

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

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

HELIUS MEDICAL TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3845
(Primary Standard Industrial
Classification Code Number)

36-4787690
(I.R.S. Employer
Identification Number)

642 Newtown Yardley Road, Suite 100
Newtown, Pennsylvania 18940
(215) 944-6100

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

Dane C. Andreeff
President and Chief Executive Officer
Helius Medical Technologies, Inc.
642 Newtown Yardley Road, Suite 100
Newtown, Pennsylvania 18940
(215) 944-6100

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

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Approximate date of commencement of proposed sale to public: From time to time after this Registration Statement becomes effective, as determined by the selling stockholder.

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

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

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

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

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

Large accelerated filer	<input type="checkbox"/>		Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>		Smaller reporting company	<input checked="" type="checkbox"/>
			Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Class A common stock, par value \$0.001 per share	731,958	\$14.32	\$10,481,638.56	\$1,143.55

- (1) Represents 31,958 shares of Class A common stock to be issued to the selling stockholder named herein and 700,000 shares of Class A common stock that may be issued to the selling stockholder at the option of the registrant, in each case pursuant to a purchase agreement between the registrant and the selling stockholder. Pursuant to Rule 416(a) under the Securities Act of 1933 (the "Securities Act"), this registration statement also covers an indeterminate number of additional number of shares of Class A common stock issuable upon stock splits, stock dividends, dividends or other distribution, recapitalization or similar events with respect to the shares of Class A common stock being registered pursuant to this registration statement.
- (2) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average of the high and low prices per share of the Class A common stock as reported on the Nasdaq Capital Market on September 1, 2021.

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

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

Subject to completion, dated September 3, 2021

PROSPECTUS



731,958 Shares of Common Stock

This prospectus relates to the resale, from time to time, of up to 731,958 shares of our Class A common stock, par value \$0.001 per share, or common stock, by Lincoln Park Capital Fund, LLC, which we refer to in this prospectus as Lincoln Park or the selling stockholder. The shares of common stock to which this prospectus relates includes up to 700,000 shares that we may sell to Lincoln Park, from time to time after the date of this prospectus, in our sole discretion, pursuant to a purchase agreement between us and Lincoln Park dated September 1, 2021, which we refer to as the Purchase Agreement, and 31,958 shares to be issued to Lincoln Park in consideration for its commitment to purchase shares of our common stock at our direction under the Purchase Agreement.

We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of the shares by Lincoln Park. However, we may receive aggregate gross proceeds of up to \$15,000,000 from the sale of shares to Lincoln Park under the Purchase Agreement, from time to time in our discretion after the date of this prospectus and after satisfaction of other conditions in the Purchase Agreement.

Lincoln Park is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act.

Lincoln Park may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. See “Plan of Distribution” on page 26 for more information about how Lincoln Park may sell the shares of common stock being registered pursuant to this prospectus.

We have agreed to bear all of the expenses incurred in connection with the registration of the shares to which this prospectus relates. Lincoln Park will pay or assume discounts, commissions, and fees of underwriters, selling brokers or dealer managers, if any, incurred in connection with the sale of shares of our common stock.

Our common stock is listed on The Nasdaq Capital Market under the symbol “HSDT” and on the Toronto Stock Exchange “TSX” under the symbol “HSM”. However, we have applied to voluntarily delist our common stock from the TSX effective September 9, 2021. On September 2, 2021, the last reported sale price of our common stock as reported on The Nasdaq Capital Market was \$15.15 per share.

Our business and investment in our common stock involve significant risks. These risks are described in the section titled “[Risk Factors](#)” beginning on page 7 of this prospectus. You should also consider the risk factors described or referred to in any documents incorporated by reference in this prospectus, and in any applicable prospectus supplement, before investing in these securities.

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

The date of this prospectus is _____, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC. Before making your investment decision, we urge you to carefully read this prospectus and all of the information contained in the documents incorporated by reference in this prospectus, as well as the additional information described under the headings “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference.”

To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference in this prospectus, on the other hand, you should rely on the information in this prospectus, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We have not, and the selling stockholder has not, authorized anyone to provide you with any information other than that contained in or incorporated by reference in this prospectus, any prospectus supplement or in any related free writing prospectus filed by us with the SEC. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in this prospectus or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in our securities, you should read this entire prospectus and the documents incorporated by reference herein and therein carefully, including our financial statements and related notes, the information in the section “Risk Factors,” and “Where You Can Find More Information.” Unless otherwise specified or the context otherwise requires, references in this prospectus to the “Company,” “Helius,” “we,” “us”, and “our” refer to Helius Medical Technologies, Inc. and its wholly owned subsidiaries, Helius Medical, Inc., or HMI, Helius Medical Technologies (Canada), Inc., or HMC, Helius Canada Acquisition Ltd., or HCA, and Helius NeuroRehab, Inc., or HNR.

All trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies’ trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Company Overview

We are a neurotech company focused on neurological wellness. Our purpose is to develop, license and acquire unique and non-invasive platform technologies that amplify the brain’s ability to heal itself.

Our first product, known as the Portable Neuromodulation Stimulator, or PoNSTM (“PoNS”), is an innovative non-surgical device, inclusive of a controller and mouthpiece, which delivers electrical stimulation to the surface of the tongue to provide treatment of gait deficit. The PoNS device is indicated for use in the United States as a short term treatment of gait deficit due to mild-to-moderate symptoms from multiple sclerosis (“MS”) and is to be used as an adjunct to a supervised therapeutic exercise program in patients 22 years of age and over by prescription only. It is authorized for sale in Canada as a class II, non-implantable, medical device intended as a short term treatment (14 weeks) of gait deficit due to mild and moderate symptoms from MS, and chronic balance deficit due to mild-to-moderate traumatic brain injury (“mmTBI”) and is to be used in conjunction with physical therapy. The PoNS™ is an investigational medical device in the European Union (“EU”) and Australia (“AUS”). It is currently under premarket review by the AUS Therapeutic Goods Administration.

Corporate History

NeuroHabilitation Corporation, or NHC, a Delaware corporation, incorporated on January 22, 2013, is involved in the medical device industry. In January 2013, HMI entered into an exclusive rights agreement whereby Advanced Neuro-Rehabilitation LLC, or ANR, granted NHC exclusive worldwide rights to ANR’s trade secrets, knowhow and patent pending technology for a non-invasive means for delivering neurostimulation through the oral cavity, in exchange for a 50% equity investment in NHC and a 4% royalty of NHC’s revenue collected from (a) the U.S. sales of products covered by any claim of the patent pending rights to end users and (b) services related to the therapy or use of such products in therapy services.

On June 13, 2014, we acquired a 100% interest in NHC pursuant to a plan of merger whereby our wholly-owned subsidiary was merged with and into NHC and all of the common shares in the capital of NHC were cancelled in consideration for the issuance of an aggregate of 201,714 shares of our common stock to the shareholders of NHC. NHC, which changed its name to Helius Medical, Inc. in December 2018, is now our wholly-owned subsidiary. Prior to the transaction we had no active business.

On January 31, 2019, we formed another wholly owned subsidiary, Heliuss NeuroRehab, Inc., a Delaware corporation. On October 10, 2019, we formed Heliuss Canada Acquisition Ltd., a company incorporated under the federal laws of Canada and a wholly owned subsidiary of Heliuss Medical Technologies (Canada), Inc., a company incorporated under the federal laws of Canada, which acquired Heuro Canada, Inc. from Health Tech Connex Inc. on October 30, 2019.

Lincoln Park Transaction

On September 1, 2021, we and Lincoln Park entered into the Purchase Agreement and a registration rights agreement, or the Registration Rights Agreement. The Purchase Agreement provides that, subject to the terms and conditions set forth therein, we may sell to Lincoln Park up to \$15.0 million of shares of common stock from time to time during the term of the Purchase Agreement. Pursuant to the terms of the Registration Rights Agreement, we have filed the registration statement that includes this prospectus with the Securities and Exchange Commission (the "SEC") to register for resale under the Securities Act up to 731,958 shares of common stock that may be issued and sold by us to Lincoln Park under the Purchase Agreement.

Under the terms and subject to the conditions of the Purchase Agreement, the Company has the right, but not the obligation, to sell to Lincoln Park, and Lincoln Park is obligated to purchase up to \$15.0 million of the Company's Common Stock. Such sales of Common Stock by the Company, if any, will be subject to certain limitations set forth in the Purchase Agreement, and may occur from time to time, at the Company's sole discretion, over the 36-month period commencing on the date that the conditions to Lincoln Park's purchase obligation set forth in the Purchase Agreement are satisfied, including that the registration statement that includes this prospectus is declared effective by the SEC and a final prospectus relating thereto is filed with the SEC (the date on which all of such conditions are satisfied, the "Commencement Date").

From and after the Commencement Date, on any business day selected by the Company on which the closing sale price of the Common Stock is not below \$1.00, the Company may, by written notice delivered by us to Lincoln Park, direct Lincoln Park to purchase up to 20,000 shares of Common Stock on such business day, at a purchase price per share that will be determined and fixed in accordance with the Purchase Agreement at the time we deliver such written notice to Lincoln Park (each, a "Regular Purchase"), provided, however, that the maximum number of shares we may sell to Lincoln Park in a Regular Purchase may be increased to (i) up to 25,000 shares, provided that the closing sale price of the Common Stock on the applicable purchase date is not below \$20.00 and (ii) up to 30,000 shares, provided that the closing sale price of the Common Stock on the applicable purchase date is not below \$25.00 (each, of such share and dollar amounts subject to adjustment for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction as provided in the Purchase Agreement). In any case, however, Lincoln Park's maximum purchase commitment in any single Regular Purchase may not exceed \$2,000,000. The purchase price per share of Common Stock sold in each such Regular Purchase, if any, will be based on prevailing market prices of the Common Stock immediately preceding the time of sale as computed under the Purchase Agreement.

In addition to Regular Purchases, provided that we have directed Lincoln Park to purchase the maximum amount of shares that we are then able to sell to Lincoln Park in a Regular Purchase, we may, in our sole discretion, also direct Lincoln Park to purchase additional shares of Common Stock in "accelerated purchases," and "additional accelerated purchases" as set forth in the Purchase Agreement. The purchase price per share of Common Stock sold in each such accelerated purchase and additional accelerated purchase, if any, will be based on prevailing market prices of the Common Stock at the time of sale as computed under the Purchase Agreement. There are no upper limits on the price per share that Lincoln Park must pay for shares of Common Stock in any purchase under the Purchase Agreement.

The Company will control the timing and amount of any sales of Common Stock to Lincoln Park pursuant to the Purchase Agreement. Lincoln Park has no right to require the Company to sell any shares of Common Stock to Lincoln Park, but Lincoln Park is obligated to make purchases as the Company directs, subject to certain conditions.

Actual sales of shares of Common Stock to Lincoln Park will depend on a variety of factors to be determined by the Company from time to time, including, among others, market conditions, the trading price of the Company's Common Stock and determinations by the Company as to the appropriate sources of funding for the Company and its operations. The net proceeds under the Purchase Agreement to the Company will depend on the frequency and prices at which the Company sells shares of its stock to Lincoln Park. The Company expects that any proceeds received by the Company from such sales to Lincoln Park will be used for working capital and general corporate purposes.

A total of 731,958 shares of common stock that may be issued to the selling stockholder are being offered by this prospectus. Depending on the market prices of common stock at the various times the Company may elect to sell shares to the selling stockholder under the Purchase Agreement, the Company may be required, under the Registration Rights Agreement, to register for resale under the Securities Act additional shares of common stock that it may sell to the selling stockholder in order for it to receive the total commitment of \$15,000,000 available under the Purchase Agreement.

Under applicable rules of the Nasdaq Capital Market, the Company may not issue or sell to Lincoln Park under the Purchase Agreement more than 19.99% of the shares of the Common Stock outstanding immediately prior to the execution of the Purchase Agreement (the "Exchange Cap") (or 463,321 shares, based on 2,317,772 shares outstanding immediately prior to the execution of the Purchase Agreement), unless (i) we obtain stockholder approval to issue shares of Common Stock in excess of the Exchange Cap to Lincoln Park under the Purchase Agreement in accordance with applicable Nasdaq rules or (ii) the average price of all applicable sales of our Common Stock to Lincoln Park under the Purchase Agreement equals or exceeds the lower of (A) the official closing price of the Company's Common Stock on Nasdaq immediately prior to the execution of the Purchase Agreement and (B) the average official closing price of our Common Stock on Nasdaq for the five consecutive trading days immediately prior to the execution of the Purchase Agreement, adjusted such that issuances of Common Stock to Lincoln Park under the Purchase Agreement will not be subject to the Exchange Cap limitation under applicable Nasdaq rules. In any event, the Purchase Agreement specifically provides that the Company may not issue or sell any shares of its Common Stock under the Purchase Agreement if such issuance or sale would breach any applicable Nasdaq rules.

In all instances, the Purchase Agreement prohibits the Company from directing Lincoln Park to purchase any shares of Common Stock if those shares, when aggregated with all other shares of Common Stock then beneficially owned by Lincoln Park (as calculated pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended, and Rule 13d-3 thereunder), would result in Lincoln Park beneficially owning more than 9.99% of the outstanding shares of Common Stock (the "Beneficial Ownership Cap").

The Company has agreed with Lincoln Park that it will not enter into an additional "equity line" or a substantially similar transaction whereby a specific investor is irrevocably bound pursuant to an agreement with the Company to purchase securities over a period of time from the Company at a price based on the market price of the Common Stock at the time of such purchase for a period defined in the Purchase Agreement. Lincoln Park has covenanted not to cause or engage in any manner whatsoever, any direct or indirect short selling or hedging of the Company's shares.

As consideration for Lincoln Park's irrevocable commitment to purchase shares of the Company's Common Stock upon the terms of and subject to satisfaction of the conditions set forth in the Purchase Agreement, the Company agreed to issue 31,958 shares of its Common Stock to Lincoln Park as commitment shares (the

“Commitment Shares”), to be issued on the business day following the delisting of the Company’s Common Stock on the Toronto Stock Exchange, which the Company anticipates will occur on September 9, 2021. The Commitment Shares are included in the 731,958 shares of common stock registered under the registration statement of which this prospectus forms a part.

The Purchase Agreement and the Registration Rights Agreement contain customary representations, warranties, conditions and indemnification obligations of the parties. The Company has the right to terminate the Purchase Agreement at any time with one business days’ notice, at no cost or penalty. During any “event of default” under the Purchase Agreement, Lincoln Park does not have the right to terminate the Purchase Agreement; however, the Company may not initiate any regular or other purchase of shares by Lincoln Park, until such event of default is cured. In addition, in the event of bankruptcy proceedings by or against the Company not discharged within 90 days, the Purchase Agreement will automatically terminate.

Corporate Information

Our principal executive offices are located at 642 Newtown Yardley Road, Suite 100, Newtown, PA 18940 and our telephone number is 215-944-6100. We maintain a corporate website at www.heliusmedical.com. We make available free of charge through our Internet website our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and any amendments to these reports, as soon as its reasonably practicable after we electronically file such material with, or furnish such material to the SEC. We are not including the information on our website as a part of, nor incorporating it by reference into, this prospectus or the registration statement of which it forms a part. Additionally, the SEC maintains a website that contains annual, quarterly, and current reports, proxy statements, and other information that issuers (including us) file electronically with the SEC. The SEC’s website address is <http://www.sec.gov>.

THE OFFERING

Common stock offered by selling stockholder

The shares being sold by this prospectus consist of:

- 31,958 Commitment Shares to be issued to Lincoln Park as consideration for its commitment to purchase shares of our common stock under the Purchase Agreement; and
- Up to 700,000 shares of our common stock we may issue and sell to Lincoln Park from time to time, at our sole discretion, during the 36-month period commencing on the Commencement Date in accordance with the Purchase Agreement.

Selling stockholder

Lincoln Park Capital Fund, LLC. See “Selling Stockholder” on page 19 of this prospectus.

Use of proceeds

We will not receive any proceeds from the sale of common stock by Lincoln Park pursuant to this prospectus.

We may receive gross proceeds of up to \$15.0 million from the sale of shares to Lincoln Park under the Purchase Agreement after the date of this prospectus. Such proceeds will be used for funding operations, working capital and general corporate purposes. See “Use of Proceeds” on page 11 of this prospectus.

Risk factors

You should read the “Risk Factors” section included or incorporated by reference in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.

Trading Markets

Our common stock is traded on the Nasdaq Capital Market under the symbol “HSDT” and on the TSX under the symbol “HSM.” However, we have applied to voluntarily delist our common stock from the TSX effective September 9, 2021. See “*Description of Capital Stock – Common Stock Listing.*”

Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or warrants described above.

Effective after the close of business on December 31, 2020, we completed a 1-for-35 reverse split of our common stock. The reverse stock split did not change the par value of our stock or the authorized number of common or preferred shares. All share and per share amounts for all periods presented in this prospectus and the documents incorporated herein by reference have been adjusted to reflect the reverse stock split.

RISK FACTORS

An investment in our securities has a high degree of risk. Before you invest you should carefully consider the risks and uncertainties described below and in the “Risk Factors” section of our Annual Report on Form 10-K for the year ended December 31, 2020 and the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2021, each of which is incorporated by reference herein, and the other information in this prospectus. Any of the risks and uncertainties set forth herein and therein could materially and adversely affect our business, results of operations and financial condition, which in turn could materially and adversely affect the trading price or value of our securities. Additional risks not currently known to us or which we consider immaterial based on information currently available to us may also materially adversely affect us. As a result, you could lose all or part of your investment.

