underwriters, selling brokers, dealer managers or similar securities industry professionals incurred by such selling stockholder in disposing of the Shares covered by this prospectus. We will bear all other costs, fees and expenses incurred in effecting the registration of the Shares covered by this prospectus and any accompanying prospectus supplement, including, without limitation, all registration and filing fees, NYSE American listing fees and fees and expenses of our counsel and our accountants.

#### SELLING STOCKHOLDER

The selling stockholder may from time to time offer and sell any or all of the shares of our common stock set forth below pursuant to this prospectus. When we refer to the "selling stockholder" in this prospectus, we mean the entity listed in the table below, and its respective pledgees, donees, permitted transferees, assignees, successors and others who later come to hold any of the selling stockholder's interests in shares of our common stock other than through a public sale.

The following table sets forth, as of the date of this prospectus, the name of the selling stockholder for whom we are registering shares for sale to the public, the number of Shares beneficially owned by the selling stockholder prior to this offering, the total number of Shares that the selling stockholder may offer pursuant to this prospectus and the number of Shares that the selling stockholder will beneficially own after this offering. Except as noted below, the selling stockholder does not have, or within the past three years has not had, any material relationship with us or any of our predecessors or affiliates and the selling stockholder is not or was not affiliated with registered broker-dealers.

Based on the information provided to us by the selling stockholder, assuming that the selling stockholder sells all of the Shares being registered hereby, the selling stockholder will not own any shares other than those appearing in the column entitled "Beneficial Ownership After This Offering." We cannot advise you as to whether the selling stockholder will in fact sell any or all of such Shares. In addition, the selling stockholder may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the shares of our common stock in transactions exempt from the registration requirements of the Securities Act after the date on which it provided the information set forth in the table below.

			Beneficial Ownership After this Offering (1)	
	Shares of			0.,,
	Common			
	Stock	Shares of		
	Owned	Common		
	Prior to this	Stock Being	Number of	
Name	Offering	Offered	Shares	% (2)
Keystone Capital Partners, LLC (3)	4,586,790(4)	4,586,790		

<sup>\*</sup> Represents less than 1% of outstanding shares.

- (1) Assumes the sale of all Shares registered pursuant to this prospectus, although the selling stockholder is under no obligation known to us to sell any shares of common stock at this time.
- (2) Based on 23,484,552 shares of common stock outstanding on May 29, 2020 excluding 174,978 Shares that have already been issued to Keystone Capital upon conversion of 20,000 shares of Series C Preferred.
- (3) Ranz Group LLC ("Ranz") is the Managing Member Keystone Capital LLC. Frederic Zaino is the Manager of Ranz.
- (4) As of the date hereof, 174,978 shares of our common stock have been acquired by Keystone Capital upon conversion of Series C Preferred issued under the Purchase Agreement prior to the date hereof. We intend to sell to Keystone Capital an additional 400,000 shares of Series C Preferred under the Purchase Agreement, which, upon conversion into shares of common stock would result in Keystone Capital's ownership of up to 4,586,790 Shares, however Keystone Capital does not presently beneficially own those Shares as determined in accordance with the rules of the SEC.

#### PLAN OF DISTRIBUTION

The Shares offered by this prospectus is being offered by Keystone Capital, the selling stockholder. The Shares may be sold or distributed from time to time by the selling stockholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the Shares offered by this prospectus may be effected in one or more of the following methods:

- ordinary brokers' transactions;
- · transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- "at the market" into an existing market for the common stock;
- · in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- · in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

The selling stockholder may transfer the shares of Shares by other means not described in this prospectus.

Brokers, dealers, underwriters, or agents participating in the distribution of the Shares as agents may receive compensation in the form of commissions, discounts, or concessions from the selling stockholder and/or purchasers of the common stock for whom the broker-dealers may act as agent. Keystone Capital has informed us that each such broker-dealer will receive commissions from Keystone Capital which will not exceed customary brokerage commissions.

Keystone Capital is an "underwriter" within the meaning of the Securities Act.

Neither we nor Keystone Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Keystone Capital, any other stockholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus. At the time a particular offer of Shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any compensation from the selling stockholder, and any other required information.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to the public other than commissions or discounts of underwriters, broker-dealers, or agents. We intend to enter into an agreement with Keystone Capital providing for indemnification against certain liabilities in connection with the offering of Shares offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Keystone Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Keystone Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Keystone Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the Purchase Agreement.

We have advised Keystone Capital that while it is engaged in a distribution of the Shares included in this prospectus it is required to comply with Regulation M promulgated under the Securities Exchange Act. With certain exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase, any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

We may suspend the sale of Shares by Keystone Capital pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all Shares offered by this prospectus have been sold by Keystone Capital.

#### DESCRIPTION OF SECURITIES

### General

The following description of our capital stock is only a summary and is subject to the provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, which are filed as exhibits to the report to which this exhibit is attached.

Our authorized capital stock consists of:

- 300,000,000 shares of common stock, \$0.001 par value per share; and
- 5,000,000 shares of undesignated preferred stock, \$0.001 par value per share, of which we have designated 420,000 as Series C Preferred.

### **Common Stock**

### Dividends

Subject to the rights and preferences of any outstanding preferred stock, each share of common stock is entitled to receive, when and as declared by the board of directors, out of our available assets at such time, such dividends as may be declared from time to time by the board of directors. We have never paid dividends on our common stock and do not intend to do so in the foreseeable future. We intend to retain any future earnings to finance our growth.

### Liquidation

If our company is liquidated, any assets that remain after the creditors are paid, and the owners of preferred stock receive any liquidation preferences, will be distributed to the owners of our common stock pro-rata. Neither the merger or consolidation by us into or with any other corporation, nor the merger or consolidation of any other corporation into or with us, nor the sale, lease, exchange or other disposition (for cash, shares of stock, securities, or other consideration) of all or substantially all our assets, will be deemed to be a dissolution, liquidation, or winding up of our business, whether voluntary or involuntary.

### Voting Rights

Each share of our common stock entitles the owner to one vote. There is no cumulative voting. Our directors are elected by a plurality of the votes of the shares present in person or represented by proxy at meetings of our stockholders and entitled to vote in the election of directors.

#### Preemptive Rights

Owners of our common stock do not have any preemptive rights. We may sell shares of our common stock to third parties without first offering it to current stockholders.

## Redemption Rights

We do not have the right to buy back shares of our common stock except in extraordinary transactions such as mergers and court approved bankruptcy reorganizations. Owners of our common stock do not ordinarily have the right to require us to buy their common stock. We do not have a sinking fund to provide assets for any buy back.

## Conversion Rights

Shares of our common stock cannot be converted into any other kind of stock except in extraordinary transactions, such as mergers and court approved bankruptcy reorganizations.

#### **Market Information**

Our common stock is listed on the NYSE American under the symbol "NAVB."

#### Transfer Agent and Registrar

The transfer agent for our common stock is Continental Stock Transfer & Trust Company, located at One State Street, 3th Floor, New York, NY 10004. Their telephone number is (212) 509-4000.

#### **Blank Check Preferred Stock**

Our certificate of incorporation authorizes our board of directors to issue "blank check" preferred stock. The board of directors may divide this stock into series and set their rights.

Under the terms of our certificate of incorporation, our board of directors has the authority, without further action by our stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to determine and alter all rights, preferences, and privileges and qualifications, limitations, and restrictions thereof (including, without limitation, voting rights and the limitation and exclusion thereof).

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could make it more difficult for a third party to acquire, or could adversely affect the rights of our common stockholders by restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock or delaying or preventing a change in control without further action by the stockholders. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock.

All shares of preferred stock offered hereby will, when issued, be fully paid and non-assessable and, unless otherwise stated in a prospectus supplement relating to the series of preferred stock being offered, will not have any preemptive or similar rights. We will set forth in a prospectus supplement relating to the class or series of preferred stock being offered the specific terms of each series of our preferred stock, including the price at which the preferred stock may be purchased, the number of shares of preferred stock offered, and the terms, if any, on which the preferred stock may be convertible into common stock or exchangeable for other securities.

## **Description of Series C Preferred**

On May 7, 2020, Navidea filed with the Secretary of State of the State of Delaware a Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series C Redeemable Convertible Preferred Stock (the "Series C Preferred Certificate"). The Series C Preferred Certificate authorizes 420,000 shares of Series C Preferred and establishes the rights and preferences of the Series C Preferred, including as follows:

- Except with respect to transactions that may adversely affect any right, preference, privilege or voting power of the Series C Preferred, the Series C Preferred has no voting rights.
- Whenever Navidea's board of directors declares a dividend on Navidea's common stock, each record holder of a share of Series C Preferred on the record date set by the board will be entitled to receive an amount equal to such dividend declared on one share of common stock multiplied by the number of shares of common stock into which such share of Series C Preferred could be converted on the record date, without regard to any conversion limitations in the Series C Preferred Certificate.
- Holders of the Series C Preferred may convert some or all of the Series C Preferred into shares of the Company's common stock at a 10% discount to market, provided that Navidea may not issue such Conversion Shares in excess of 19.99% of the number of shares of Company common stock outstanding (the "Exchange Cap"), which is a cap of 4,586,790 Shares issuable to Keystone Capital under the Purchase Agreement, without shareholder approval (which Navidea is not required to seek). In the event that (a) Navidea does not have enough Shares registered for resale so as to allow for a requested conversion and immediate resale, or (b) if the number of Shares issued to Keystone Capital reaches the Exchange Cap, then the Company will be required to redeem the difference in cash at \$11 per share of Series C Preferred, but only if, when and to the extent that Navidea has received cash proceeds as a result of the judgment entered by the Ohio Court of Common Pleas in Case No. 18-CV-003097 being affirmed.