Risks Related to the Offering

The sale or issuance of shares of our common stock to Lincoln Park may cause dilution, and the sale of shares of common stock acquired by Lincoln Park, or the perception that such sales may occur, could cause the price of our common stock to fall.

On September 1, 2021, we entered into the Purchase Agreement with Lincoln Park, pursuant to which Lincoln Park has committed to purchase from us up to \$15.0 million of shares of our common stock at our discretion. As consideration for Lincoln Park’s commitment to purchase shares of our common stock at our direction under the Purchase Agreement, we agreed to issue 31,958 Commitment Shares to Lincoln Park on the business day next following the date our shares of common stock are delisted from the TSX.

The 731,958 shares of our common stock being registered for resale hereunder consist of (i) the 31,958 Commitment Shares to be issued to Lincoln Park for its commitment to purchase shares of our common stock at our direction under the Purchase Agreement, and (ii) up to 700,000 shares of our common stock that we may, in our sole discretion, elect to sell to Lincoln Park from time to time over the 36-month period commencing on the Commencement Date. The purchase price for the shares of our common stock that we may sell to Lincoln Park under the Purchase Agreement will fluctuate based on the public trading price of our common stock. Depending on market liquidity at the time, sales of such shares of our common stock may cause the public trading price of our common stock to decrease.

We generally have the right to control the timing and amount of any future sales of shares of our common stock to Lincoln Park. Sales of shares of our common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Lincoln Park all, some or none of the additional shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. Therefore, sales to Lincoln Park by us could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could 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 wish to effect sales. If and when we do sell shares of our common stock to Lincoln Park, after Lincoln Park has acquired the shares of common stock, Lincoln Park may resell all, some or none of those shares of common stock at any time or from time to time in its discretion.

We may not have access to the full amount available under the Purchase Agreement with Lincoln Park.

Although the Purchase Agreement provides that we may sell up to \$15.0 million of shares of common stock to Lincoln Park, only 731,958 of the shares of common stock that may be issued to Lincoln Park are being offered under this prospectus, of which (i) 31,958 shares represent the Commitment Shares to be issued to Lincoln Park

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for its commitment to purchase shares of our common stock at our direction under the Purchase Agreement and (ii) up to 700,000 shares of our common stock that we may, in our sole discretion, elect to sell to Lincoln Park from time to time over the 36-month period commencing on the Commencement Date. As a result, depending on the market prices of our common stock at the times we elect to issue and sell shares to Lincoln Park under the Purchase Agreement, if any, we may need to issue and sell to Lincoln Park under the Purchase Agreement more than the 700,000 purchase shares being registered for resale by Lincoln Park under the registration statement that includes this prospectus, in order to receive proceeds equal to the \$15,000,000 total purchase commitment available to us under the Purchase Agreement. In such case, before we can sell any additional shares to Lincoln Park, we will need to register for resale under the Securities Act such additional shares of common stock, which will require additional time, resources and cost to us. In addition, the issuance and sale of such additional shares of common stock by the Company to Lincoln Park under the Purchase Agreement could cause substantial dilution to our stockholders.

In addition, under the rules of the Nasdaq Capital Market and the terms of the Purchase Agreement, in no event may we issue or sell to Lincoln Park under the Purchase Agreement shares of our common stock in excess of the Exchange Cap of 463,321 shares (including the 31,958 Commitment Shares), which represents 19.99% of the shares of our common stock outstanding (based on 2,317,772 shares outstanding) immediately prior to the execution of the Purchase Agreement, unless (i) we obtain stockholder approval to issue shares of our common stock in excess of the Exchange Cap or (ii) the average price of all applicable sales of our common stock to Lincoln Park under the Purchase Agreement equals or exceeds \$15.1661 per share, so that such issuances and sales would be exempt from the Exchange Cap limitation under applicable Nasdaq rules. In addition, Lincoln Park cannot be required to purchase any shares of our common stock if such purchase would cause Lincoln Park's beneficial ownership of our common stock to exceed the Beneficial Ownership Cap. Our inability to access a portion or the full amount available under the Purchase Agreement, in the absence of any other financing sources, could have a material adverse effect on our business.

Our management will have broad discretion over the use of the net proceeds, if any, from our sale of shares of common stock to Lincoln Park, you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of the net proceeds from our sale of shares of common stock to Lincoln Park, and we could use them for purposes other than those contemplated at the time of commencement of this offering. Accordingly, you will be relying on the judgment of our management with regard to the use of those net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that, pending their use, we may invest those net proceeds in a way that does not yield a favorable, or any, return for us. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flows.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus including the documents that we incorporate by reference, contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “may,” “will,” “should,” “could,” “anticipates,” “estimates,” “plans,” “projects,” “potential,” “continuing,” “ongoing,” “expects,” “believes,” “intends,” “targets,” “predicts,” and similar words or phrases. Accordingly, these statements involve estimates, assumptions and uncertainties which could cause actual results to differ materially from those expressed in them.

The forward-looking statements included or incorporated by reference in this prospectus include but are not limited to statements relating to: the Company’s future growth and operational progress, including pre-commercial activities for the PoNS device, expected time to begin commercialization of the PoNS device in the U.S., the COVID-19 pandemic, including its impact on the Company, clinical development plans, product development activities, plans for U.S. Food and Drug Administration, or FDA, filings and their subsequent approvals, other foreign or domestic regulatory filings, the safety and effectiveness of our product, the timeline for our improvement plans, our market awareness, our ability to compete effectively, the ability and limitation of our manufacturing source(s), our distribution network, the adequacy of our intellectual property protection, our future patent approvals, our future expenses and cash flow, our ability to become profitable, our future financing arrangements, our accountants’ future perspective including our ability to continue as a going concern, any future stock price, our ability to build commercial infrastructure, and our ability to receive reimbursement coverage under Medicare, Medicaid or under other insurance plans.

Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Heliuss, are inherently subject to significant business, economic, competitive political and social uncertainties and contingencies. The factors and assumptions used by management of the Company to develop such forward-looking statements include, but are not limited to, uncertainties associated with the Company’s capital requirements to achieve its business objectives, the impact of the COVID-19 pandemic, the Company’s ability to train physical therapists in the supervision of the use of the PoNS Treatment, the Company’s ability to secure contracts with rehabilitation clinics, the Company’s ability to obtain national Medicare coverage and to obtain a reimbursement code so that the PoNS device is covered by Medicare and Medicaid, the Company’s ability to build internal commercial infrastructure, secure state distribution licenses, build a commercial team and build relationships with Key Opinion Leaders, neurology experts and neurorehabilitation centers, market awareness of the PoNS device, future clinical trials and the clinical development process, manufacturing and supply chain risks, potential changes to the MCIT program resulting from the 60-day deferral of the program implementation, the product development process and FDA regulatory submission review and approval process, other development activities, ongoing government regulation and other factors included in the section entitled “Risk Factors.”

Although we believe the expectations expressed in such forward-looking statements are based on reasonable assumptions at the time they were made, they are subject to risks and uncertainties, known and unknown, which could cause actual results and developments to differ materially from those expressed or implied in such statements. Forward-looking statements are not guarantees of future performance and actual results may differ significantly from such forward-looking statements.

You should carefully read this prospectus, any prospectus supplement and any related free writing prospectus and with the understanding that our actual future results may materially differ from what we expect.

Except as required by law, forward-looking statements speak only as of the date they are made, and we assume no obligation to update any forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in any forward-looking statements, even if new information becomes available.

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This prospectus supplement contains and incorporates by reference certain market data and industry statistics and forecasts that are based on Company-sponsored studies, independent industry publications and other publicly available information. Although we believe these sources are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under “Risk Factors” in this prospectus and under similar headings in the documents incorporated by reference herein. Accordingly, investors should not place undue reliance on this information.

USE OF PROCEEDS

This prospectus relates to the shares of common stock that may be offered and sold from time to time by Lincoln Park. We are not selling any securities under this prospectus and we will not receive any proceeds from the sale of shares by Lincoln Park.

However, we may receive up to \$15.0 million in aggregate gross proceeds under the Purchase Agreement from any sales of common stock we make to Lincoln Park pursuant to the Purchase Agreement after the date of prospectus. Any proceeds we receive from our sale of shares of common stock to Lincoln Park under the Purchase Agreement will be used for funding operations, working capital and general corporate purposes.

We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of any proceeds from the sale of any shares of our common stock under the Purchase Agreement.

The allocation of the net proceeds we receive from our sale of shares of common stock to Lincoln Park under the Purchase Agreement, if any, represents our estimates based upon our current plans and assumptions regarding industry and general economic conditions, our future revenues and expenditures.

The amounts and timing of our actual expenditures may vary significantly and will depend on numerous factors, including market conditions, cash generated or used by our operations, business developments and opportunities that may arise and related rate of growth. We may find it necessary or advisable to use portions of the proceeds we receive from our sale of shares of common stock to Lincoln Park under the Purchase Agreement for other purposes.

Circumstances that may give rise to a change in the use of proceeds and the alternate purposes for which the proceeds may be used include:

- the existence of other opportunities or the need to take advantage of changes in timing of our existing activities;
- the need or desire on our part to accelerate, increase or eliminate existing initiatives due to, among other things, changing market conditions and competitive developments; and/or
- if strategic opportunities present themselves (including acquisitions, joint ventures, licensing and other similar transactions).

From time to time, we evaluate these factors and other factors and we anticipate continuing to make such evaluations to determine if the existing allocation of resources, including the proceeds we receive from our sale of shares of common stock to Lincoln Park under the Purchase Agreement, is being optimized. Pending the application of the net proceeds as described above, we will hold the net proceeds from this offering in short-term, interest-bearing, securities.

DILUTION

The sale of our common stock to Lincoln Park pursuant to the Purchase Agreement will have a dilutive impact on our stockholders. In addition, the lower our stock price is at the time we exercise our right to sell shares to Lincoln Park, the more shares of our common stock we will have to issue to Lincoln Park pursuant to the Purchase Agreement and our existing stockholders would experience greater dilution.

Net tangible book value per share prior to this offering is equal to our total tangible assets minus total liabilities, all divided by 2,317,772 shares of common stock outstanding at June 30, 2021. Our historical net tangible book value as of June 30, 2021 was approximately \$7.1 million, or \$3.08 per share of our common stock.

After giving effect to (i) the issuance of 31,958 shares of our common stock to Lincoln Park as Commitment Shares and (ii) the sale of 700,000 shares of our common stock to Lincoln Park pursuant to the Purchase Agreement at an assumed sale price of \$14.49 per share of our common stock (which represents the closing price of our common stock on September 1, 2021) and after deducting estimated offering expenses payable by us, our as-adjusted net tangible book value as of June 30, 2021 would have been approximately \$17.2 million, or \$5.63 per share. This represents an immediate increase in net tangible book value of \$2.55 per share to existing stockholders and an immediate dilution of \$8.86 per share to investors in this offering.

The number of shares of common stock that will be outstanding after this offering as shown above is based on 2,317,772 shares of our common stock outstanding as of June 30, 2021, and excludes the following:

- 631,016 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2021, at a weighted-average exercise price of \$38.92 per share;
- 593,924 shares of common stock issuable upon the exercise of warrants outstanding as June 30, 2021, at a weighted-average exercise price of \$16.32 per share;
- an aggregate of 127,328 shares of common stock reserved for future issuance under our 2018 Plan as of June 30, 2021;
- an aggregate of 100,000 shares of common stock reserved for future issuance under our Inducement Plan adopted following June 30, 2021 or any of the stock options issued thereunder; and
- an aggregate of 8,290 restricted stock units outstanding as of June 30, 2021.

To the extent that outstanding options or warrants are exercised or new awards are issued under our equity incentive plans, there may be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

THE LINCOLN PARK TRANSACTION

General

On September 1, 2021, we entered into the Purchase Agreement with Lincoln Park, pursuant to which Lincoln Park has agreed to purchase from us up to an aggregate of \$15.0 million of our common stock (subject to certain limitations) from time to time over the term of the Purchase Agreement. Also on September 1, 2021, we entered into the Registration Rights Agreement, pursuant to which we filed with the SEC the registration statement that includes this prospectus to register for resale under the Securities Act the shares of our common stock that may be issued to Lincoln Park under the Purchase Agreement.

This prospectus covers the resale by the selling stockholder of up to 731,958 shares of our common stock, comprised of: (i) 31,958 Commitment Shares that we agreed to issue to Lincoln Park as a fee for making its irrevocable commitment to purchase our common stock under the Purchase Agreement, one business day following the delisting of our common stock from the TSX, and (ii) up to an additional 700,000 shares of our common stock that we have reserved for sale to Lincoln Park under the Purchase Agreement from time to time after the date of this prospectus, if and when we determine to sell additional shares of our common stock to Lincoln Park under the Purchase Agreement.

Other than the Commitment Shares that we agreed to issue to Lincoln Park following the delisting of our common stock from the TSX as a fee for making its irrevocable commitment to purchase our common stock under the Purchase Agreement, we do not have the right to commence any sales of our common stock to Lincoln Park under the Purchase Agreement until all of the conditions set forth in the Purchase Agreement have been satisfied on the Commencement Date, including that the SEC has declared effective the registration statement that includes this prospectus and the delisting of our common stock from the TSX. From and after the Commencement Date, we may, from time to time and at our sole discretion for a period of 36-months, on any business day that we select on which the closing sale price of our common stock equals or exceeds \$1.00 per share, direct Lincoln Park to purchase in a Regular Purchase up to 20,000 shares of our common stock, which amount may be increased depending on the market price of our common stock at the time of sale, subject to a maximum commitment of \$2,000,000 per Regular Purchase. In addition, at our discretion, Lincoln Park has committed to purchase other “accelerated amounts” and/or “additional accelerated amounts” under certain circumstances. We will control the timing and amount of any sales of our common stock to Lincoln Park. The purchase price of the shares of our common stock that may be sold to Lincoln Park in Regular Purchases under the Purchase Agreement will be based on the market price of our common stock immediately preceding the time of sale as computed under the Purchase Agreement. The purchase price per share will be equitably adjusted as provided in the Purchase Agreement for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction as set forth in the Purchase Agreement. We may at any time in our sole discretion terminate the Purchase Agreement without fee, penalty or cost upon one business day notice. There are no restrictions on future financings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement or Registration Rights Agreement, other than restrictions on our ability to enter into additional “equity line” or a substantially similar transaction whereby a specific investor is irrevocably bound pursuant to an agreement with us to purchase securities over a period of time from us at a price based on the market price of our common stock at the time of such purchase). Lincoln Park may not assign or transfer its rights and obligations under the Purchase Agreement.

As of September 1, 2021, there were 2,317,772 shares of our common stock outstanding, of which 2,199,970 shares of our common stock were held by non-affiliates. Although the Purchase Agreement provides that we may sell up to an aggregate of \$15.0 million of our common stock to Lincoln Park, only 731,958 shares of our common stock are being registered for resale under this prospectus, which represents the 31,958 Commitment Shares that we agreed to issue to Lincoln Park as a fee for making its irrevocable commitment to purchase our common stock under the Purchase Agreement and an additional 700,000 shares of our common stock that we

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may issue and sell to Lincoln Park in the future under the Purchase Agreement, if and when we sell shares of our common stock to Lincoln Park under the Purchase Agreement. Depending on the market prices of our common stock at the time we elect to issue and sell shares of our common stock to Lincoln Park under the Purchase Agreement, we may need to register for resale under the Securities Act additional shares of our common stock in order to receive aggregate gross proceeds equal to the \$15.0 million total commitment available to us under the Purchase Agreement. If we elect to issue and sell to Lincoln Park under the Purchase Agreement more than the additional 700,000 shares of our common stock being registered for resale by Lincoln Park under this prospectus, which we have the right, but not the obligation, to do, we must first register for resale under the Securities Act any such additional shares of our common stock, which could cause additional substantial dilution to our stockholders. The number of shares of our common stock ultimately offered for resale by Lincoln Park is dependent upon the number of shares of our common stock we ultimately decide to sell to Lincoln Park under the Purchase Agreement.

Under applicable Nasdaq rules, in no event may we issue or sell to Lincoln Park under the Purchase Agreement shares of our common stock in excess of the Exchange Cap of 463,321 shares (including the 31,958 Commitment Shares), which represents 19.99% of the shares of our common stock outstanding (based on 2,317,772 shares outstanding) immediately prior to the execution of the Purchase Agreement, unless (i) we obtain stockholder approval to issue shares of our common stock in excess of the Exchange Cap or (ii) the average price of all applicable sales of our common stock to Lincoln Park under the Purchase Agreement equals or exceeds \$15.1661 per share, so that such issuances and sales would be exempt from the Exchange Cap limitation under applicable Nasdaq rules. In any event, the Purchase Agreement specifically provides that we may not issue or sell any shares of our common stock under the Purchase Agreement if such issuance or sale would breach any applicable rules or regulations of The Nasdaq Stock Market.