- At no time may a holder of Series C Preferred convert shares of Series C Preferred (or have its Series C Preferred redeemed) if the number of shares of Company common stock to be issued pursuant to such conversion or redemption, when aggregated with all other shares of Company common stock owned by such holder at such time, would result in the holder owning (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended, and the rules thereunder) more than 4.99% of all of the Company common stock outstanding at such time; provided, however, that such holder may waive this limitation by providing the Company with sixty-one (61) days' prior notice. Notwithstanding the foregoing, in no instance may the Company issue shares of common stock to any holder of Series C Preferred if as a result such holder would be the beneficial owner of more than 9.99% of all of the Company common stock outstanding at such time. This 9.99% limitation may not be waived.
- The Company has the right to redeem any outstanding shares of Series C Preferred at any time at a price of \$11 per share, payable in cash or in registered shares of common stock.

### **Anti-Takeover Charter Provisions and Laws**

Some features of our certificate of incorporation and bylaws and the Delaware General Corporation Law (the "DGCL"), which are further described below, may have the effect of deterring third parties from making takeover bids for control of our company or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid. See the section entitled "Risk Factors".

### Limitations on Stockholder Actions

Our certificate of incorporation provides that stockholder action may only be taken at a meeting of the stockholders. Thus, an owner of a majority of the voting power could not take action to replace the board of directors, or any class of directors, without a meeting of the stockholders, nor could he amend the bylaws without presenting the amendment to a meeting of the stockholders. Furthermore, under the provisions of the certificate of incorporation and bylaws, only the board of directors has the power to call a special meeting of stockholders. Therefore, a stockholder, even one who owns a majority of the voting power, may neither replace sitting board of directors members nor amend the bylaws before the next annual meeting of stockholders.

### Advance Notice Provisions

Our bylaws establish advance notice procedures for the nomination of candidates for election as directors by stockholders, as well as for other stockholder proposals to be considered at annual meetings. Generally, we must receive a notice of intent to nominate a director or raise any other matter at a stockholder meeting not less than 120 days before the first anniversary of the mailing of our proxy statement for the previous year's annual meeting. The notice must contain required information concerning the person to be nominated or the matters to be brought before the meeting and concerning the stockholder submitting the proposal.

#### Delaware Law

We are incorporated in Delaware, and as such are subject to Section 203 of the DGCL, which provides that a corporation may not engage in any business combination with an interested stockholder during the three years after the stockholder becomes an interested stockholder unless:

- the corporation's board of directors approved in advance either the business combination or the transaction which resulted in the stockholder becoming an
  interested stockholder;
- the interested stockholder owned at least 85 percent of the corporation's voting stock at the time the transaction commenced; or
- the business combination is approved by the corporation's board of directors and the affirmative vote of at least two-thirds of the voting stock which is not owned by the interested stockholder.

An interested stockholder is anyone who owns 15% or more of a corporation's voting stock, or who is an affiliate or associate of the corporation and was the owner of 15% or more of the corporation's voting stock at any time within the previous three years; and the affiliates and associates of any those persons. Section 203 of the DGCL makes it more difficult for an interested stockholder to implement various business combinations with our Company for a three-year period, although our stockholders may vote to exclude it from the law's restrictions.

### Classified Board

Our certificate of incorporation and bylaws divide our board of directors into three classes with staggered three-year terms. There are currently four directors. Two classes are comprised of two directors each and a third class is currently vacant. At each annual meeting of stockholders, the terms of one class of directors will expire and the newly nominated directors of that class will be elected for a term of three years. The board of directors will be able to determine the total number of directors constituting the full board of directors and the number of directors in each class, but the total number of directors may not exceed nine nor may the number of directors in any class exceed six. No reduction in the total number of directors or in the number of directors in a given class will have the effect of removing a director from office or reducing the term of any then-sitting director. Stockholders may only remove directors for cause. If the board of directors increases the number of directors in a class, it will be able to fill the vacancies created for the full remaining term of a director in that class even though the term may extend beyond the next annual meeting. The directors will also be able to fill any other vacancies for the full remaining term of the director whose death, resignation or removal caused the vacancy.

A person who has a majority of the voting power at a given meeting will not in any one year be able to replace a majority of the directors since only one class of the directors will stand for election in any one year. As a result, at least two annual meeting elections will be required to change the majority of the directors by the requisite vote of stockholders. The purpose of classifying the board of directors is to provide for a continuing body, even in the face of a person who accumulates a sufficient amount of voting power, whether by ownership or proxy or a combination, to have a majority of the voting power at a given meeting and who may seek to take control of our Company without paying a fair premium for control to all of the owners of our common stock. This will allow the board of directors time to negotiate with such a person and to protect the interests of the other stockholders who may constitute a majority of the shares not actually owned by that person. However, it may also have the effect of deterring third parties from making takeover bids for control of our Company or may be used to hinder or delay a takeover bid.

#### PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of the named executive officers; and
- all of our current executive officers and directors as a group.

The percentage ownership information is based on 23,484,552 shares of our common stock outstanding as of May 29, 2020, excluding the 4,586,790 Shares that have been issued or may be issuable to Keystone Capital pursuant to the Purchase Agreement.

The following table is based upon information supplied by officers, directors and principal stockholders and/or a review of Schedules 13D and 13G, if any, and other documents filed with the SEC.

Beneficial Owner	Number of Shares Beneficially Owned (*)		Percent of Class (**)
Claudine Bruck, Ph.D.	12,550	(a)	— (i)
Adam D. Cutler	10,000	(b)	— (i)
Jed A. Latkin	24,000	(c)	— (i)
Y. Michael Rice	15,000	(d)	— (i)
Michael S. Rosol, Ph.D.	9,680	(e)	— (i)
S. Kathryn Rouan, Ph.D.	13,350	(f)	— (i)
All directors and executive officers as a group (6 persons)	84,580	(g)(j)	— (i)
John K. Scott, Jr.	6,978,772	(h)	29.7 %

- (\*) Beneficial ownership is determined in accordance with the rules of the SEC which generally attribute beneficial ownership of securities to persons who possess sole or shared voting power and/or investment power with respect to those securities. Unless otherwise indicated, voting and investment power are exercised solely by the person named above or shared with members of such person's household.
- (\*\*) Percent of class is calculated on the basis of the number of shares outstanding on May 29, 2020, plus the number of shares the person has the right to acquire within 60 days of May 29, 2020.
- (a) This amount includes 5,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 2,500 shares of unvested restricted stock and 2,500 shares issuable upon exercise of options which are not exercisable within 60 days.
- (b) This amount includes 5,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 2,500 shares of unvested restricted stock and 2,500 shares issuable upon exercise of options which are not exercisable within 60 days.
- (c) This amount includes 3,250 shares issuable upon exercise of options which are exercisable within 60 days and 4,342 shares in Mr. Latkin's account in the 401(k) Plan, but does not include 200,000 shares issuable upon exercise of options which are not exercisable within 60 days.

- (d) This amount includes 7,500 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 2,500 shares of unvested restricted stock and 2,500 shares issuable upon exercise of options which are not exercisable within 60 days.
- (e) This amount includes 6,250 shares issuable upon exercise of options which are exercisable within 60 days and 3,430 shares in Dr. Rosol's account in the 401(k) Plan, but does not include 25,000 shares issuable upon exercise of options which are not exercisable within 60 days.
- (f) This amount includes 5,000 shares issuable upon exercise of options which are exercisable within 60 days, but does not include 2,500 shares of unvested restricted stock and 2,500 shares issuable upon exercise of options which are not exercisable within 60 days.
- (g) This amount includes 32,000 shares issuable upon exercise of options which are exercisable within 60 days, and 7,772 shares held in the 401(k) Plan on behalf of certain officers, but it does not include 10,000 shares of unvested restricted stock and 235,000 shares issuable upon the exercise of options which are not exercisable within 60 days. The Company's Chief Executive Officer, Chief Operating Officer and Chief Financial Officer, Jed A. Latkin, is the trustee of the Navidea Biopharmaceuticals, Inc. 401(k) Plan and may, as such, share investment power over Common Stock held in such plan. Mr. Latkin disclaims any beneficial ownership of shares held by the 401(k) Plan. The 401(k) Plan holds an aggregate total of 45,478 shares of Common Stock.
- (h) The number of shares beneficially owned is based on a Form 4 filed by John K. Scott, Jr. with the SEC on February 19, 2020, and has been reduced by 1,073,529 shares to be issued pursuant to a February 2020 Stock Purchase Agreement, which shares have not yet been issued as of May 29, 2020. The address of John K. Scott, Jr. is 5251 DTC Parkway, Suite 285, Greenwood Village, CO 80111.
- (i) Less than one percent.
- (j) The address of all directors and executive officers is c/o Navidea Biopharmaceuticals, Inc., 4995 Bradenton Avenue, Suite 240, Dublin, OH 43017.

All of our employees and directors, or any of their designees, are prohibited from (i) purchasing financial instruments (including prepaid variable forward contracts, equity swaps, collars, and exchange funds), or (ii) otherwise engaging in transactions (including "short sales" and arrangements involving a non-recourse pledge of securities), that hedge or offset, or are designed to hedge or offset, any decrease in the market value of shares of our common stock granted to such employee or director, or any of their designees, as part of their compensation, or held (directly or indirectly) by such employee or director, or any of their designees.

#### LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus, and any supplement thereto, has been passed upon for us by Thompson Hine LLP, 335 Madison Avenue, 12th Floor, New York, New York 10017-4611.

#### **EXPERTS**

The financial statements as of December 31, 2019 and 2018, and management's assessments of the effectiveness of internal control over financial reporting as of December 31, 2019 and 2018 (which are included in Management's Report on Internal Control over Financial Reporting), incorporated in this prospectus by reference to the Annual Report on Form 10-K for the years ended December 31, 2019 and 2018, respectively, have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

### WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the securities being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference. The SEC maintains an internet website that contains reports, proxy statements, and other information about registrants, like us, that file electronically with the SEC. The address of that website is www.sec.gov. The information contained in, or that can be accessed through, the SEC's website is not incorporated by reference in, and is not part of, this prospectus or any prospectus supplement.