The Purchase Agreement prohibits us from directing Lincoln Park to purchase any shares of our common stock if those shares of our common stock, when aggregated with all other shares of our common stock then beneficially owned by Lincoln Park and its affiliates, would cause Lincoln Park's beneficial ownership of our common stock to exceed the Beneficial Ownership Cap.

Issuances of our common stock to Lincoln Park under the Purchase Agreement will not affect the rights or privileges of our existing stockholders, except that the economic and voting interests of each of our existing stockholders will be diluted as a result of any such issuance. Although the number of shares of our common stock that our existing stockholders own will not decrease, the shares of our common stock owned by our existing stockholders will represent a smaller percentage of our total outstanding shares of our common stock after any such issuance of shares of our common stock to Lincoln Park under the Purchase Agreement.

Purchase of Shares of our Common Stock under the Purchase Agreement

Under the Purchase Agreement, from and after commencement, on any business day that we select on which the closing sale price of our common stock equals or exceeds \$1.00 per share, subject to adjustment, we may direct Lincoln Park to purchase up to 20,000 shares of our common stock in a Regular Purchase on such business day, provided, however, that the Regular Purchase may be increased to up to 25,000 shares of our common stock, provided that the closing sale price of our common stock is not below \$20.00 on the purchase date, or up to 30,000 shares of our common stock, provided that the closing sale price of our common stock is not below \$25.00 (the "Regular Purchase Share Limit"). In each case, Lincoln Park's maximum commitment in any single Regular Purchase may not exceed \$2,000,000. The Regular Purchase Share Limit is subject to proportionate adjustment in the event of a reorganization, recapitalization, non-cash dividend, stock split or other similar transaction; provided, that if after giving effect to such full proportionate adjustment, the adjusted Regular Purchase Share Limit would preclude us from requiring Lincoln Park to purchase shares of our common stock at an aggregate purchase price equal to or greater than \$150,000 in any single Regular Purchase, then the Regular Purchase Share Limit will not be fully adjusted, but rather the Regular Purchase Share Limit for such Regular

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Purchase shall be adjusted as specified in the Purchase Agreement, such that, after giving effect to such adjustment, the Regular Purchase Share Limit will be equal to (or as close as can be derived from such adjustment without exceeding) \$150,000.

The purchase price per share for each such Regular Purchase will be equal to the lower of:

- the lowest sale price for our common stock on the purchase date for such shares of our common stock; and
- the arithmetic average of the three lowest closing sale prices for our common stock during the 10 consecutive business days ending on the business day immediately preceding the purchase date of such shares of our common stock.

In addition to Regular Purchases described above, we may also direct Lincoln Park, on any business day on which we have properly submitted a Regular Purchase notice directing Lincoln Park to purchase the maximum number of shares of our common stock that we are then permitted to include in a single Regular Purchase notice, to purchase an additional amount of our common stock, which we refer to as an Accelerated Purchase, not to exceed the lesser of:

- 30% of the aggregate number of shares of our common stock traded during all or, if certain trading volume or market price thresholds specified in the Purchase Agreement are crossed on the applicable Accelerated Purchase date, which is defined as the next business day following the purchase date for the corresponding Regular Purchase, the portion of the normal trading hours on the applicable Accelerated Purchase date prior to such time that any one of such thresholds is crossed, which period of time on the applicable Accelerated Purchase date we refer to as the Accelerated Purchase Measurement Period; and
- 300% of the number of purchase shares purchased pursuant to the corresponding Regular Purchase.

The purchase price per share for each such Accelerated Purchase will be equal to the lower of:

- 96% of the volume weighted average price of our common stock during the Accelerated Purchase Measurement Period on the applicable Accelerated Purchase date; and
- the closing sale price of our common stock on the applicable Accelerated Purchase date.

We may also direct Lincoln Park, not later than 1:00 p.m., Eastern time, on a business day on which an Accelerated Purchase has been completed and all of the shares of our common stock to be purchased thereunder (and under the corresponding Regular Purchase) have been properly delivered to Lincoln Park in accordance with the Purchase Agreement prior to such time on such business day, to purchase an additional amount of our common stock, which we refer to as an Additional Accelerated Purchase, of up to the lesser of:

- 30% of the aggregate number of shares of our common stock traded during a certain portion of the normal trading hours on such Accelerated Purchase date as determined in accordance with the Purchase Agreement, which period of time we refer to as the Additional Accelerated Purchase Measurement Period; and
- 300% of the number of purchase shares purchased pursuant to the Regular Purchase corresponding to the Accelerated Purchase that was completed on such Accelerated Purchase date on which an Additional Accelerated Purchase notice was properly received.

We may, in our sole discretion, submit multiple Additional Accelerated Purchase notices to Lincoln Park prior to 1:00 p.m., Eastern time, on a single Accelerated Purchase date, provided that all prior Accelerated Purchases and Additional Accelerated Purchases (including those that have occurred earlier on the same day) have been completed and all of the shares of our common stock to be purchased thereunder (and under the corresponding Regular Purchase) have been properly delivered to Lincoln Park in accordance with the Purchase Agreement.

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The purchase price per share for each such Additional Accelerated Purchase will be equal to the lower of:

- 96% of the volume weighted average price of our common stock during the applicable Additional Accelerated Purchase Measurement Period on the applicable Additional Accelerated Purchase date; and
- the closing sale price of our common stock on the applicable Additional Accelerated Purchase date.

In the case of Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases, the purchase price per share will be equitably adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring during the business days used to compute the purchase price.

Other than as described above, there are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common stock to Lincoln Park.

Events of Default

Events of default under the Purchase Agreement include the following:

- the effectiveness of the registration statement of which this prospectus forms a part lapses for any reason (including, without limitation, the issuance of a stop order), or any required prospectus supplement and accompanying prospectus are unavailable for the resale by Lincoln Park of our common stock offered hereby, and such lapse or unavailability continues for a period of 10 consecutive business days or for more than an aggregate of 30 business days in any 365-day period;
- suspension by our principal market of our common stock from trading for a period of one business day;
- the de-listing of our common stock from the Nasdaq Capital Market, our principal market, provided our common stock is not immediately thereafter trading on the New York Stock Exchange, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the NYSE American, the NYSE Arca, or the OTCQX Best Market or the OTCQB Venture Market operated by OTC Markets Group Inc. (or nationally recognized successor thereto);
- the failure of our transfer agent to issue to Lincoln Park shares of our common stock within two business days after the applicable date on which Lincoln Park is entitled to receive such shares of our common stock;
- any breach of the representations or warranties or covenants contained in the Purchase Agreement or Registration Rights Agreement that has or could have a material adverse effect on us and, in the case of a breach of a covenant that is reasonably curable, that is not cured within five consecutive business days;
- any voluntary or involuntary participation or threatened participation in insolvency or bankruptcy proceedings by or against us;
- if at any time we are not eligible to transfer our common stock electronically; or
- if at any time the Exchange Cap (to the extent applicable under the terms of the Purchase Agreement) is reached and our stockholders have not approved the issuance of common stock in excess of the Exchange Cap in accordance with applicable Nasdaq rules.

Lincoln Park does not have the right to terminate the Purchase Agreement upon any of the events of default set forth above. During an event of default, all of which are outside of Lincoln Park's control, we may not direct Lincoln Park to purchase any shares of our common stock under the Purchase Agreement.

Our Termination Rights

We have the unconditional right, at any time, for any reason and without any payment or liability to us, to give notice to Lincoln Park to terminate the Purchase Agreement. In the event of bankruptcy proceedings by or against us, the Purchase Agreement will automatically terminate without action of any party.

No Short-Selling or Hedging by Lincoln Park

Lincoln Park has agreed that neither it nor any of its affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the Purchase Agreement.

Prohibitions on Similar Financings

Subject to specified exceptions included in the Purchase Agreement, we are limited in our ability to enter into any new “equity line” or similar transaction whereby an investor is irrevocably bound to purchase securities over a period of time from us at a price based on the market price of our common stock at the time of such purchase.

Effect of Performance of the Purchase Agreement on Our Stockholders

All shares of our common stock being registered for resale hereunder which may be issued or sold by us to Lincoln Park under the Purchase Agreement are expected to be freely tradable. It is anticipated that shares registered in this offering will be sold from time to time over a period of up to 36-months commencing on the date that the registration statement including this prospectus becomes effective. The sale by Lincoln Park of a significant amount of shares of our common stock registered in this offering at any given time could cause the market price of our common stock to decline and to be highly volatile. Sales of our common stock to Lincoln Park, if any, will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Lincoln Park all, some or none of the additional shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. If and when we do sell additional shares of our common stock to Lincoln Park, after Lincoln Park has acquired the shares of our common stock, Lincoln Park may resell all, some or none of those shares of our common stock at any time or from time to time in its discretion. Therefore, sales to Lincoln Park by us under the Purchase Agreement may result in substantial dilution to the interests of other holders of our common stock. In addition, if we sell a substantial number of shares of our common stock to Lincoln Park under the Purchase Agreement, or if investors expect that we will do so, the actual sales of shares of our common stock or the mere existence of our arrangement with Lincoln Park may 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 wish to effect such sales. However, we have the right to control the timing and amount of any additional sales of our common stock to Lincoln Park and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Pursuant to the terms of the Purchase Agreement, from and after commencement, we have the right, but not the obligation, from time to time to direct Lincoln Park to purchase up to \$15.0 million of our common stock. Depending on the price per share at which we sell our common stock to Lincoln Park pursuant to the Purchase Agreement, we may need to sell to Lincoln Park under the Purchase Agreement more shares of our common stock than are being offered under this prospectus in order to receive aggregate gross proceeds equal to the \$15.0 million total commitment available to us under the Purchase Agreement. If we choose to do so, we must first register for resale under the Securities Act such additional shares of our common stock, which could cause additional substantial dilution to our stockholders. The number of shares of our common stock ultimately offered for resale by Lincoln Park under this prospectus is dependent upon the number of shares of our common stock we direct Lincoln Park to purchase under the Purchase Agreement.

The Purchase Agreement prohibits us from issuing or selling to Lincoln Park under the Purchase Agreement (i) shares of our common stock in excess of the Exchange Cap, unless we obtain stockholder approval to issue shares in excess of the Exchange Cap or the average price of all applicable sales of our common stock to Lincoln

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Park under the Purchase Agreement equals or exceeds \$15.1661 per share, such that the transactions contemplated by the Purchase Agreement are exempt from the Exchange Cap limitation under applicable Nasdaq rules and (ii) any shares of our common stock if those shares, when aggregated with all other shares of our common stock then beneficially owned by Lincoln Park, would exceed 9.99%.

The following table sets forth the amount of gross proceeds we would receive from Lincoln Park from our sale of up to 700,000 shares of our common stock that we are registering hereby that we may issue and sell to Lincoln Park in the future under the Purchase Agreement at varying purchase prices from and after commencement:

<u>Assumed Average Purchase Price Per Share</u>	<u>Number of Registered Shares of our Common Stock to be Issued if Full Purchase(1)</u>	<u>Percentage of Outstanding Shares of our Common Stock After Giving Effect to the Issuance to Lincoln Park(2)</u>	<u>Gross Proceeds from the Sale of Shares of our Common Stock to Lincoln Park Under the Purchase Agreement(1)</u>
\$1.00	700,000	23.0%	\$ 700,000
\$5.00	700,000	23.0%	\$ 3,500,000
\$10.00	700,000	23.0%	\$ 7,000,000
\$14.49 (3)	700,000	23.0%	\$ 10,143,000
\$15.00	700,000	23.0%	\$ 10,500,000
\$20.00	700,000	23.0%	\$ 14,000,000
\$25.00	600,000	20.3%	\$ 15,000,000

- (1) Although the Purchase Agreement provides that we may sell up to \$15.0 million of our common stock to Lincoln Park, we are only registering 731,958 shares of our common stock for resale under this prospectus, including 31,958 Commitment Shares we agreed to issue to Lincoln Park as a commitment fee for making its irrevocable commitment to purchase our common stock under the Purchase Agreement, which may or may not cover all the shares of our common stock we ultimately sell to Lincoln Park under the Purchase Agreement, depending on the purchase price per share. We have included in this column only those shares registered for resale in the offering made by this prospectus (excluding the Commitment Shares), without regard for the Exchange Cap or the Beneficial Ownership Cap. We may only issue shares of our common stock in excess of the Exchange Cap if we obtain stockholder approval to do so, or if the average price of all applicable sales of our common stock to Lincoln Park under the Purchase Agreement equals or exceeds \$15.1661 per share.
- (2) The denominator is based on 2,317,772 shares of our common stock outstanding as of September 1, 2021, adjusted to include the 31,958 Commitment Shares and number of shares of our common stock set forth in the adjacent column. The numerator is based on the number of shares of our common stock set forth in the adjacent column.
- (3) The closing sale price per share of our common stock on September 1, 2021.

THE SELLING STOCKHOLDER

This prospectus relates to the possible resale by the selling stockholder, Lincoln Park, of shares of our common stock that may be issued to Lincoln Park pursuant to the Purchase Agreement. We are filing the registration statement of which this prospectus is a part pursuant to the provisions of the Registration Rights Agreement, which we entered into with Lincoln Park on September 1, 2021 concurrently with our execution of the Purchase Agreement, in which we agreed to provide certain registration rights with respect to sales by Lincoln Park of the shares of our common stock that may be issued to Lincoln Park under the Purchase Agreement.

Lincoln Park, as the selling stockholder, may, from time to time, offer and sell pursuant to this prospectus up to 731,958 shares of our common stock that we have issued or may issue to Lincoln Park under the Purchase Agreement. The selling stockholder may sell some, all or none of the shares of common stock. We do not know how long the selling stockholder will hold the shares of our common stock before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares of common stock. See “Plan of Distribution.”

The table below sets forth, to our knowledge, information concerning the beneficial ownership of shares of our common stock by the selling stockholder as of September 1, 2021. The percentages of shares owned before and after the offering are based on 2,317,772 shares of common stock outstanding as of September 1, 2021, which includes the Commitment Shares we agreed to issue to Lincoln Park that are offered by this prospectus. The information in the table below with respect to the selling stockholder has been obtained from the selling stockholder.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to shares. Unless otherwise indicated below, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for the person named below.

Throughout this prospectus, when we refer to the shares of common stock being offered by this prospectus on behalf of the selling stockholder, we are referring to the shares of common stock sold pursuant to the Purchase Agreement unless otherwise indicated.

<u>Name of Selling Stockholder</u>	<u>Shares Beneficially Owned Prior to Offering</u>	<u>Percentage of Shares Beneficially Owned Prior to Offering</u>	<u>Shares to be Sold in this Offering Assuming We Issue the Maximum Number of Shares Under the Purchase Agreement (3)</u>	<u>Percentage of Shares to be Beneficially Owned After Offering</u>
Lincoln Park Capital Fund, LLC (1)	47,984(2)	2.1%	731,958	*%

* Represents less than 1% of the outstanding shares and assumes all shares of common stock registered hereunder have been resold by Lincoln Park.

- (1) Josh Scheinfeld and Jonathan Cope, the Managing Members of Lincoln Park Capital, LLC, the manager of Lincoln Park Capital Fund, LLC, are deemed to be beneficial owners of all of the shares of Class A common stock owned directly by Lincoln Park Capital Fund, LLC. Messrs. Cope and Scheinfeld have shared voting and investment power over the shares of Class A common stock being offered under the registration statement filed with the SEC in connection with the transactions contemplated under the Purchase Agreement and the Registration Rights Agreement. Neither Lincoln Park Capital, LLC nor Lincoln Park Capital Fund, LLC is a licensed broker dealer or an affiliate of a licensed broker dealer.
- (2) Represents 16,026 shares of Common stock issuable upon the exercise of warrants previously held by Lincoln Park and the 31,958 Commitment Shares to be issued to Lincoln Park as a commitment fee for making its irrevocable commitment to purchase our common stock under the Purchase Agreement. In

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accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares of our common stock beneficially owned prior to the offering all of the shares of our common stock that we may issue and sell to Lincoln Park pursuant to the Purchase Agreement from and after commencement, because the issuance and sale of such shares of our common stock to Lincoln Park under the Purchase Agreement is solely at our discretion and is subject to certain conditions, the satisfaction of all of which are outside of Lincoln Park's control, including the registration statement of which this prospectus is a part becoming and remaining effective under the Securities Act. Furthermore, under the terms of the Purchase Agreement, issuances and sales of shares of our common stock to Lincoln Park under the Purchase Agreement are subject to certain limitations on the amounts we may sell to Lincoln Park at any time, including the Exchange Cap and the Beneficial Ownership Cap.

- (3) Although the Purchase Agreement provides that we may sell up to \$15.0 million of our common stock to Lincoln Park, only 731,958 of the shares of common stock that may be issued to Lincoln Park are being offered under this prospectus which represents: (i) 31,958 shares to be issued as Commitment Shares and (iii) an aggregate of 700,000 shares that may be sold by us to Lincoln Park at our discretion from time to time over a 36-month period commencing after the satisfaction of certain conditions set forth in the Purchase Agreement. Depending on the price per share at which we sell our common stock to Lincoln Park pursuant to the Purchase Agreement, we may need to sell to Lincoln Park under the Purchase Agreement more shares of our common stock than are offered under this prospectus in order to receive aggregate gross proceeds equal to the full \$15.0 million available to us under the Purchase Agreement. If we choose to do so, we must first register for resale under the Securities Act such additional shares. The number of shares ultimately offered for resale by Lincoln Park is dependent upon the number of shares we sell to Lincoln Park under the Purchase Agreement.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our Certificate of Incorporation and Amended and Restated Bylaws are summaries. You should also refer to the Certificate of Incorporation and the Amended and Restated Bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part.

General

Our Certificate of Incorporation authorizes us to issue up to 150,000,000 shares of common stock and 10,000,000 shares of preferred stock, par value \$0.001 per share, all of which shares of preferred stock are currently undesignated. Our board of directors may establish the rights and preferences of the preferred stock from time to time.

As of June 30, 2021, there were (i) 2,317,772 shares of common stock outstanding; (ii) no outstanding shares of preferred stock; (iii) 631,016 shares of common stock issuable upon the exercise of outstanding stock options; (iv) 593,924 shares of common stock issuable upon the exercise of outstanding warrants; and (v) 8,290 restricted stock units. At a special meeting of our stockholders on December 28, 2020, our stockholders approved a reverse split of our outstanding common stock at a ratio in the range of 1-for-5 to 1-for-35 to be determined at the discretion of our Board of Directors, whereby each outstanding 5 to 35 shares would be combined, converted and changed into 1 share of our common stock, to enable the Company to comply with Nasdaq's continued listing requirements. Following such meeting, our board of directors approved a final reverse stock split ratio of 1-for-35. We filed with the Secretary of State of the State of Delaware a Certificate of Amendment to our Certificate of Incorporation to effect the reverse stock split. The reverse stock split was effective as of 5:00 pm Eastern Time on December 31, 2020, and our common stock began trading on a split adjusted basis on The Nasdaq Capital Market and TSX on January 4, 2021. All share and per share amounts presented herein have been retroactively adjusted to reflect the reverse stock split.

Common Stock

Voting

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

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Rights and Preferences

Holders of our common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Preferred Stock

Our board of directors has the authority under our Certificate of Incorporation, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. 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 and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until the board of directors determines the specific rights attached to that preferred stock.

Anti-Takeover Provisions

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- merger or consolidation involving the corporation or any direct or indirect majority-owned subsidiary of the corporation and the interested stockholder;

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- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder (in one transaction or a series of transactions);
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation or by any direct or indirect majority-owned subsidiary of the corporation of any stock of the corporation or of such subsidiary to the interested stockholder;
- any transaction involving the corporation or any direct or indirect majority-owned subsidiary of the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Certificate of Incorporation and Amended and Restated Bylaws

Our Certificate of Incorporation provides that the authorized number of directors may be changed only by resolution of the board of directors, and vacancies and newly created directorships on the board of directors may, except as otherwise required by law or determined by the board of directors, only be filled by a majority vote of the directors then serving on the board of directors, even though less than a quorum.

Our Amended and Restated Bylaws provide that all stockholder actions must be effected at a duly called meeting of stockholders and eliminate the right of stockholders to act by written consent without a meeting. Our Amended and Restated Bylaws also provide that only our Chairman of the board of directors, Chief Executive Officer or the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our Amended and Restated Bylaws also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and specify requirements as to the form and content of a stockholder’s notice. At any meeting of stockholders for the election of directors at which a quorum is present, the election will be determined by a plurality of the votes cast by the stockholders entitled to vote at the election.

Our Certificate of Incorporation and Amended and Restated Bylaws provide that the stockholders cannot amend many of the provisions described above except by a vote of 66 2/3% or more of our outstanding Common stock. As described above, our Certificate of Incorporation gives our board of directors the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making

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tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our Certificate of Incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our Certificate of Incorporation or our Amended and Restated Bylaws; or
- any action asserting a claim against us that is governed by the internal affairs doctrine.

The provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act.

The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any action, a court could find the choice of forum provisions contained in our Certificate of Incorporation to be inapplicable or unenforceable in such action. Our Certificate of Incorporation further provides that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

Participation Rights of Investors in October 2020 Private Placement

Pursuant to the securities purchase agreement for the October 2020 Private Placement, as amended, if we issue any shares of common stock or common stock equivalents for cash consideration, indebtedness or a combination thereof, with certain exceptions (including equity line of credit transactions), within twelve months of the closing of the private placement, each purchaser who subscribed for at least \$250,000 in the private placement has the right to participate in up to such purchaser's pro rata portion of 30% of the such subsequent financing on the same terms, conditions and price provided for in the subsequent financing.

Registration Rights

Pursuant to the terms of convertible notes issued to A&B (HK) Company Limited in October 2015 and December 2015, we agreed to register any shares issued upon the conversion of such convertible notes upon the request of A&B (HK) Company Limited. As of June 30, 2021, A&B (HK) Company Limited beneficially owned 71,306 shares of Common stock that were issued upon the conversion of such convertible notes.

Transfer Agent and Registrar

The transfer agent and the registrar for the Company is American Stock Transfer & Trust Company LLC, 6201 15th Avenue, Brooklyn, New York 11219; Telephone: 800-937-5449.

Common Stock Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “HSDT” and on the TSX under the symbol “TSX”. However, the Company believes that the trading volume of its shares on the TSX no longer justifies the expense and administrative efforts associated with maintaining the listing, and we have applied to voluntarily delist our common stock from the TSX effective at the close of trading on September 9, 2021.

PLAN OF DISTRIBUTION

The shares of our common stock offered by this prospectus are being offered by the selling stockholder, Lincoln Park. 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 our common stock offered by this prospectus could 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 shares of our 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 of our common stock offered by this prospectus may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares of our common stock offered by this prospectus may not be sold unless they have been registered or qualified for sale in the state or an exemption from the state's registration or qualification requirement is available and complied with. Notwithstanding the foregoing, Lincoln Park has agreed with the Company that it shall not offer or sell any shares of Class A Common Stock that may be issued to Lincoln Park pursuant to the Purchase Agreement (A) directly to any person whom, to Lincoln Park's knowledge, is (I) a person resident in Canada or (II) a person acquiring such securities for the benefit of another person resident in Canada, or (B) on any "marketplace" (as such term is defined in National Instrument 21-101 *Marketplace Operation*) in Canada.

Lincoln Park is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act.

Lincoln Park has informed us that it intends to use an unaffiliated broker-dealer to effectuate all sales, if any, of our common stock that it has acquired and may in the future acquire from us pursuant to the Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Lincoln Park has informed us that each such broker-dealer will receive commissions from Lincoln Park that will not exceed customary brokerage commissions.

Brokers, dealers, underwriters or agents participating in the distribution of the shares of our common stock offered by this prospectus may receive compensation in the form of commissions, discounts, or concessions from the purchasers, for whom the broker-dealers may act as agent, of shares of our common stock sold by Lincoln Park through this prospectus. The compensation paid to any such particular broker-dealer by any such purchasers of shares of our common stock sold by Lincoln Park may be less than or in excess of customary commissions. Neither we nor Lincoln Park can presently estimate the amount of compensation that any agent will receive from any purchasers of shares of our common stock sold by Lincoln Park.

We know of no existing arrangements between Lincoln Park or any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our common stock offered by this prospectus.

We may from time to time file with the SEC one or more supplements to this prospectus or amendments to the registration statement that includes this prospectus to amend, supplement or update information contained in this

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prospectus, including, if and when required under the Securities Act, to disclose certain information relating to a particular sale of shares of our common stock offered by this prospectus by the selling stockholder, including the names of any brokers, dealers, underwriters or agents participating in the distribution of such shares of our common stock by the selling stockholder, any compensation paid by Lincoln Park to any such brokers, dealers, underwriters or agents, and any other required information.

We will pay the expenses incident to the registration under the Securities Act of the offer and sale of the shares of our common stock included in this prospectus by Lincoln Park. We have agreed to indemnify Lincoln Park and certain other persons against certain liabilities in connection with the offering of shares of our common stock offered by this prospectus, 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. Lincoln Park has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Lincoln Park specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Lincoln Park has represented to us that at no time prior to the Purchase Agreement has Lincoln Park or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our common stock or any hedging transaction, which establishes a net short position with respect to our common stock. Lincoln Park agreed that during the term of the Purchase Agreement, it, its agents, representatives or affiliates will not enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised Lincoln Park that it is required to comply with Regulation M promulgated under the 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 securities offered by this prospectus.

This offering will terminate on the earlier of (i) termination of the Purchase Agreement or (ii) the date that all shares of our common stock offered by this prospectus have been sold by Lincoln Park.

Our common stock is listed on The Nasdaq Capital Market under the symbol "HSDT" and on the Toronto Stock Exchange "TSX" under the symbol "HSM". However, we have applied to voluntarily delist our common stock from the TSX effective September 9, 2021.

No Sales to Canadian Residents

The shares of our Class A Common Stock offered under this prospectus may not be resold to any person resident in Canada, to any person acquiring such shares for the benefit of any person resident in Canada or on any marketplace in Canada.

LEGAL MATTERS

Honigman LLP, Kalamazoo, Michigan, will issue a legal opinion as to the validity of the securities offered by this prospectus.

EXPERTS

The consolidated financial statements as of December 31, 2020 and 2019, and for the years then ended, incorporated by reference in this prospectus and the registration statement of which this prospectus forms a part have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting. The report on the consolidated financial statements contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC in accordance with the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Our reports, proxy statements and other information filed with the SEC are available free of charge to the public over the Internet at the SEC's website at <http://www.sec.gov>. These documents may also be accessed on our website at www.heliusmedical.com. We are not including the information on our website as a part of, nor incorporating it by reference into, this prospectus or the registration statement of which it forms a part.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed.

We incorporate by reference into this prospectus and the registration statement of which this prospectus forms a part the information or documents listed below that we have filed with the SEC, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K or Schedule 14A), including all filings filed pursuant to the Exchange Act after the date of the registration statement and prior to effectiveness of the registration statement, and following effectiveness of the registration statement and until the termination or completion of the offering of the securities covered by this prospectus:

- Our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2020, filed with the SEC on March 10, 2021, including the information specifically incorporated by reference into such Annual Report on Form 10-K from our [definitive proxy statement](#) for our 2021 Annual Meeting of Stockholders filed with the SEC on April 23, 2021;
- Our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2021, filed with the SEC on [May 17, 2021](#), and for the quarter ended June 30, 2021, filed with the SEC on [August 12, 2021](#);
- Our Current Reports on Form 8-K filed with the SEC on [January 11, 2021](#), [January 19, 2021](#), [February 1, 2021](#), [March 4, 2021](#), [March 11, 2021](#) (as amended on [April 19, 2021](#)),

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[March 29, 2021](#), [April 7, 2021](#), [May 27, 2021](#), [June 2, 2021](#), and [June 15, 2021](#), [July 8, 2021](#), [July 26, 2021](#), [August 17, 2021](#), [August 19, 2021](#), [August 25, 2021](#) and [September 2, 2021](#); and

- The description of the Registrant's Common Stock contained in the Registrant's [Form 8-A](#) (File No. 001-38445) filed with the Commission on April 4, 2018, as amended by the description of the Common Stock contained in [Exhibit 4.7](#) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2020, and as further amended by any subsequent amendment or report filed for the purpose of updating such description.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus including exhibits to these documents. You should direct any requests for documents to Helius Medical Technologies, Inc., Attn: Chief Financial Officer, 642 Newtown Yardley Road, Suite 100, Newtown PA 18940, or via e-mail at inquiry@heliusmedical.com. Our phone number is (215) 944-6104.

You also may access these filings on our website at <http://www.heliusmedical.com>. We do not incorporate the information on our website into this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus).

731,958 Shares



PROSPECTUS

, 2021

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by us (except any underwriting discounts and commissions and expenses incurred by the selling stockholder for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholder in disposing of the shares). All amounts shown are estimates except the SEC registration fee.

	<u>Amount</u>
SEC registration fee	\$ 1,143.55
Accounting fees and expenses	\$ 25,000
Legal fees and expenses	\$ 75,000
Transfer agent fees and expenses	\$ 15,000
Miscellaneous fees and expenses	\$ 8,856.05
Total	<u>\$ 125,000</u>

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation 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 Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law 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 an action, suit or proceeding to which he or she is or is threatened to be made 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, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except 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 indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated bylaws provide that: (1) we are required to indemnify our directors and executive officers to the fullest extent permitted by the Delaware General Corporation Law; (2) we may, in our discretion, indemnify our other officers, employees and agents as set forth in the Delaware General Corporation Law; (3) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors and executive officers in connection with certain legal proceedings; (4) the rights conferred in the bylaws are not exclusive; (5) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents; and (6) we may secure insurance on behalf of any director, officer, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law.

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We have entered into indemnification agreements with our directors and officers. These agreements provide broader indemnity rights than those provided under the Delaware General Corporation Law and our Certificate of Incorporation. The indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against us or our directors or officers, but to the extent a director or officer were entitled to indemnity or contribution under the indemnification agreement, the financial burden of a third-party suit would be borne by us, and we would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to our benefit but would be offset by our obligations to the director or officer under the indemnification agreement.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information regarding all unregistered securities sold by the registrant in the three years preceding the date of this registration statement.

On September 1, 2021, we entered into a purchase agreement with Lincoln Park Capital Fund, LLC pursuant to which we have the right to sell to Lincoln Park up to \$15.0 million in shares of common stock, subject to certain limitations, from time to time over the 36-month period commencing on the date that a registration statement covering the resale of the shares is declared effective by the SEC. We agreed to issue 31,958 Commitment Shares to Lincoln Park as consideration for its commitment to purchase our shares under the Purchase Agreement, following the delisting of our common stock from the TSX.

On October 21, 2020, we entered into a securities purchase agreement with certain purchasers, pursuant to which we agreed to sell and issue, in a private placement, an aggregate of 187,646 shares of common stock. Pursuant to the Purchase Agreement, we also issued 93,817 Warrants. The Warrants have an initial exercise price of \$15.82 per share and expire on October 26, 2023, except that Warrants issued to insiders, and affiliates of insiders, have an initial exercise price of \$16.1665 per share and expire on October 26, 2023. Joseph Gunnar & Co., LLC acted as placement agent for the Company in connection with the private placement. The Company issued warrants to the Joseph Gunnar & Co., LLC to purchase 961 shares of common stock, with an exercise price of \$19.775 per share.

On March 18, 2020, we entered into a securities purchase agreement with certain purchasers, pursuant to which we agreed to sell and issue to such purchasers, in a registered direct offering, an aggregate of 178,776 shares of our common stock, at \$12.25 per share. Pursuant to the purchase agreement, in a concurrent private placement, on March 20, 2020 we issued to the purchasers warrants to purchase up to 178,776 shares of common stock. The warrants are exercisable beginning on September 21, 2020 at an exercise price of \$16.10 per share and expire on September 22, 2025. H.C. Wainwright & Co., LLC acted as placement agent for the private placement.

In March 2018, we issued 15,874 shares of common stock upon the exercise of warrants at an exercise price of \$236.25 per share. During the second quarter of 2018, we issued 405 shares of common stock upon the exercise of warrants at an exercise price of CAD\$262.50 per share. The issuance of these securities was exempt from registration pursuant to Regulation S of the Securities Act as an offering outside the United States. During the third quarter of 2018, we issued 1 share of common stock upon the exercise of warrants at an exercise price of CAD\$262.50 per share. The issuance of these securities was exempt from registration pursuant to Regulation S of the Securities Act as an offering outside the United States.

Unless otherwise noted, the transactions described in Item 15 were exempt from registration under the Securities Act pursuant to Section 4(a)(2) of the Securities Act in that such sales did not involve a public offering, under

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Rule 701 promulgated under the Securities Act, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701, or under Rule 506 of Regulation D promulgated under the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

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 the 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent 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 (a)(1)(i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission 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.