We are subject to the information and periodic reporting requirements of the Exchange Act, and we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at https://www.navidea.com/. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

### INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-37544):

- our annual report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 18, 2020;
- our quarterly report on Form 10-Q for the quarter ended March 31, 2019, filed with the SEC on May 15, 2020;
- our current reports on Form 8-K and all amendments thereto on Form 8-K/A, filed with the SEC on February 14, 2020, February 18, 2020, May 12, 2020, and May 21, 2020; and
- the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on February 8, 2011, including all amendments and reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to the termination of the offering (excluding any information furnished rather than filed) shall be deemed to be incorporated by reference into this prospectus.

We will provide to each person, including any beneficial owners, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered with the prospectus. We will provide these reports or documents upon written or oral request at no cost to the requester. You should direct any written requests for documents to Navidea Biopharmaceuticals, Inc., Attention: Chief Financial Officer, 4995 Bradenton Avenue, Suite 240, Dublin, Ohio 43017-3552. You may also telephone us at (614) 793-7500.

You may also access these documents, free of charge, on the SEC's website at www.sec.gov or on our website at https://ir.navidea.com/sec-filings. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus or any accompanying prospectus supplement.

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference into this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such an offer or solicitation.

## DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified to the fullest extent permitted under Delaware law. We also maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a capacity.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing, or otherwise, we have been advised that in the opinion of the SEC 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 us of expenses incurred or paid by a director, officer or controlling person of ours 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, we will, unless in the opinion of our 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.

4,586,790
Shares of Common Stock
Shares of Common Stock
PROSPECTUS

#### PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 13.

### Other Expenses of Issuance and Distribution.

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, paid or payable by the Registrant in connection with the sale of the securities being registered under this registration statement. All amounts shown are estimates except for the U.S. Securities and Exchange Commission (the "SEC"), registration fee and the FINRA filing fee.

Expense	 Amount
SEC Registration Fee	\$ 1,512
Accounting Fees and Expenses	10,000
Legal Fees and Expenses	50,000
Miscellaneous Fees and expenses	 50,000
Total	\$ 111,512

#### Item 14.

#### Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law (the "DGCL") permits a corporation in its certificate of incorporation or an amendment to eliminate or limit the personal liability of its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of law or obtained an improper personal benefit. Our certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with 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 the corporation, to which he or she is a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. Section 145 further provides that in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145(g) of the DGCL 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 under Delaware law.

We have entered into indemnification agreements with each of our directors and executive officers. In general, these agreements provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer or in connection with his or her service at our request for another corporation or entity.

Article Nine, Section (b), of our certificate of incorporation further provides that no director will be personally liable to us or our stockholders for monetary damages or for any breach of fiduciary duty except for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of law, pursuant to Section 174 of the Delaware General Corporation Law (which imposes liability in connection with the payment of certain unlawful dividends, stock purchases or redemptions), or any amendment or successor provision thereto, or for any transaction from which a director derived an improper personal benefit.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

We maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The foregoing discussion of indemnification merely summarizes certain aspects of indemnification provisions of, and is limited by reference to, the above discussed sections of the DGCL and our certificate of incorporation.