- (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 a 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.
- (b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 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 indemnification provisions described herein, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

EXHIBIT INDEX

Exhibit Number	Exhibit
3.1	Certificate of Conversion filed with the Delaware Secretary of State on July 18, 2018 (incorporated by reference to Exhibit 3.1 to the Form 10-Q filed August 9, 2018)
3.2	Certificate of Incorporation, as corrected (incorporated by reference to Exhibit 3.1 to the Form 8-K filed October 30, 2018)
3.3	Certificate of Amendment to Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Form 8-K filed on December 31, 2020)
3.4	Bylaws as amended and restated (incorporated by reference to Exhibit 3.3 to the Form 10-Q filed August 9, 2018)
5.1	Opinion of Honigman LLP
10.1*	Separation and Release Agreement between Helius Medical Technologies, Inc. and Philippe Deschamps, dated August 23, 2020 (incorporated by reference to Exhibit 10.2 to the Form 8-K filed with the SEC on August 25, 2020)
10.2*	Employment Agreement by and between Helius Medical Technologies, Inc. and Dane C. Andreeff effective as of June 14, 2021 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC on June 15, 2021)
10.3*	Employment Agreement by and between Helius Medical Technologies, Inc. and Jeffrey S. Mathiesen effective as of June 14, 2021 (incorporated by reference to Exhibit 10.2 to the Form 8-K filed with the SEC on June 15, 2021)
10.4*	Consulting Agreement between Helius Medical, Inc. and Mitch Tyler, dated December 10, 2014 (incorporated by reference to Exhibit 10.5 to the Form 10-12G filed with the SEC on February 6, 2015)
10.5	License Agreement between Advanced NeuroRehabilitation, LLC and Yuri Danilov, Mitchell Tyler, Kurt Kaczmarek and John Klus, dated June 29, 2011 (incorporated by reference to Exhibit 10.8 to the Amendment to Form S-1 filed with the SEC on September 23, 2014)
10.6	Amended and Restated Patent Sub-License Agreement between Advanced NeuroRehabilitation, LLC and Helius Medical, Inc, having an effective date of January 22, 2013 (incorporated by reference to Exhibit 10.1 to the Form S-1 filed with the SEC on July 14, 2014)
10.7	Second Amended and Restated Patent Sub-License between Advanced NeuroRehabilitation, LLC and Helius Medical, Inc, dated June 6, 2014, but having an effective date of January 22, 2013 (incorporated by reference to Exhibit 10.7 to the Form S-1 filed with the SEC on July 14, 2014)
10.8	Master Cooperative Research and Development Agreement between Helius Medical, Inc, Advanced NeuroRehabilitation, LLC, Yuri Danilov, Mitchell Tyler, Kurt Kaczmarek and U.S. Army Medical Material Agency and U.S. Army Medical Material Development Activity, dated effective February 1, 2013 (incorporated by reference to Exhibit 10.2 to the Form S-1 filed with the SEC on July 14, 2014)
10.9	Notice of Modification No. 1 to Cooperative Research and Development Agreement between Helius Medical, Inc., Advanced NeuroRehabilitation, LLC, Yuri Danilov, Mitchell Tyler, Kurt Kaczmarek and U.S. Army Medical Material Agency and U.S. Army Medical Material Development Activity, dated April 29, 2014 (incorporated by reference to Exhibit 10.5 to the Form S-1 filed with the SEC on July 14, 2014)

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<u>Exhibit Number</u>	<u>Exhibit</u>
10.10	<u>Notice of Modification No. 2 to Cooperative Research and Development Agreement between Helius Medical, Inc., Advanced NeuroRehabilitation, LLC, Yuri Danilov, Mitchell Tyler, Kurt Kaczmarek and U.S. Army Medical Material Agency and U.S. Army Medical Material Development Activity, dated January 12, 2015 (incorporated by reference to Exhibit 10.12 to the Form 10-12G filed with the SEC on February 6, 2015)</u>
10.11	<u>Design and Manufacturing Consultant Agreement between Helius Medical, Inc. and Clinvue, LLC, dated January 30, 2013 (incorporated by reference to Exhibit 10.3 to the Form S-1 filed with the SEC on July 14, 2014)</u>
10.12	<u>Commercial Development-to-Supply Program between Helius Medical, Inc. and Ximedica, dated October 25, 2013 (incorporated by reference to Exhibit 10.4 to the Form S-1 filed with the SEC on July 14, 2014)</u>
10.13*	<u>Separation and Release Agreement between Helius Medical Technologies, Inc. and Joyce LaViscount, dated August 17, 2021 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC on August 19, 2021)</u>
10.14‡	<u>Asset Purchase Agreement between the Company and A&B (HK) Company Limited, dated as of October 9, 2015 (incorporated by reference to Exhibit 2.1 to the Form 8-K filed with the SEC on October 16, 2015)</u>
10.14.1	<u>Amendment to Asset Purchase Agreement between the Company and A&B (HK) Company Limited, dated as of October 30, 2017 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC on November 2, 2017)</u>
10.14.2	<u>Supplemental Agreement to Asset Purchase Agreement Dated October 9, 2015, between Helius Medical, Inc. and A&B (HK) Company Limited, dated as of August 15, 2018 (incorporated by reference to Exhibit 10.27 to the Form 10-K filed March 14, 2019)</u>
10.15	<u>Sole-source cost sharing contract between Helius Medical, Inc. and the U.S. Army Medical Research and Materiel Command (USAMRMC) dated as of July 7, 2015 (incorporated by reference to Exhibit 10.22 to the Form S-1 filed with the SEC on May 4, 2016)</u>
10.15.1	<u>Amendment to Sole-Source Cost Sharing Contract between Helius Medical, Inc. and the U.S. Army Medical Research and Materiel Command (USAMRMC), dated November 7, 2016 (incorporated by reference to Exhibit 10.2 to the Form 8-K filed with the SEC on November 21, 2016)</u>
10.16*	<u>Amended and Restated June 2014 Equity Incentive Plan (incorporated by reference to Exhibit 4.3 to the Form 10-Q filed with the SEC on November 9, 2017)</u>
10.16.1*	<u>2014 Stock Incentive Plan Form of Option Grant Agreement (incorporated by reference to Exhibit 10.23.1 to the Transition Report on Form 10-K filed with the SEC on April 3, 2017)</u>
10.17*	<u>2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.25 to the Transition Report on Form 10-K filed with the SEC on April 3, 2017)</u>
10.17.1*	<u>Amendment Number 1 to the 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.25.1 to the Transition Report on Form 10-K filed with the SEC on April 3, 2017)</u>
10.17.2*	<u>Amendment Number 2 to the 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 4.7 to the Registration Statement on Form S-8 filed with the SEC on May 18, 2017)</u>
10.17.3*	<u>2016 Omnibus Incentive Plan Form of U.S. Option Grant Agreement (incorporated by reference to Exhibit 4.8 to the Registration Statement on Form S-8 filed with the SEC on May 18, 2017)</u>
10.17.4*	<u>2016 Omnibus Incentive Plan Form of Canada Option Grant Agreement (incorporated by reference to Exhibit 4.9 to the Registration Statement on Form S-8 filed with the SEC on May 18, 2017)</u>

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<u>Exhibit Number</u>	<u>Exhibit</u>
10.18	<u>Commercial lease agreement dated March 29, 2017 between Helius Medical, Inc. and 660 Tudor Square, L.P. (incorporated by reference to Exhibit 10.26 to the Transition Report on Form 10-K filed with the SEC on April 3, 2017)</u>
10.19†	<u>Employment agreement between Helius Medical Technologies, Inc. and Jennifer Laux, dated July 9, 2018, (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed August 9, 2018)</u>
10.20*	<u>2018 Omnibus Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to the Form 10-Q filed November 8, 2018)</u>
10.20.1*	<u>2018 Omnibus Incentive Plan Form of Option Grant Agreement (incorporated by reference to Exhibit 10.3 to the Form 10-Q filed November 8, 2018)</u>
10.20.2*	<u>2018 Omnibus Incentive Plan Form of Restricted Stock Unit Grant Agreement (incorporated by reference to Exhibit 10.4 to the Form 10-Q filed November 8, 2018)</u>
10.20.3*	<u>2018 Omnibus Incentive Plan Form of Option Grant Agreement—2020 Retention Grant (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on October 7, 2020)</u>
10.20.4*	<u>2018 Omnibus Incentive Plan Form of Option Grant Agreement – Initial Grants to Dane C. Andreeff and Jeffrey S. Mathiesen (incorporated by reference to Exhibit 10.3 to the Form 8-K filed on June 15, 2021)</u>
10.20.5*	<u>Amendment to the Helius Medical Technologies, Inc. 2018 Omnibus Incentive Plan, effective May 25, 2021 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed May 27, 2021)</u>
10.21*	<u>Non-employee Director Compensation Policy (incorporated by reference to Exhibit 10.7 to the Form 10-Q filed May 17, 2021)</u>
10.22	<u>Form of Warrant Indenture dated April 13, 2018 by and between Helius Medical Technologies, Inc. and Computershare Trust Company of Canada (incorporated by reference to Exhibit 4.1 to the Form 8-K filed April 12, 2018)</u>
10.23	<u>Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Form 8-K filed March 18, 2020)</u>
10.24#+	<u>Form of Securities Purchase Agreement dated October 21, 2020 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on October 26, 2020)</u>
10.25#	<u>Underwriting Agreement dated as of January 28, 2021, by and between Helius Medical Technologies, Inc. and Ladenburg Thalmann & Co. Inc. (incorporated by reference to Exhibit 1.1 to the Form 8-K filed on February 1, 2021)</u>
10.26	<u>Form of Warrant (incorporated by reference to Exhibit 4.1 to the Form 8-K filed March 18, 2020)</u>
10.27	<u>Form of Warrant to Purchase Common Stock issued pursuant to the Securities Purchase Agreement, dated October 21, 2020 (incorporated by reference to Exhibit 4.1 to the Form 8-K filed on October 26, 2020)</u>
10.28	<u>Form of Warrant to purchase shares of common stock (incorporated by reference to Exhibit 4.1 of Company’s Amendment No. 1 to the Registration Statement on Form S-1 filed on January 20, 2021 (File No. 333-251804))</u>
10.29	<u>Warrant Agency Agreement dated as of February 1, 2021, by and between Helius Medical Technologies, Inc. and American Stock Transfer & Trust Company, LLC (incorporated by reference to Exhibit 4.2 to the Form 8-K filed on February 1, 2021)</u>
10.30	<u>Form of Underwriter Warrant (incorporated by reference to Exhibit 4.3 of Company’s Amendment No. 1 to the Registration Statement on Form S-1 filed on January 20, 2021 (File No. 333-251804))</u>

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<u>Exhibit Number</u>	<u>Exhibit</u>
10.31	<u>Employment Agreement by and between Helius Medical Technologies, Inc. and Antonella Favit-Van Pelt, effective as of July 7, 2021</u>
10.32	<u>Registration Rights Agreement, dated September 1, 2021 by and between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.2 to the Form 8-K filed on September 2, 2021)</u>
10.33#	<u>Purchase Agreement, dated September 1, 2021 by and between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to Exhibit 10.1 to the Form 8-K filed on September 2, 2021)</u>
10.34	<u>First Amendment to Securities Purchase Agreement, dated September 1, 2021</u>
10.35	<u>Consulting Agreement between Helius Medical Technologies, Inc. and Jonathan Sackier, dated March 8, 2021 (incorporated by reference to Exhibit 10.3 to the Form 10-K filed on March 10, 2021)</u>
10.36	<u>2018 Omnibus Incentive Plan Form of Stock Grant Notice and Award Agreement (incorporated by reference to Exhibit 10.1 to the Form 8-K filed April 7, 2021)</u>
10.37*	<u>Helius Medical Technologies, Inc. 2021 Inducement Plan (incorporated by reference to Exhibit 4.5 to the Form S-8 filed July 7, 2021)</u>
10.38*	<u>Form of Stock Option Grant Notice, Option Agreement and Notice of Exercise under the Helius Medical Technologies, Inc. 2021 Inducement Plan (incorporated by reference to Exhibit 4.6 to the Form S-8 filed July 7, 2021)</u>
10.39	<u>Form of Indemnification Agreement (incorporated by reference to Exhibit 10.24 to the Form 10-K filed March 10, 2021)</u>
21.1	<u>Subsidiaries of Helius Medical Technologies, Inc. (incorporated by reference to Exhibit 21.1 to the Form 10-K filed March 10, 2021)</u>
23.1	<u>Consent of BDO USA, LLP</u>
23.2	<u>Consent of Honigman LLP (included in Exhibit 5.1 hereto)</u>
24.1	<u>Power of Attorney (included in signature page hereto)</u>

* Indicates a management contract or compensatory plan.

‡ Confidential information has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been granted with respect to this omitted information.

Schedules and exhibits to this agreement have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish any omitted schedules or exhibits upon the request of the Securities and Exchange Commission.

+ A list of the omitted schedules and exhibits to this agreement is as follows: Exhibit A: Schedule of Purchasers; Exhibit B: Form of Warrant; Exhibit C: Accredited Investor Qualification Questionnaire; Exhibit D: Bad Actor Questionnaire; and Exhibit E: Selling Stockholder Questionnaire.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Newton, State of Pennsylvania, on September 3, 2021.

Helius Medical Technologies, Inc.

By: /s/ Dane C. Andreeff
 Dane C. Andreeff
 President, Chief Executive Officer and Director

KNOW ALL MEN BY THESE PRESENTS, that the undersigned officers and directors of Helius Medical Technologies, Inc., a Delaware corporation, do hereby constitute and appoint each of Dane C. Andreeff and Jeffrey S. Mathiesen as his or her 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 post-effective amendments, exhibits thereto and other documents in connection therewith) to this Registration Statement and any subsequent registration statement filed by the registrant pursuant to Rule 462(b) of the Securities Act of 1933, as amended, which relates to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Dane C. Andreeff</u> Dane C. Andreeff	President, Chief Executive Officer (Principal Executive Officer) and Director	September 3, 2021
<u>/s/ Jeffrey S. Mathiesen</u> Jeffrey S. Mathiesen	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	September 3, 2021
<u>/s/ Edward M. Straw</u> Edward M. Straw	Director	September 3, 2021
<u>/s/ Sherrie Perkins</u> Sherrie Perkins	Director	September 3, 2021
<u>/s/ Mitchell E. Tyler</u> Mitchell E. Tyler	Director	September 3, 2021
<u>/s/ Blane Walter</u> Blane Walter	Director	September 3, 2021



September 3, 2021

Helius Medical Technologies, Inc.
645 Newtown Yardley Road
Suite 100
Newtown, PA 18940

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to Helius Medical Technologies, Inc., a Delaware corporation (the "Company"), in connection with preparing and filing the Registration Statement on Form S-1 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Act"), relating to the resale from time to time by the selling stockholder of an aggregate of 731,958 shares of the Company's Class A common stock, par value \$0.001 per share, of which (i) 31,958 shares (the "Commitment Shares") will be issued to Lincoln Park Capital Fund, LLC ("Lincoln Park") and (ii) 700,000 shares (the "Purchase Shares" and together with the Commitment Shares, the "Shares") are reserved for issuance to Lincoln Park pursuant to the Purchase Agreement between the Company and Lincoln Park, dated as of September 1, 2021 (the "Purchase Agreement").

For the purpose of rendering this opinion, we examined originals or copies of such documents as we deemed relevant. In conducting our examination, we assumed, without investigation, the genuineness of all signatures, the correctness of all certificates, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted as copies, and the authenticity of the originals of such copies, and the accuracy and completeness of all records made available to us by the Company. We have assumed that Shares will be properly delivered to Lincoln Park pursuant to the Purchase Agreement and the Delaware General Corporation Law. With respect to the Shares, we express no opinion to the extent that, notwithstanding the Company's current reservation of the Shares, future issuances of securities of the Company, including the Shares, and/or antidilution adjustments to outstanding securities of the Company, may result in the Shares issuable pursuant to the Purchase Agreement to exceed the number of the Company's shares of common stock that then remain authorized but unissued and available for issuance.

Our opinion is limited solely to matters set forth herein. The law covered by the opinions expressed herein is limited to the Delaware General Corporation Law. We are not rendering any opinion with respect to federal law, including federal securities laws, or state blue sky laws.

Based on the foregoing, our examination of such documents and other matters as we deem relevant and the assumption that no Purchase Shares will be sold at a price which is less than the Floor Price (as defined in the Purchase Agreement), we are of the opinion that: (i) the Commitment Shares, when issued and delivered by the Company in the manner described in the Registration Statement and the Prospectus and in accordance with, and in the manner set forth in, the Purchase Agreement (including, without limitation, the payment in full of the applicable consideration therefor) and the resolutions adopted by the Board of Directors of the Company, will be validly issued, fully paid and non-assessable; and (ii) the Purchase Shares, when sold, issued and delivered by the Company in the manner described in the Registration Statement and the Prospectus and in accordance with, and in the manner set forth in, the Purchase Agreement (including, without limitation, the payment in full of the applicable consideration therefor) and the resolutions adopted by the Board of Directors of the Company, will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption “Legal Matters” in the Registration Statement and in the Prospectus included therein. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder. This opinion letter is given as of its date, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed in this opinion letter or of any subsequent changes in applicable law.

Very truly yours,

/s/ Honigman LLP

Honigman LLP

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "**Agreement**") by and between **HELIUS MEDICAL TECHNOLOGIES, INC.**, a Delaware corporation (the "**Company**"), and **ANTONELLA R. FAVIT-VAN PELT, M.D., PH.D.** (the "**Executive**") is entered into by the Company and the Executive and made effective as of July 7, 2021 (the "**Effective Date**").

RECITALS

WHEREAS, the Board of Directors of the Company (the "**Board**") has determined that it is in the best interests of the Company and the Company's stockholders to employ the Executive commencing on the Effective Date;

WHEREAS, the Company and the Executive desire to enter into this Agreement to embody the terms of the Executive's continued relationship with the Company following the Effective Date; and

WHEREAS, this Agreement shall represent the entire understanding and agreement between the parties with respect to the Executive's employment with the Company.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the respective covenants and agreements set forth below, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. EMPLOYMENT PERIOD. The Company hereby agrees to employ the Executive, and the Executive hereby agrees to enter into the employ of the Company, subject to the terms and conditions of this Agreement for the period commencing on the Effective Date and ending on the third anniversary of the Effective Date (the "**Initial Term**"). The term of this Agreement will automatically be renewed for a term of one (1) year (each, a "**Renewal Term**") at the end of the Initial Term and at the end of each Renewal Term thereafter, provided that the Board does not provide written notice to the Executive of its intention not to renew this Agreement at least ninety (90) days prior to the expiration of the Initial Term or any Renewal Term. For purposes of this Agreement, "**Employment Period**" includes the Initial Term and any Renewal Term(s) thereafter, subject to earlier termination in accordance with Section 3 of this Agreement.

2. TERMS OF EMPLOYMENT.**(a) Position and Duties.**

(i) During the Employment Period, the Executive shall serve as the Chief Medical Officer of the Company, and in such other position or positions with the Company and its subsidiaries as are consistent with the Executive's position as Chief Medical Officer of the Company, and shall have such duties and responsibilities as are assigned to the Executive by the Company's Chief Executive Officer or the Board consistent with the Executive's position as Chief Medical Officer of the Company. The Executive shall report to the Company's Chief Executive Officer. The Executive shall work remotely from both the Executive's home office and as reasonably requested from time to time at the Company's principal executive offices and such other locations as needed or reasonably requested from time to time by the Company's Chief Executive Officer.

(ii) During the Employment Period, and excluding any periods of paid time off to which the Executive is entitled, the Executive agrees to devote reasonable attention and time during normal business hours and on a full-time basis to the business and affairs of the Company, to discharge the responsibilities assigned to the Executive hereunder, and to use the Executive's reasonable best efforts to perform faithfully and efficiently such responsibilities. During the Employment Period it shall not be a violation of this Agreement for the Executive to (A) be employed by the Company or any of its subsidiaries or Affiliates (as defined below); (B) serve on civic or charitable boards, committees, or advisory boards; (C) deliver lectures, fulfill speaking engagements or teach at educational institutions; (D) manage personal investments; or (E) serve on the boards of directors of not-for-profit organizations, so long as such entities are not Competitors (as defined below) and such activities do not significantly interfere with the performance of the Executive's responsibilities as an employee of the Company in accordance with this Agreement.

(b) Compensation.

(i) **Base Salary.** During the Employment Period, the Executive shall receive an annual base salary (the "**Annual Base Salary**") of \$340,000 subject to applicable withholding taxes, which shall be paid in accordance with the Company's normal payroll practices for senior executive officers of the Company as in effect from time to time. During the Employment Period, commencing with the review of base salaries in connection with the Company's compensation program for the 2022 fiscal year, the Annual Base Salary shall be reviewed at least annually by the Board or the Compensation Committee of the Board (the "**Compensation Committee**"). Any increase in the Annual Base Salary shall not serve to limit or reduce any other obligation to the Executive under this Agreement. The Annual Base Salary at the Effective Date and after any such increase shall not be reduced (unless otherwise agreed to be the Executive) and the term "Annual Base Salary" as utilized in this Agreement shall refer to the Annual Base Salary as so increased or adjusted.

(ii) **Annual Bonus.** In addition to the Annual Base Salary, for each fiscal year ending during the Employment Period, the Executive shall be eligible for an annual cash bonus (the "**Annual Bonus**"), as determined by the Compensation Committee or the Board (in their sole and absolute discretion), which value shall be up to 35% of Executive's Annual Base Salary in effect on the last day of such fiscal year and as determined in accordance with the policies and practices generally applicable to other senior executive officers of the Company. The Annual Bonus, to the extent earned, shall be paid to the Executive within thirty (30) days following approval by the Compensation Committee or the Board of the Annual Bonus actually earned by Executive (in their sole and absolute discretion), if any, the timing of which shall depend on the availability of financial results audited by the Company's independent registered public accounting firm. For the avoidance of doubt, any Annual Bonus earned by the Executive for 2021 shall be prorated by the number of days (or other measurement of time) during which the Executive was employed by the Company during the year.

(iii) Option Award. Subject to the terms of the Company's 2021 Inducement Plan (the "**Inducement Plan**") and the form of stock option agreement issued thereunder, on or after the Effective Date, immediately following conditional approval of the Inducement Plan from the Toronto Stock Exchange, the Company will issue the Executive a "nonstatutory stock option," which is not intended to satisfy the requirements of an "incentive stock option" as described in Section 422 of the Code (as defined below), to purchase (the "**Option Award**") 18,000 shares of the Company's Class A common stock (the "**Shares**"), as an inducement for Executive's acceptance of employment with the Company. The Option Award shall include the following additional terms: (1) the exercise price per share shall be equal to the Fair Market Value (as defined in the Inducement Plan) of a share of the Company's Class A common stock on the date of grant of the Option Award; (2) subject to the Executive's continued employment and the terms and conditions of the Inducement Plan, the Shares subject to the Option Award shall vest and become exercisable as follows, 25% of the Shares shall vest and become exercisable on the first, second, third and fourth anniversary of the date of grant, subject to the Executive's continuous service with the Company or an Affiliate through such vesting dates; and (3) upon the occurrence of a Change in Control (as defined below) all of the Shares subject to the Option Award shall fully vest and become exercisable immediately prior to the effectiveness of such Change in Control, subject to the Executive's continued employment with the Company as of each such date and as further provided in the terms and conditions of this Agreement, the Option Award and the Inducement Plan.

(iv) Long-Term Incentive Compensation. During the Employment Period, the Executive shall be entitled to participate in any equity incentive, performance share, performance unit or other equity based long-term incentive compensation plan, program or arrangement (the "**Plans**") generally made available to senior executive officers of the Company, on substantially the same terms and conditions as generally apply to such other officers, except that the size of the awards made to the Executive shall reflect the Executive's position with the Company and may be based on different performance criteria established by the Compensation Committee or the Board, as the case may be.

(v) Welfare Benefit Plans. During the Employment Period, the Executive and/or the Executive's family, as the case may be, shall be eligible to participate in and receive benefits under the welfare benefit plans, practices, policies and programs provided by the Company and its Affiliates (including, without limitation, medical, prescription, dental, disability, employee life, group life, accidental death and travel accident insurance plans and programs) made available to other senior executive officers of the Company, subject to the terms and conditions of the applicable plans, practices, policies and programs. Notwithstanding the foregoing, the Company may amend or discontinue any such welfare benefit plans, practices, policies and programs at any time in its sole discretion.

(vi) Expenses. During the Employment Period, the Executive shall be entitled to receive prompt reimbursement for all reasonable and documented out-of-pocket business, entertainment, and travel expenses incurred by the Executive in connection with the performance of the Executive's duties hereunder in accordance with the plans, practices, policies and programs of the Company, including, but not limited to, the Executive's home office expenses and travel and lodging expenses incurred by the Executive in connection with the performance of the Executive's duties hereunder.

(vii) Paid Time Off. During the Employment Period, the Executive shall be entitled to twenty (20) days of paid days off, to be taken in accordance with the plans, practices, policies and programs of the Company.

3. TERMINATION OF EMPLOYMENT.

(a) Notwithstanding Section 1, the Employment Period shall end upon the earlier of (x) the expiration of the Initial term or any Renewal Term in the event the Board elects not to renew this Agreement in accordance with Section 1 of this Agreement or (y) the earliest to occur of the following dates (such date, the **“Termination Date”**): (i) the Executive’s death; (ii) a Termination due to Disability (as defined below); (iii) a Termination for Cause (as defined below); (iv) the date the Company specifies in writing to the Executive in connection with any exercise by the Company of its Termination Right (as defined below); (v) the date the Executive specifies in writing to the Company in connection with any notice to effect a Termination for Good Reason (as defined below) by the Executive; or (vi) the date the Executive specifies in writing to the Company in connection with any notice to effect a termination of this Agreement by Executive pursuant to Section 3(b). Upon termination of the Executive’s employment with the Company for any reason, the Executive will be deemed to have automatically resigned, effective as of the Termination Date, from any and all positions that the Executive holds as an officer, director, manager and/or member of any governing body (or a committee thereof), in any case, of the Company or any of its Affiliates.

(b) This Agreement may be terminated by the Executive at any time upon thirty (30) days prior written notice to the Company or upon such shorter period as may be agreed upon between the Executive and the Board. In the event of a termination by the Executive other than a Termination for Good Reason, the Company shall be obligated only to continue to pay the Executive’s salary and provide other benefits provided by this Agreement up to the Termination Date.

(c) Benefits Payable Under Termination.

(i) In the event of the Executive’s death during the Employment Period or a Termination due to Disability, the Executive or the Executive’s beneficiaries or legal representatives shall be provided the Unconditional Entitlements (as defined below), and any additional benefits that are or become payable under any Company plan, policy, practice or program or any contract or agreement with the Company by reason of the Executive’s death or Termination due to Disability.

(ii) In the event of the Executive’s Termination for Cause, termination by the Executive other than a Termination for Good Reason, the Executive shall be provided the Unconditional Entitlements.

(iii) In the event of a Termination for Good Reason, the Board elects not to renew this Agreement in accordance with Section 1 of this Agreement, or the exercise by the Company of its Termination Right to which Section 5 of this Agreement does not apply, the Executive shall be provided the Unconditional Entitlements and, subject to the Executive signing and delivering to the Company and not revoking before the sixtieth (60th) day following the

Termination Date, a general release of claims of each of the Company and the Executive, respectively, in a form reasonably satisfactory to the Company and the Executive, which the Company shall provide to the Executive within seven (7) days following the Termination Date (the “**Release**”), the Company shall provide the Executive the Conditional Benefits. Any and all amounts payable and benefits or additional rights provided to the Executive upon a termination of the Executive’s employment pursuant to this Section 3(c) (other than the Unconditional Entitlements) shall only be payable or provided if the Executive signs and delivers the Release and if the Release becomes irrevocable prior to the sixtieth (60th) day following the Termination Date. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to the Executive under any of the provisions of this Agreement, nor shall the amount of any payment hereunder be reduced by any compensation earned by the Executive as a result of employment by a subsequent employer.

(d) Unconditional Entitlements. For purposes of this Agreement, the “**Unconditional Entitlements**” to which the Executive may become entitled under Section 3(c) are as follows:

(i) Earned Amounts. The Earned Compensation (as defined below) shall be paid within thirty (30) days following the Termination Date, or if any part thereof constitutes a bonus which is subject to or conditioned upon any performance conditions, within thirty (30) days following the determination that such conditions have been met, provided that in no event shall the bonus be paid later than ninety (90) days following the Termination Date.

(ii) Benefits. All benefits payable to the Executive under any employee benefit plans (including, without limitation any pension plans or 401(k) plans) of the Company or any of its Affiliates applicable to the Executive at the time of termination of the Executive’s employment with the Company and all amounts and benefits (other than the Conditional Benefits) which are vested or which the Executive is otherwise entitled to receive under the terms of or in accordance with any plan, policy, practice or program of, or any contract or agreement with, the Company, at or subsequent to the Termination Date without regard to the performance by the Executive of further services or the resolution of a contingency, shall be paid or provided in accordance with and subject to the terms and provisions of such plans, it being understood that all such benefits shall be determined on the basis of the actual date of termination of the Executive’s employment with the Company.

(iii) Indemnities. Any right which the Executive may have to claim a defense and/or indemnity for liabilities to or claims asserted by third parties in connection with the Executive’s activities as an officer, director or employee of the Company shall be unaffected by the Executive’s termination of employment and shall remain in effect in accordance with the terms of the Indemnification Agreement (as defined below).

(iv) Medical Coverage. The Executive shall be entitled to such continuation of health care coverage as is required under, and in accordance with, applicable law or otherwise provided in accordance with the Company’s policies. The Executive shall be notified in writing of the Executive’s rights to continue such coverage after the termination of the Executive’s employment pursuant to this Section 3(d)(iv), provided that the Executive timely complies with the conditions to continue such coverage. The Executive understands and

acknowledges that the Executive is responsible to make all payments required for any such continued health care coverage that the Executive may choose to receive (except to the extent additional rights are provided upon Executive's qualifying to receive Conditional Benefits). To the extent the Company is required by law to pay for the premium for Executive to continue health coverage under the federal COBRA law, such COBRA subsidies will be included in the Unconditional Entitlements.

(v) Business Expenses. The Executive shall be entitled to reimbursement, in accordance with the Company's policies regarding expense reimbursement as in effect from time to time, for all business expenses incurred by the Executive prior to the Termination Date.

(vi) Stock Options/Equity Awards. Except to the extent additional rights are provided upon the Executive's qualifying to receive the Conditional Benefits, the Executive's rights with respect to any stock option, restricted stock or other equity award granted to the Executive by the Company shall be governed by the terms and provisions of the Inducement Plan or equity incentive plan, the applicable Original Stock Option Award Documents or Original Award Documents (each as defined below).

(e) Conditional Benefits. For purposes of this Agreement, the "**Conditional Benefits**" to which the Executive may become entitled are as follows:

(i) Severance Amount. The Severance Amount (as defined below) will be subject to all applicable withholdings and will be payable by the Company to the Executive in one lump sum payment on the first regular payroll date following the date that the Release becomes effective and irrevocable or, if any component of the Severance Amount is subject to Section 409A (as defined below), beginning on the first regular Company payroll date after the sixtieth (60th) day following the Termination Date.

(ii) COBRA. Provided that the Executive timely elects continued health insurance coverage under the federal COBRA law and under the Company's group health plans following the Termination Date, then, to the extent such premium payments are not already part of the Unconditional Entitlements, the Company shall pay 100% of the COBRA premiums necessary to continue the Executive's and the Executive's covered dependents' health insurance coverage in effect for the Executive (and the Executive's covered dependents) on the Termination Date until the earliest of: (A) twelve (12) months following the Termination Date; (B) the date when the Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment; or (C) the date the Executive ceases to be eligible for COBRA continuation coverage for any reason, including plan termination (such period from the Termination Date through the earlier of (A)-(C) (the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines that its payment of COBRA premiums on the Executive's behalf could result in a violation of applicable law or the imposition of penalties or taxes, or not available for other reasons, then in lieu of paying COBRA premiums pursuant to this Section 3(e)(ii), the Company shall pay the Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the premium for such month, subject to applicable tax withholding, for the remainder of the COBRA Payment Period. Nothing in this Agreement shall deprive the Executive of the Executive's rights under COBRA for benefits under plans and policies arising under the Executive's employment by the Company.

(iii) Stock Options/Equity Awards. All of the Executive's stock options, restricted stock or other equity awards shall vest and become immediately exercisable in accordance with the applicable Original Stock Option Award Documents or Original Award Documents, subject to the same conditions as if the Executive had remained employed under this Agreement through the end of the then remaining portion of the Initial Term or the Renewal Term, as applicable. Except as otherwise expressly provided herein, all stock options, restricted stock or other equity awards shall continue to be subject to the Inducement Plan or other equity incentive plan, and the applicable Original Stock Option Award Documents or Original Award Documents. All of the Executive's stock options that were vested and exercisable at the Termination Date, including those that vested pursuant to this Section 3(e)(iii), shall remain exercisable in accordance with the applicable Original Stock Option Award Documents until the date that is ninety (90) days following the end of the then remaining portion of the Initial Term or the Renewal Term, as applicable.

(iv) Additional Distribution Rules. Notwithstanding any other payment date or schedule provided in this Agreement to the contrary, if the Executive is deemed on the Termination Date of the Executive's employment to be a "specified employee" within the meaning of that term under Section 409A of the Code and the regulations thereunder ("**Section 409A**"), then each of the following shall apply:

(A) With regard to any payment that is considered "nonqualified deferred compensation" under Section 409A and payable on account of a "separation from service" (within the meaning of Section 409A and as provided in Section 3(h) of this Agreement), such payment shall not be made prior to the date which is the earlier of (1) the expiration of the six (6)-month period measured from the date of the Executive's "separation from service," and (2) the date of the Executive's death (the "**Delay Period**") to the extent required under Section 409A. Upon the expiration of the Delay Period, all payments delayed pursuant to this Section 3(e)(v)(A) (whether they would have otherwise been payable in a single sum or in installments in the absence of such delay) shall be paid to the Executive in a lump sum, and all remaining payments due under this Agreement shall be paid or provided in accordance with the normal payment dates specified for them herein; and

(B) To the extent that benefits to be provided during the Delay Period are considered "nonqualified deferred compensation" under Section 409A provided on account of a "separation from service," the Executive shall pay the cost of such benefits during the Delay Period, and the Company shall reimburse the Executive, to the extent that such costs would otherwise have been paid or reimbursed by the Company or to the extent that such benefits would otherwise have been provided by the Company at no cost to the Executive, for the Company's share of the cost of such benefits upon expiration of the Delay Period, and any remaining benefits shall be paid, reimbursed or provided by the Company in accordance with the procedures specified herein.

The foregoing provisions of this Section 3(e)(v)(A) and (B) shall not apply to any payments or benefits that are excluded from the definition of “nonqualified deferred compensation” under Section 409A, including, without limitation, payments excluded from the definition of “nonqualified deferred compensation” on account of being separation pay due to an involuntary separation from service under Treasury Regulation 1.409A-1(b)(9)(iii) or on account of being a “short-term deferral” under Treasury Regulation 1.409A-1(b)(4).

(f) Definitions. For purposes of this Agreement, the following terms shall have the meanings ascribed to them below:

(i) “Affiliate” means any corporation, partnership, limited liability company, trust or other entity which directly, or indirectly through one or more intermediaries, controls, is under common control with, or is controlled by, the Company.