### Item 15.

#### Recent Sales of Unregistered Securities.

- Pursuant to the terms of an Asset Purchase Agreement dated as of November 23, 2016 between the Company and Cardinal Health 414, LLC (*'Cardinal Health 414''*), the Company granted to each of Cardinal Health 414 and The Regents of the University of California (San Diego) (*'UCSD''*) a five (5)-year warrant to purchase up to 10 million shares and 1 million shares, respectively, of the Company's common stock, par value \$.001 per share, at an exercise price of \$1.50 per share, each of which warrant is subject to anti-dilution and other customary terms and conditions. The Company relied on the exemption from registration under Section 4(2) of the Securities Act for the issuance of the warrants.
- On June 13, 2019, the Company entered into an underwriting agreement (the "June 2019 Agreement") with H.C. Wainwright & Co., LLC (the "Underwriter"), relating to an underwritten public offering of 8,000,000 shares of the Company's common stock. Pursuant to the June 2019 Agreement, the Company, in connection with the offering, agreed to issue to the underwriter warrants to purchase up to 690,000 shares of common stock, if the underwriter exercised the Underwriter Option, representing 7.5% of the aggregate number of shares of common stock sold in the offering (the "Underwriter Warrants" and together with the shares issuable upon exercise of the Underwriter Warrants, the "Underwriter Securities"). The Underwriter Warrants will be exercisable at any time and from time to time, in whole or in part, following the date of issuance and ending five years from the date of the execution of the June 2019 Agreement, at a price per share equal to \$0.9375 (125% of the offering price to the public per Share). The Underwriter Securities were issued in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Act.
- On December 6, 2019, the Company entered into a Stock Purchase Agreement (the "December 2019 Agreement") with the investors named therein. Pursuant to the December 2019 Agreement, the investors agreed to purchase approximately 2.1 million shares of the Company's common stock in a private placement for aggregate gross proceeds to the Company of approximately \$1.9 million. Such shares were sold in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Securities Act.
- On February 14, 2020, the Company executed agreements with two existing investors, including John K. Scott, Jr., to purchase approximately 4.0 million shares of the Company's common stock for aggregate gross proceeds to Navidea of approximately \$3.4 million. The securities to be issued to the Investors will represent approximately 16.5% of the Company's outstanding common stock after such issuance. The securities offered and to be sold by the Company in the private placement to Mr. Scott were sold in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Securities Act. The remaining shares were issued pursuant to the Company's shelf registration statement on Form S-3.
- On May 6, 2020, the Company entered into a Stock Purchase Agreement and Letter of Investment Intent (the "Keystone Purchase Agreement") with Keystone Capital Partners, LLC (the "Investor") pursuant to which the Company agreed to issue to the Investor 420,000 shares of newly-designated Series C Preferred Stock (the "Transaction Shares") for an aggregate purchase price of \$4,200,000. The Transaction Shares are being sold in reliance upon the exemption from the registration requirements in Section 4(a)(2) of the Securities Act. Pursuant to the Keystone Purchase Agreement, the Investor agreed to purchase Transaction Shares in amounts to be determined by the Investor in one or more closings (each, a "Call Closing") on or before November 6, 2020, provided that all of the Transaction Shares must be purchased by such date. In the event that the Company has not registered the resale of the shares ("Conversion Shares") of Common Stock (as defined below) issuable upon conversion of the Transaction Shares to be purchased at any Call Closing, then the Investor will not be obligated to complete the Call Closing until such Conversion Shares are registered for resale.

## Item 16.

# Exhibits and financial statement schedules.

- (a) The exhibits to the registration statement are set forth within the Exhibit Index below.
- (b) No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

# **Exhibit Index**

Exhibit Number	Exhibit Description
3.1	Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc., as corrected February 18, 1994, and amended June 27, 1994, July 25, 1995, June 3, 1996, March 17, 1999, May 9, 2000, June 13, 2003, July 29, 2004, June 22, 2005, November 20, 2006, December 26, 2007, April 30, 2009, July 27, 2009, August 2, 2010, January 5, 2012, June 26, 2013 and August 18, 2016) (filed as Exhibit 3.1 to the Company's Annual Report on Form 10-K filed March 31, 2017, and incorporated therein by reference).
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed April 26, 2019).
3.3	Amended and Restated By-Laws dated July 21, 1993, as amended July 18, 1995, May 30, 1996, July 26, 2007, and November 7, 2013 (filed as Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q filed November 12, 2013, and incorporated herein by reference).
3.4	Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series C Redeemable Convertible Preferred Stock (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K filed May 12, 2020, and incorporated herein by reference).
4.1	Amended and Restated Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series B Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 26, 2013).
4.2	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-3 filed December 31, 2019).
4.3	Registration Rights Agreement, dated December 6, 2019, among Navidea Biopharmaceuticals, Inc. and the stockholders named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 11, 2019).
4.4	Form of Underwriter Warrants (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 17, 2019).
4.5	Reference is made to Exhibits 3.1, 3.2, 3.3 and 3.4.
5.1	Opinion of Thompson Hine LLP.*
10.1	License Agreement, dated December 9, 2011, between AstraZeneca AB and the Company (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the U.S. Securities and Exchange Commission) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K/A filed April 11, 2012).
10.2	Series HH Warrant to purchase Common Stock of Navidea Biopharmaceuticals, Inc. issued to GE Capital Equity Investments, Inc., dated June 25, 2013 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K/A filed June 28, 2013).
10.3	Series HH Warrant to purchase Common Stock of Navidea Biopharmaceuticals, Inc. issued to MidCap Financial SBIC, LP, dated June 25, 2013 (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K/A filed June 28, 2013).
10.4	Office Lease, dated August 29, 2013, by and between Navidea Biopharmaceuticals, Inc. and BRE/COH OH LLC (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the U.S. Securities and Exchange Commission) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed September 5, 2013).
10.5	Form of Series KK Warrants to purchase Common Stock of Navidea Biopharmaceuticals, Inc. issued to Oxford Finance LLC on March 4, 2014 (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed March 7, 2014).
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pursuant to a request for confidential treatment and have been filed separately with the U.S. Securities and Exchange Commission) (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed August 11, 2014). Form of Stock Option Agreement under the Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the 10.7 Company's Quarterly Report on Form 10-Q filed November 10, 2014). ^ 10.8 Form of Restricted Stock Award and Agreement under the Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed November 10, 2014). ^ Securities Exchange Agreement dated as of March 11, 2015 among Macrophage Therapeutics, Inc., Platinum-Montaur Life Sciences, LLC and Michael 10.9 Goldberg, M.D. (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed May 11, 2015). Term Loan Agreement, dated as of May 8, 2015, by and among Navidea Biopharmaceuticals, Inc., as borrower, Macrophage Therapeutics, Inc. as guarantor, and Capital Royalty Partners II L.P., Capital Royalty Partners II – Parallel Fund "A" L.P. and Parallel Investment Opportunities Partners II L.P., 10.10 as lenders (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K/A filed October 9, 2015). 10.11 Security Agreement, dated as of May 15, 2015 among Navidea Biopharmaceuticals, Inc., as borrower, Macrophage Therapeutics, Inc. as guarantor, and Capital Royalty Partners II L.P., Capital Royalty Partners II - Parallel Fund "A" L.P. and Parallel Investment Opportunities Partners II L.P., as lenders, and Capital Royalty Partners II L.P., as control agent (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed May 15, 10.12 Form of Series LL Warrant issued to Montsant Partners LLC and Platinum Partners Value Arbitrage Fund, L.P. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed August 26, 2015). 10.13 Amendment 1 to Term Loan Agreement by and among Navidea Biopharmaceuticals, Inc., as borrower, and Capital Royalty Partners II L.P., Capital Royalty Partners II - Parallel Fund "A" L.P. and Parallel Investment Opportunities Partners II L.P., as lenders, dated as of December 23, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed January 11, 2016). 10.14 Form of Director Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed May 10, 2016). 10.15 Asset Purchase Agreement, dated November 23, 2016, between Navidea Biopharmaceuticals, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 30, 2016). 10.16 Global Settlement Agreement dated March 3, 2017, by and among Navidea Biopharmaceuticals, Inc., Cardinal Health 414, LLC, Macrophage Therapeutics, Inc., Capital Royalty Partners II L.P., Capital Royalty Partners II (Cayman), L.P., Capital Royalty Partners II – Parallel Fund "A" L.P., Parallel Investment Opportunities Partners II L.P. and Capital Royalty Partners II - Parallel Fund "B" (Cayman) L.P. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed March 9, 2017). 10.17 License-Back Agreement, dated March 3, 2017, between Navidea Biopharmaceuticals, Inc. and Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed March 9, 2017). Series NN Warrant, dated March 3, 2017, issued to Cardinal Health 414, LLC (incorporated by reference to Exhibit 10.4 to the Company's Current Report 10.18 on Form 8-K filed March 9, 2017). Series NN Warrant, dated March 3, 2017, issued to The Regents of the University of California (San Diego) (incorporated by reference to Exhibit 10.5 to 10.19 the Company's Current Report on Form 8-K filed March 9, 2017). II-5