(ii) “Change in Control” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(A) any Exchange Act Person (as defined below) becomes the Owner (as defined below), directly or indirectly, of securities of the Company representing more than 50% of the combined Voting Power (as defined below) of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (1) in connection with the issuance of securities of the Company as part of a joint venture or strategic partnership to which the Company is party; (2) on account of the acquisition of securities of the Company directly from the Company; (3) on account of the acquisition of securities of the Company by an investor, any Affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities; (4) on account of the acquisition of securities of the Company by any individual who is, on the Effective Date, either an executive officer or a member of the Board and/or any entity in which an executive officer or member of the Board has a direct or indirect interest (whether in the form of voting rights or participation in profits or capital contributions) of more than 50% (collectively, the **“Incumbent Entities”**); (5) on account of the Incumbent Entities continuing to hold shares that come to represent more than 50% of the combined Voting Power of the Company’s then outstanding securities as a result of the conversion of any class of the Company’s securities into another class of the Company’s securities having a different number of votes per share pursuant to the conversion provisions set forth in the Company’s Certificate of Incorporation, as amended; or (6) solely because the level of Ownership (as defined below) held by any Exchange Act Person (the **“Subject Person”**) exceeds the designated percentage threshold of the outstanding Voting Securities (as defined below) as a result of a repurchase or other acquisition of Voting Securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of Voting Securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional Voting Securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding Voting Securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to have occurred;

(B) a merger, consolidation or similar transaction involving (directly or indirectly) the Company is consummated and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own (as defined below), directly or indirectly, either (1) outstanding Voting Securities representing more than 50% of the combined outstanding Voting Power of the surviving entity in such merger, consolidation or similar transaction or (2) more than 50% of the combined outstanding Voting Power of the parent of the surviving entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding Voting Securities of the Company immediately prior to such transaction; *provided, however*, that a merger, consolidation or similar transaction will not constitute a Change in Control under this prong of the definition if the outstanding Voting Securities representing more than 50% of the combined Voting Power of the surviving entity or its parent are owned by the Incumbent Entities;

(C) a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its subsidiaries is consummated, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its subsidiaries to an entity, more than 50% of the combined Voting Power of the Voting Securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding Voting Securities of the Company immediately prior to such sale, lease, license or other disposition; *provided, however*, that a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its subsidiaries will not constitute a Change in Control under this prong of the definition if the outstanding Voting Securities representing more than 50% of the combined Voting Power of the acquiring entity or its parent are owned by the Incumbent Entities; or

(D) individuals who, on the Effective Date, are members of the Board (the “**Incumbent Board**”) cease for any reason to constitute at least a majority of the members of the Board; *provided, however*, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member will, for purposes of this Agreement, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing definition, the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company; moreover, in the case of any payment or benefit that constitutes nonqualified deferred compensation under Section 409A, if necessary in order to ensure that the Executive does not incur liability for additional tax under Section 409A, a transaction (or series of related transactions) shall constitute a Change in Control only if, in addition to satisfying the foregoing definition, such transaction (or series of related transactions) also satisfies the definition of a “change in control event” under Treasury Regulation 1.409A-3(i)(5).

(iii) “**Code**” means the Internal Revenue Code of 1986, as amended and the rules and regulations promulgated thereunder.

(iv) “**Earned Compensation**” means (i) any Annual Base Salary earned, but unpaid, for services rendered to the Company on or prior to the Termination Date (but excluding any salary and interest accrued thereon payment of which has been deferred) and (ii) to the extent the Annual Bonus for the year prior to the year in which the termination of employment occurs has been earned but not paid, the earned Annual Bonus, if any.

(v) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(vi) **“Exchange Act Person”** means any natural person, entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (A) the Company or any subsidiary of the Company; (B) any employee benefit plan of the Company or any subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any subsidiary of the Company; (C) an underwriter temporarily holding securities pursuant to a registered public offering of such securities; (D) an entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (E) any natural person, entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined Voting Power of the Company’s then outstanding securities.

(vii) **“Non-Compete Amount”** means, if a Change in Control occurs and if during the twenty-four (24) month period following the Change in Control the Executive is terminated without Cause (other than because of the Executive’s death or Disability) or the Executive terminates the Executive’s employment for Good Reason, the amount mutually agreed upon by the Company and the Executive in exchange for the Executive’s covenant not to engage in or otherwise compete against the business engaged in by the Company, directly or indirectly, whether as an employee, consultant, independent contractor, partner, shareholder, investor or in any other capacity, for a one-year period following termination of the Executive’s employment with the Company.

(viii) **“Original Award Documents”** means, with respect to any restricted stock or other equity award, the terms and provisions of the applicable award agreement and the equity incentive plan of the Company pursuant to which such equity award was granted, each as in effect on the Termination Date.

(ix) **“Original Stock Option Award Documents”** means, with respect to any stock option, the terms and provisions of the applicable award agreement and the equity incentive plan of the Company pursuant to which such stock option was granted, each as in effect on the Termination Date.

(x) **“Own,” “Owned,” “Owner,” “Ownership”** means a person or entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(xi) **“Person”** shall have the same meaning as ascribed to such term in Section 3(a)(9) of the Exchange Act, as supplemented by Section 13(d)(3) of the Exchange Act, and shall include any group (within the meaning of Rule 13d-5(b) under the Exchange Act); provided that Person shall not include (A) the Company or any of its Affiliates, or (B) any employee benefit plan (including an employee stock ownership plan or employee stock purchase plan) sponsored by the Company or any of its Affiliates.

(xii) **“Severance Amount”** means an amount equal to 1.0 times the Annual Base Salary as in effect as of the Termination Date less the Non-Compete Amount (if applicable).

(xiii) **“Termination for Cause”** means a termination of the Executive’s employment by the Company due to (A) an intentional act or acts of dishonesty undertaken by the Executive and intended to result in substantial gain or personal enrichment to the Executive at the expense of the Company, (B) unlawful conduct or gross misconduct that is willful and deliberate on the Executive’s part and that, in either event, is materially injurious to the Company, (C) the conviction of the Executive of, or the Executive’s entry of a no contest or *nolo contendere* plea to, a felony, (D) material breach by the Executive of the Executive’s fiduciary obligations as an officer or director of the Company, (E) a persistent failure by the Executive to perform the duties and responsibilities of the Executive’s employment hereunder, which failure is willful and deliberate on the Executive’s part and is not remedied by the Executive within 30 days after the Executive’s receipt of written notice from the Company of such failure, or (F) material breach of any terms and conditions of this Agreement by Executive, which breach has not been cured by the Executive within ten days after written notice thereof to Executive from the Company. For the purposes of this Section 3(f)(xiii), no act or failure to act on the Executive’s part shall be considered “dishonest,” “willful” or “deliberate” unless intentionally done or omitted to be done by the Executive in bad faith and without reasonable belief that the Executive’s action or omission was in the best interests of the Company. Any act, or failure to act, based upon authority given pursuant to a resolution duly adopted by the Board shall be conclusively presumed to be done, or omitted to be done, by the Executive in good faith and in the best interests of the Company.

(xiv) **“Termination due to Disability”** means a termination of the Executive’s employment by the Company because the Executive has been incapable, after reasonable accommodation, of substantially fulfilling the positions, duties, responsibilities and obligations set forth in this Agreement because of physical, mental or emotional incapacity resulting from injury, sickness or disease for a period of (A) six (6) consecutive months or (B) an aggregate of nine (9) months (whether or not consecutive) in any twelve (12) month period. Any question as to the existence, extent or potentiality of the Executive’s disability shall be determined by a qualified physician selected by the Company with the consent of the Executive, which consent shall not be unreasonably withheld. The Executive or the Executive’s legal representatives or any adult member of the Executive’s immediate family shall have the right to present to such physician such information and arguments as to the Executive’s disability as he, she or they deem appropriate, including the opinion of the Executive’s personal physician.

(xv) **“Termination for Good Reason”** means a termination of the Executive’s employment by the Executive within thirty (30) days of the Company’s failure to cure, in accordance with the procedures set forth below, any of the following events: (A) a reduction in Executive’s Annual Base Salary as in effect immediately prior to such reduction by

more than 10% without Executive's written consent, unless such reduction is made pursuant to an across the board reduction applicable to all senior executives of the Company; (B) the removal of the Executive by the Company from the position of Chief Medical Officer of the Company; (C) a material reduction in the Executive's duties and responsibilities as in effect immediately prior to such reduction; or (D) a material breach of any material provision of this Agreement by the Company to which the Executive shall have delivered a written notice to the Board within forty-five (45) days of the Executive's having actual knowledge of the occurrence of one of such events stating that the Executive intends to terminate the Executive's employment for Good Reason, if not cured, and specifying the factual basis for such termination. Notwithstanding the foregoing, a termination shall not be treated as a Termination for Good Reason if the Executive shall have consented in writing to the occurrence of the event giving rise to the claim of Termination for Good Reason.

(xvi) "**Termination Right**" means the right of the Company, in its sole, absolute and unfettered discretion, to terminate the Executive's employment under this Agreement for any reason or no reason whatsoever. For the avoidance of doubt, any Termination for Cause effected by the Company shall not constitute the exercise of its Termination Right.

(xvii) "**Voting Power**" means such number of Voting Securities as shall enable the holders thereof to cast all the votes which could be cast in an annual election of directors of a company.

(xviii) "**Voting Securities**" means all securities entitling the holders thereof to vote in an annual election of directors of a company.

(g) **Conflict with Plans.** As permitted under the terms of the applicable equity incentive plan of the Company, Original Stock Option Award Documents or Original Award Documents, the Company and the Executive agree that the definitions of Termination for Cause or Termination for Good Reason set forth in this Section 3 shall apply in place of any similar definition or comparable concept applicable under any equity incentive plan of the Company, Original Stock Option Award Documents or Original Award Documents.

(h) **Section 409A.** It is intended that payments and benefits under this Agreement either be excluded from or comply with the requirements of Section 409A and the guidance issued thereunder and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted consistent with such intent. In the event that any provision of this Agreement is subject to but fails to comply with Section 409A, the Company may revise the terms of the provision to correct such noncompliance to the extent permitted under any guidance, procedure or other method promulgated by the Internal Revenue Service now or in the future or otherwise available that provides for such correction as a means to avoid or mitigate any taxes, interest or penalties that would otherwise be incurred by the Executive on account of such noncompliance; *provided, however*, that in no event whatsoever shall the Company be liable for any additional tax, interest or penalty imposed upon or other detriment suffered by the Executive under Section 409A or damages for failing to comply with Section 409A. Solely for purposes of determining the time and form of payments due the Executive under this Agreement (including any payments due under Sections 3(c) or 5) or otherwise in connection with the Executive's termination of

employment with the Company, the Executive shall not be deemed to have incurred a termination of employment unless and until the Executive shall incur a "separation from service" within the meaning of Section 409A. The parties agree, as permitted in accordance with the final regulations thereunder, a "separation from service" shall occur when the Executive and the Company reasonably anticipate that the Executive's level of bona fide services for the Company (whether as an employee or an independent contractor) will permanently decrease to no more than forty (40) percent of the average level of bona fide services performed by the Executive for the Company over the immediately preceding thirty-six (36) months (or the period of Executive's employment if Executive has been employed with the Company less than thirty-six (36) months at the time of the Executive's termination). The determination of whether and when a separation from service has occurred shall be made in accordance with this subparagraph and in a manner consistent with Treasury Regulation 1.409A-1(h). All reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during the Executive's lifetime (or during a shorter period of time specified in this Agreement); (ii) the amount of expenses eligible for reimbursement (and the in-kind benefits to be provided) during a calendar year may not affect the expenses eligible for reimbursement (and the in-kind benefits to be provided) in any other calendar year; (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred; and (iv) the right to reimbursement (or in-kind benefits) is not subject to set off or liquidation or exchange for any other benefit. For purposes of Section 409A, the Executive's right to any installment payments under this Agreement shall be treated as a right to receive a series of separate and distinct payments. Whenever a payment under this Agreement specifies a payment period with reference to a number of days (e.g., "payment shall be made within ninety (90) days following the date of termination"), the actual date of payment within the specified period shall be within the sole discretion of the Company.

4. EXECUTIVE REMEDY. The Executive acknowledges and agrees that the payments and rights provided under Section 3 of this Agreement are fair and reasonable, and are the Executive's sole and exclusive remedy, in lieu of all other remedies at law or in equity, for termination of the Executive's employment by the Company upon exercise of its Termination Right pursuant to this Agreement or upon a Termination for Good Reason.

5. ADDITIONAL PAYMENTS FOLLOWING A CHANGE IN CONTROL.

(a) If within the twelve (12) months following or three (3) months prior to the effective date of a Change in Control: (i) the Executive effects a Termination for Good Reason; or (ii) the Company terminates the Executive's employment in connection with any exercise by the Company of its Termination Right, in lieu of the payments and rights that may otherwise be provided under Section 3 of this Agreement:

(i) the Company shall pay to the Executive, in a lump sum in cash within thirty (30) days after the Termination Date, the amount equal to the product of 1 times the sum of (y) the Annual Base Salary as in effect as of the Termination Date, and (z) the target Annual Bonus for the Executive as in effect as of the Termination Date, less the Non-Compete Amount (if applicable), and

(ii) all of the Executive's remaining stock options, restricted stock or other equity awards that were issued by the Company and assumed, continued or substituted by the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) in a transaction that constitutes a Change in Control and remain subject to time vesting conditions on the Termination Date shall fully vest on the Termination Date and become immediately exercisable in accordance with the terms of the applicable Original Stock Option Award Documents and Original Award Agreements, and

(iii) the Company shall provide the Executive the Unconditional Entitlements and the Conditional Benefits minus the Severance Amount.

(b) If any payment or benefit (whether or not pursuant to this Agreement) the Executive would receive in connection with a Change in Control from the Company or otherwise (the "**Payment**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this paragraph, be subject to the excise tax imposed by Section 4999 of the Code (the "**Excise Tax**"), then the Executive shall have the option to select one of the following two alternative forms of payment: (A) payment in full of the entire amount of the Payment, or (B) payment of only a part of the Payment so that the Executive receives the largest payment possible without the imposition of the Excise Tax (a "**Reduced Payment**"). If Executive elects to receive a Reduced Payment, the reduction in payments and/or benefits shall occur in the following order: (A) reduction of cash payments in the reverse chronological order in which otherwise payable; (B) cancellation of accelerated vesting of equity awards other than stock options; (C) cancellation of accelerated vesting of stock options; and (D) reduction of other benefits paid to Executive in the reverse chronological order in which otherwise payable. In the event that acceleration of compensation from the Executive's equity awards is to be reduced, such acceleration of vesting shall be canceled in the reverse order of the date of grant and, in the case of a particular grant, in the reverse chronological order in which the grant would otherwise vest.

(c) The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the Change in Control, or a nationally recognized law firm, shall make all determinations required to be made under this Section 5. If the independent registered public accounting firm or nationally recognized law firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company shall appoint an independent registered public accounting firm or nationally recognized law firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder.

(d) The independent registered public accounting firm or law firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and the Executive within fifteen (15) calendar days after the date on which Executive's right to a Payment is triggered (if requested at that time by the Company or Executive) or such other time as requested by the Company or Executive. Any good faith determinations of the accounting firm or law firm made hereunder shall be final, binding and conclusive upon the Company and Executive.

(e) The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to the Executive under any of the provisions of this Agreement and such amounts shall not be reduced whether or not the Executive obtains other employment. The Company agrees to pay as incurred, to the full extent permitted by law, all legal fees and expenses which the Executive may reasonably incur as a result of any contest (regardless of the outcome thereof) by the Company, the Executive or others of the validity or enforceability of, or liability under, any provision of this Agreement or any guarantee of performance thereof (including as a result of any contest by the Executive about the amount of any payment pursuant to this Agreement), plus, in each case, interest on any delayed payment at the applicable Federal rate provided for in Section 7872(f)(2)(A) of the Code.

6. CONFIDENTIALITY.

(a) **Confidentiality.** Without the prior written consent of the Company, except (y) as reasonably necessary in the course of carrying out the Executive's duties hereunder or (z) to the extent required by an order of a court having competent jurisdiction or under subpoena from an appropriate government agency, the Executive shall not disclose any Confidential Information (as defined below) unless such Confidential Information has been previously disclosed to the public by the Company or has otherwise become available to the public (other than by reason of the Executive's breach of this Section 6(a)). The term "**Confidential Information**" shall include, but shall not be limited to: (i) the identities of the existing and prospective customers or clients of the Company and its Affiliates, including names, addresses, credit status, and pricing levels; (ii) the buying and selling habits and customs of existing and prospective customers or clients of the Company and its Affiliates; (iii) financial information about the Company and its Affiliates; (iv) product and systems specifications, concepts for new or improved products and other product or systems data; (v) the identities of, and special skills possessed by, employees of the Company and its Affiliates; (vi) the identities of and pricing information about the suppliers and vendors of the Company and its Affiliates; (vii) training programs developed by the Company or its Affiliates; (viii) pricing studies, information and analyses; (ix) current and prospective products and inventories; (x) financial models, business projections and market studies; (xi) the financial results and business conditions of the Company and its Affiliates; (xii) business plans and strategies of the Company and its Affiliates; (xiii) special processes, procedures, and services of suppliers and vendors of the Company and its Affiliates; and (xiv) computer programs and software developed by the Company or its Affiliates.

(b) **Company Property.** Promptly following the Executive's termination of employment, the Executive shall return to the Company all property of the Company, and all copies thereof in the Executive's possession or under the Executive's control, except that the Executive may retain the Executive's personal notes, diaries, rolodexes, mobile devices, calendars and electronic calendars, and correspondence of a personal nature.