License Agreement, dated July 14, 2014, between the Company and the Regents of the University of California (portions of this Exhibit have been omitted

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10.20	Amended and Restated License Agreement, dated March 3, 2017, between Navidea Biopharmaceuticals, Inc. and The Regents of the University of California (San Diego) (portions of this Exhibit have been omitted pursuant to a request for confidential treatment and have been filed separately with the
	Securities and Exchange Commission) (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed March 9, 2017).
10.21	Amendment to Asset Purchase Agreement dated April 2, 2018, between Navidea Biopharmaceuticals, Inc. and Cardinal Health 414, LLC (incorporated reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed May 9, 2018).
10.22	Agreement dated August 14, 2018, by and among Navidea Biopharmaceuticals, Inc., Macrophage Therapeutics, Inc. and Michael M. Goldberg, M.D. (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed November 9, 2018).
10.23	Employment Agreement, effective October 1, 2018, by and between Navidea Biopharmaceuticals, Inc. and Jed A. Latkin (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed October 5, 2018).
10.24	Navidea Biopharmaceuticals, Inc. 2014 Stock Incentive Plan (as amended and restated on August 16, 2018) (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed August 21, 2018).
10.25	Stock Purchase Agreement, dated March 22, 2019, between Navidea Biopharmaceuticals, Inc. and John K. Scott, Jr. (incorporated by reference to Exhib 10.1 to the Company's Quarterly Report on Form 10-Q filed May 9, 2019).
10.26	Stock Purchase Agreement, dated December 6, 2019, among Navidea Biopharmaceuticals, Inc. and the purchasers named therein (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed December 11, 2019).
10.27	Stock Purchase Agreement, effective February 14, 2020, by and between Navidea Biopharmaceuticals, Inc. and Keystone Capital Partners, LLC (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K filed March 18, 2020).
10.28	Stock Purchase Agreement, effective February 14, 2020, by and between Navidea Biopharmaceuticals, Inc. and John K. Scott (incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-K filed March 18, 2020).
10.29	Stock Purchase Agreement and Letter of Investment Intent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K file May 12, 2020).
10.30	Termination Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed May 12, 2020).
21.1	Subsidiaries of the registrant (incorporated by reference to Exhibit 21.1 to the Company's Annual Report on Form 10-K filed March 18, 2020).
23.1	Consent of Marcum LLP.*
23.2	Consent of Thompson Hine LLP (included in Exhibit 5.1).*
24.1	Power of Attorney (included on the signature page to this registration statement).*
^ *	Management contract or compensatory plan or arrangement. Filed herewith.