(c) Nonsolicitation. The Executive agrees that, while the Executive is employed by the Company and during the one-year period following the Executive's termination of employment with the Company (the "**Restricted Period**"), the Executive shall not directly or indirectly, (i) solicit any individual who is, on the Termination Date (or was, during the six-month period prior to the Termination Date), employed by the Company or its Affiliates to terminate or refrain from renewing or extending such employment or to become employed by or become a consultant to any other individual or entity other than the Company or its Affiliates or (ii) induce or attempt to induce any customer or investor (in each case, whether former, current or prospective), supplier, licensee or other business relation of the Company or any of its Affiliates to cease doing business with the Company or such Affiliate, or in any way interfere with the relationship between any such customer, investor, supplier, licensee or business relation, on the one hand, and the Company or any of its Affiliates, on the other hand. Any payments owed to Executive at time of separation as described herein shall be contingent upon Executive's compliance with the post-employment nonsolicitation provisions.

(d) Noncompetition. The Executive agrees that, during the Restricted Period, the Executive shall not be employed by, serve as a consultant to, or otherwise assist or directly or indirectly provide services to a Competitor if (i) the services that the Executive is to provide to the Competitor are the same as, or substantially similar to, any of the services that the Executive provided to the Company or the Affiliates, and such services are to be provided with respect to any location in which the Company or an Affiliate had material operations during the twelve (12) month period prior to the Termination Date, or with respect to any location in which the Company or an Affiliate had devoted material resources to establishing operations during the twelve (12) month period prior to the Termination Date; or (ii) the trade secrets, Confidential Information, or proprietary information (including, without limitation, confidential or proprietary methods) of the Company and the Affiliates to which the Executive had access could reasonably be expected to benefit the Competitor if the Competitor were to obtain access to such secrets or information. For purposes of this paragraph, services provided by others shall be deemed to have been provided by the Executive to Competitor if the Executive had material supervisory responsibilities with respect to the provision of such services. The term "**Competitor**" means any enterprise (including a person, firm, business, division, or other unit, whether or not incorporated) during any period in which a material portion of its business is (and during any period in which it intends to enter into business activities that would be) materially competitive in any way with any business in which the Company or any of the Affiliates were engaged during the twelve (12) month period prior to the Executive's Termination Date (including, without limitation, any business if the Company devoted material resources to entering in such business during such twelve (12) month period), but for purposes of clause (c) above, the term "Competitor" shall be limited to those businesses to which the Executive devoted more than an insignificant amount of time while employed by the Company. Notwithstanding the foregoing, the term "**Competitor**" shall not include a business of a Competitor if such business would not, as a stand-alone enterprise, constitute a "Competitor" under the foregoing definition, provided that Executive does not render any services to, or otherwise assist the portion of the business that competes with the Company and its Affiliates. For the avoidance of doubt, the Company's and Affiliates' businesses shall include, without limitation, the lines of business set forth in the

Company's annual report on Form 10-K, provided that nothing in this sentence shall be construed to limit the type of business of the Company and the Affiliates or the restrictions with respect to such businesses in the future. Any payments owed to Executive at time of separation as described herein shall be contingent upon Executive's compliance with the post-employment noncompetition provisions.

(e) Equitable Remedies. The Executive acknowledges that the Company would be irreparably injured by a violation of this Section 6 and the Executive agrees that the Company, in addition to any other remedies available to it for such breach or threatened breach, on meeting the standards required by law, shall be entitled to a preliminary injunction, temporary restraining order, or other equivalent relief, restraining the Executive from any actual or threatened breach of this Section 6. If a bond is required to be posted in order for the Company to secure an injunction or other equitable remedy, the parties agree that said bond need not be more than a nominal sum.

(f) Employee Proprietary Information and Inventions Assignment. The terms of that certain Employee Proprietary Information, Inventions Assignment Agreement between the Executive and the Company dated as of the Effective Date (the "***Invention Assignment Agreement***") are hereby incorporated by reference. To the extent that there are any conflicts between the terms and conditions of the Invention Assignment Agreement and this Agreement, the terms and conditions of this Agreement shall control. All non-conflicting terms of the Invention Assignment Agreement are hereby expressly preserved.

(g) Severability; Blue Pencil. The Executive acknowledges and agrees that the Executive has had the opportunity to seek advice of counsel in connection with this Agreement and the restrictive covenants contained herein are reasonable in geographical scope temporal duration and in all other respects. If it is determined that any provision of this Section 6 is invalid or unenforceable, the remainder of the provisions of this Section 6 shall not thereby be affected and shall be given full effect, without regard to the invalid portions. If any court or other decision-maker of competent jurisdiction determines that any of the covenants in this Section 6 is unenforceable because of the duration or geographic scope, of such provision, then after such determination becomes final and unappealable, the duration or scope of such provision, as the case may be, shall be reduced so that such provision becomes enforceable, and in its reduced form, such provision shall be enforced.

7. SUCCESSORS.

(a) This Agreement is personal to the Executive and without the prior written consent of the Company shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) This Agreement shall inure to the benefit of and be binding upon the Company and its successors and assigns and any party acting in the form of a receiver or trustee capacity.

(c) The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to assume expressly and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. As used in this Agreement, "Company" shall mean the Company as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law, or otherwise.

8. MISCELLANEOUS.

(a) This Agreement shall be construed, and the rights and obligations of the parties hereunder determined, in accordance with the substantive laws of the Commonwealth of Pennsylvania, without regard to its conflict-of-laws principles. For the purposes of any suit, action or proceeding based upon, arising out of or relating to this Agreement or the negotiation, execution or performance hereof, the parties hereby expressly submit to the jurisdiction of all federal and state courts sitting within the confines of the Commonwealth of Pennsylvania (the "Venue Area") and consent that any order, process, notice of motion or other application to or by any such court or a judge thereof may be served within or without such court's jurisdiction by registered mail or by personal service in accordance with Section 8(b). The parties agree that such courts shall have the exclusive jurisdiction over any such suit, action or proceeding commenced by either or both of said parties. Each party hereby irrevocably waives any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding based upon, arising out of or relating to this Agreement or the negotiation, execution or performance hereof, brought in any federal or state court sitting within the confines of the Venue Area and hereby further irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. This Agreement may not be amended or modified otherwise than by a written agreement executed by the parties hereto or their respective successors and legal representatives.

(b) All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to the Executive: At Executive's address as it appears in the Company's books and records or at such other place as Executive shall have designated by notice as herein provided to the Company

If to the Company: Helius Medical Technologies, Inc.
Attn: President and Chief Executive Officer
642 Newtown Yardley Road, Suite 100
Newtown, Pennsylvania 18940

with a copy to: Honigman LLP
650 Trade Centre Way, Suite 200
Kalamazoo, Michigan 49002
Attention: Phillip D. Torrence, Esq.

or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notice and communications shall be effective when actually received by the addressee.

(c) The Company hereby agrees to indemnify the Executive and hold the Executive harmless to the extent provided under the Certificate of Incorporation of the Company, the Bylaws of the Company and the Indemnification Agreement entered by and between the Company and the Executive (the "**Indemnification Agreement**") against and in respect of any and all actions, suits, proceedings, claims, demands, judgments, costs, expenses (including reasonable attorney's fees), losses, and damages resulting from the Executive's good faith performance of the Executive's duties and obligations with the Company. This obligation shall survive the termination of the Executive's employment with the Company.

(d) From and after the Effective Date, the Company shall cover the Executive under directors' and officers' liability insurance both during and, while potential liability exists, after the Employment Period in the same amount and to the same extent as the Company covers its other executive officers and directors.

(e) The Company may withhold from any amounts payable under this Agreement such Federal, state, local or foreign taxes that the Company determines are required to be withheld pursuant to any applicable law or regulation.

(f) The Executive's or the Company's failure to insist upon strict compliance with any provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder shall not be deemed to be a waiver of such provision of right or any other provision or right of this Agreement.

(g) This Agreement, the Invention Assignment Agreement, the Indemnification Agreement, the Original Award Documents, the Original Stock Option Award Documents and all agreements, documents, instruments, schedules, exhibits or certificates prepared in connection herewith or therewith as of the Effective Date represent the entire understanding and agreement between the parties with respect to the subject matter hereof, supersede all prior understandings, agreements or negotiations between such parties, whether written or oral, and may be amended, supplemented or changed only by an agreement in writing which makes specific reference to this Agreement or the agreement or document delivered pursuant hereto, as the case may be, and which is signed by the party against whom enforcement of any such amendment, supplement or modification is sought. If any of the terms and conditions of this Agreement conflict with the terms and conditions of the Original Award Documents and the Original Stock Option Award Documents, the terms and conditions of this Agreement shall control. All non-conflicting terms of the Original Award Documents and the Original Stock Option Award Documents are hereby expressly preserved.

(h) This Agreement may be executed in one or more counterparts and by facsimile, each of which shall constitute an original and all of which together shall constitute one and the same instrument. Signatures of the parties transmitted by facsimile or via .pdf format shall be deemed to be their original signatures for all purposes. The words “execution,” “signed,” “signature,” and words of like import shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the Pennsylvania Uniform Electronic Transactions Act, or any other similar state laws based on the Uniform Electronic Transactions Act. This Agreement and any signed agreement or instrument entered into in connection with this Agreement, and any amendments hereto or thereto, to the extent delivered by means of a facsimile machine or electronic mail (any such delivery, an **“Electronic Delivery”**), will be treated in all manner and respects as an original agreement or instrument and will be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party hereto or to any such agreement or instrument, each other party hereto or thereto will re-execute original forms thereof and deliver them to all other parties. No party hereto or to any such agreement or instrument will raise the use of Electronic Delivery to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of Electronic Delivery as a defense to the formation of a contract, and each such party forever waives any such defense, except to the extent such defense related to lack of authenticity.

SIGNATURES ON THE FOLLOWING PAGE

IN WITNESS WHEREOF, the Company and the Executive have executed this Agreement as of the date first above written.

THE EXECUTIVE:

THE COMPANY:

/s/ Antonella R. Favit-Van Pelt

ANTONELLA R. FAVIT-VAN PELT, M.D., PH.D.

By: /s/ Dane Andreeff

Name: Dane Andreeff

Title: President and Chief Executive Officer

39818308.5

SIGNATURE PAGE TO
EMPLOYMENT AGREEMENT

**FIRST AMENDMENT TO
SECURITIES PURCHASE AGREEMENT**

THIS FIRST AMENDMENT TO SECURITIES PURCHASE AGREEMENT (this “*First Amendment*”) is entered into and made effective as of September 1, 2021, by and among **HELIUS MEDICAL TECHNOLOGIES, INC.**, a Delaware corporation (the “*Company*”), and the investors listed on the signature pages hereto (collectively, the “*Principal Purchasers*”).

RECITALS

A. The parties hereto and the other Purchasers identified therein previously entered into that certain Securities Purchase Agreement dated as of October 21, 2020 (the “*Securities Purchase Agreement*”). Capitalized terms that are not defined herein shall have the meanings ascribed to them in the Securities Purchase Agreement.

B. Pursuant to Section 8.4 of the Securities Purchase Agreement, the Securities Purchase Agreement may be amended in a written instrument signed by the Company; provided that such written instrument for such waiver or amendment is also signed by the Principal Purchasers if, and only if, in the reasonable and good faith determination of the Principal Purchasers, such waiver or amendment would reasonably be expected to be adverse to the interests of any Purchaser in a more than de minimis way or that would reasonably be expected to have more than a de minimis adverse effect on the value of such Purchaser’s investment in the Securities. The investors listed on the signature pages hereto, as the Purchasers holding or having the right to acquire, as of such time, at least a majority-in-interest of the total amount of Securities, represent the Principal Purchasers. The Company and the Principal Purchasers desire to amend the Securities Purchase Agreement pursuant to the terms and conditions of this First Amendment.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants and conditions set forth below, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. AMENDMENT TO ARTICLE 1, SECTION 1.1. The definition of “Exempt Issuance” in Article 1, Section 1.1 is hereby deleted in its entirety and replaced with the following:

“**Exempt Issuance**” means the issuance of (a) shares of Common Stock or options to employees, consultants, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company, (b) securities upon the exercise or exchange of or conversion of securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, (c) shares of Common Stock in any at-the-market offering, (d) shares of Common Stock in any “equity line of credit” transaction, and (e) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested

directors of the Company, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

2. GOVERNING LAW. This First Amendment shall be governed by, and construed in accordance with, the internal laws of the State of Delaware without regard to the choice of law principles thereof.

3. HEADINGS. The headings herein are for convenience only, do not constitute a part of this First Amendment and shall not be deemed to limit or affect any of the provisions hereof.

4. CONSTRUCTION. The terms of this First Amendment amend and modify the Securities Purchase Agreement as if fully set forth in the Securities Purchase Agreement. Upon the effectiveness of this First Amendment, all references in the Securities Purchase Agreement to “the Agreement” or “this Agreement,” as applicable, shall refer to the Securities Purchase Agreement, as modified by this First Amendment. If there is any conflict between the terms, conditions and obligations of this First Amendment and the Securities Purchase Agreement, this First Amendment’s terms, conditions and obligations shall control. All other provisions of the Securities Purchase Agreement not specifically modified by this First Amendment are expressly preserved. This First Amendment may be executed in one or more counterparts and by facsimile, each of which shall constitute an original and all of which together shall constitute one and the same instrument. Signatures of the parties transmitted by facsimile or via .pdf format shall be deemed to be their original signatures for all purposes. The words “execution,” “signed,” “signature,” and words of like import shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the Delaware Uniform Electronic Transactions Act, the Pennsylvania Uniform Electronic Transactions Act, or any other similar state laws based on the Uniform Electronic Transactions Act. This First Amendment, to the extent delivered by means of a facsimile machine or electronic mail (any such delivery, an “**Electronic Delivery**”), will be treated in all manner and respects as an original agreement or instrument and will be considered to have the same binding legal effect as if it were the original signed version thereof delivered in person. At the request of any party hereto or to any such agreement or instrument, each other party hereto or thereto will re-execute original forms thereof and deliver them to all other parties. No party hereto or to any such agreement or instrument will raise the use of Electronic Delivery to deliver a signature or the fact that any signature or agreement or instrument was transmitted or communicated through the use of Electronic Delivery as a defense to the formation of a contract, and each such party forever waives any such defense, except to the extent such defense related to lack of authenticity.

5. AUTHORITY. By their execution of this First Amendment, the undersigned parties hereby confirm that: (1) the Company has all corporate right, power and authority to enter into this First Amendment and to consummate the transactions contemplated hereby, (2) all corporate action on the part of the Company, its directors and stockholders necessary for the authorization, execution, delivery and performance of this First Amendment by the Company, the authorization, sale, issuance and delivery of the Securities contemplated herein and the performance of the Company's obligations hereunder has been taken, and (3) this First Amendment has been (or upon delivery will have been) duly executed and delivered by the Company and constitute the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date as of the date first indicated above.

HELIUS MEDICAL TECHNOLOGIES, INC.

By: /s/ Jeffrey S. Mathiesen

Name: Jeffrey S. Mathiesen

Title: Chief Financial Officer

[Signature Page to First Amendment to Securities Purchase Agreement]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date as of the date first indicated above.

PURCHASER:

CAVALRY FUND I LP

By: /s/ Thomas Walsh

Name: Thomas Walsh

Title: Manager

[Signature Page to First Amendment to Securities Purchase Agreement]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date as of the date first indicated above.

PURCHASERS:

PORTER PARTNERS, L.P.

By: /s/ Jeffrey H. Porter

Name: Jeffrey H. Porter

Title: General Partner

ARDARA CAPITAL, LP

By: /s/ Patrick M. Mullin

Name: Patrick M. Mullin

Title: Managing Director

COLUMBUS CAPITAL PARTNERS, L.P.

By: Columbus Capital Management, LLC

Its: Managing Member

By: /s/ Matthew D. Ockner

Name: Matthew D. Ockner

Title: General Partner

[Signature Page to First Amendment to Securities Purchase Agreement]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date as of the date first indicated above.

PURCHASERS:

MAPLE LEAF DISCOVERY I, L.P.

By: /s/ Dane Andreeff

Name: Dane Andreeff

Title: General Partner

MAPLE LEAF OFFSHORE, LTD.

By: /s/ Dane Andreeff

Name: Dane Andreeff

Title: Portfolio Manager

MAPLE LEAF PARTNERS, L.P.

By: /s/ Dane Andreeff

Name: Dane Andreeff

Title: General Partner

MAPLE LEAF PARTNERS I, L.P.

By: /s/ Dane Andreeff

Name: Dane Andreeff

Title: General Partner

[Signature Page to First Amendment to Securities Purchase Agreement]

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date as of the date first indicated above.

PURCHASER:

WILLIAN QUALIFIED SPENDTHRIFT TRUST

By: /s/ John Willian

Name: John Willian

Title: Manager

[Signature Page to First Amendment to Securities Purchase Agreement]

Consent of Independent Registered Public Accounting Firm

Helius Medical Technologies, Inc.
Newtown, Pennsylvania

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 10, 2021, relating to the consolidated financial statements of Helius Medical Technologies, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2020. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP

Philadelphia, Pennsylvania
September 3, 2021