#### 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 of 1933, as amended (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 SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 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 paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of 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.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
  - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
  - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (5) That, for the purpose of determining liability of the registrant under the Securities Act 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;
  - (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.
- (b) The undersigned registrant hereby further 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.
- (c) 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 SEC 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.

### **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 Dublin, State of Ohio, on the 3rd day of June 2020.

### NAVIDEA BIOPHARMACEUTICALS, INC.

By:

/s/ Jed A. Latkin

Jed A. Latkin

Chief Executive Officer, Chief Operating Officer and Chief Financial Officer

## POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jed A. Latkin as true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission ("SEC"), and generally to do all such things in his name and behalf in his capacities as officer to enable Navidea Biopharmaceuticals, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the SEC, 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 connection therewith, as fully to all intents and purposes as he might or could do in person, ratifying and confirming all that said attorneys-in-fact and agents, or his substitutes or substitute, 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/ Jed A. Latkin Jed A. Latkin	Chief Executive Officer, Chief Operating Officer and Chief Financial Officer, Director (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	June 3, 2020	
/s/ Y. Michael Rice Y. Michael Rice	Chair, Director	June 3, 2020	
/s/ Claudine Bruck, Ph.D.		J. 2.2020	
Claudine Bruck, Ph.D.	Director	June 3, 2020	
/s/ Adam D. Cutler Adam D. Cutler	Director	June 3, 2020	
/s/ S. Kathryn Rouan, Ph.D. S. Kathryn Rouan, Ph.D.	Director	June 3, 2020	

June 3, 2020

Navidea Biopharmaceuticals, Inc. 4995 Bradenton Avenue Suite 240 Dublin, Ohio 43017

### Ladies and Gentlemen:

We have acted as counsel to Navidea Biopharmaceuticals, Inc., a Delaware corporation (the "Company") in connection with (i) the preparation and filing of the Registration Statement on Form S-1, being filed on the date hereof with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), (as so filed and as amended, the "Registration Statement") and the related prospectus contained in the Registration Statement (the "Prospectus") relating to the registration of the offering by the selling stockholder named in the Registration Statement under the caption "Selling Stockholder" (the "Selling Stockholders") of up to an aggregate of 4,586,790 shares of the Company's common stock, \$0.001 par value per share (the "Shares"), which consists of: (i) 174,978 shares of common stock and (ii) up to 4,411,812 shares of common stock issuable upon conversion of shares of our Series C Redeemable Convertible Preferred Stock, par value \$0.001 per share ("Series C Preferred"). The Series C Preferred are being issued pursuant to the terms of the May 6, 2020 Purchase Agreement and Letter of Investment Intent (the "Purchase Agreement") between the Company and the Selling Stockholder.

In rendering this opinion, we have examined the Registration Statement, the Prospectus, the Purchase Agreement, and such other documents and reviewed such questions of law as we have deemed advisable in order to render our opinion set forth below. In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, that all parties (other than the Company) had the requisite power and authority (corporate or otherwise) to execute, deliver and perform such agreements or instruments, that all such agreements or instruments have been duly authorized by all requisite action (corporate or otherwise), executed and delivered by such parties, that such agreements or instruments are valid, binding and enforceable obligations of such parties, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. In providing this opinion, we have further relied as to certain matters on information obtained from public officials and officers of the Company.

As a result of and subject to the foregoing, we are of the opinion that the Shares, when such Shares were issued, and when any such Shares may be issued pursuant to conversion of the Series C Preferred against payment therefor as set forth in the Registration Statement, have been and will be duly authorized for issuance, validly issued, fully paid, and non-assessable.

Our opinions expressed above are limited to the General Corporation Laws of the State of Delaware and laws of the State of New York, in each case as currently in effect, and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

This opinion letter is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares, the Registration Statement or the Prospectus.

THOMPSON HINE LLP 335 Madison Avenue www.ThompsonHine.com

12th Floor O: 212.344.5680 ATTORNEYS AT LAW

New York, New York 10017-4611 F: 212.344.6101



We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to being named under the caption "Legal Matters" contained in the Prospectus. In giving this consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Thompson Hine LLP

Thompson Hine LLP

### INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Navidea Biopharmaceuticals, Inc. on Form S-1 of our report dated March 18, 2020, which refers to the adoption of new accounting standard ASU No. 2016-02, Leases (Topic 842), as amended, effective January 1, 2019, and which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Navidea Biopharmaceuticals, Inc. as of December 31, 2019 and 2018 and for the years then ended appearing in the Annual Report on Form 10-K of Navidea Biopharmaceuticals, Inc. for the year ended December 31, 2019. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum LLP

New Haven, CT June 3, 2020