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

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**POST-EFFECTIVE AMENDMENT NO. 1  
TO  
FORM S-3  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

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**Helius Medical Technologies, Inc.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**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)

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**Philippe Deschamps  
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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**Copies to:**

**Darren DeStefano  
Cooley LLP  
One Freedom Square  
Reston Town Center  
11951 Freedom Drive  
Reston, VA 20190-5640  
(703) 456-8034**

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**From time to time after the effective date of this Registration Statement**  
(Approximate date of commencement of proposed sale to the public)

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If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See 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

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging Growth Company

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

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**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 that 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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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## EXPLANATORY NOTE

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-3 (File No. 333-215286) is filed pursuant to Rule 462(d) solely to add an updated Exhibit 5.1 with respect to such Registration Statement. The Registration Statement was previously filed by the Registrant as a Wyoming corporation prior to the Registrant's conversion into a Delaware corporation in July 2018. No changes or additions are being made hereby to the existing prospectus and prospectus supplements that already form a part of such registration statement. Accordingly, such existing prospectus and prospectus supplements are omitted from this filing.

**PART II**  
**INFORMATION NOT REQUIRED IN THE PROSPECTUS**

**Item 16. Exhibits and Financial Statement Schedules**

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
1.1*	Form of Underwriting Agreement
2.1+	<a href="#">Agreement and Plan of Merger among Heliuss Medical Technologies, Inc., HMT Mergersub, Inc. and NeuroHabilitation Corporation, dated June 6, 2014 (incorporated by reference to Exhibit 10.6 to the Form S-1 filed with the SEC on July 14, 2014)</a>
4.1+	<a href="#">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 with the SEC on August 9, 2018)</a>
4.2+	<a href="#">Corrected Certificate of Incorporation filed with the Delaware Secretary of State on October 24, 2018 (incorporated by reference to Exhibit 3.1 to the Form 8-K filed with the SEC on October 30, 2018)</a>
4.3+	<a href="#">Bylaws as amended and restated (incorporated by reference to Exhibit 3.3 to the Form 10-Q filed with the SEC on August 9, 2018)</a>
4.4+	<a href="#">Form of Warrant (included in Exhibit 4.5)</a>
4.5+	<a href="#">Warrant Indenture dated April 18, 2016 by and between Heliuss Medical Technologies, Inc and Computershare Investor Services Inc. (incorporated by reference to Exhibit 4.1 to amendment no. 1 to the Form 8-K filed with the SEC on April 18, 2016 and amended on April 20, 2016)</a>
4.6+	<a href="#">Form of Indenture (incorporated by reference to Exhibit 4.7 to Form S-3 filed with the SEC on December 23, 2016)</a>
4.7+	<a href="#">Form of Warrant to Purchase Class A Common Stock (incorporated by reference to Exhibit 4.8 to Form S-3 filed with the SEC on December 23, 2016)</a>
4.8+	<a href="#">Form of Warrant to Purchase Debt Securities (incorporated by reference to Exhibit 4.9 to Form S-3 filed with the SEC on December 23, 2016)</a>
5.1	<a href="#">Opinion of Cooley LLP</a>
12.1*	Statement Regarding Computation of Ratios
23.1+	<a href="#">Consent of Independent Registered Public Accounting Firm (incorporated by reference to Exhibit 23.1 to Form S-3 filed with the SEC on December 23, 2016)</a>
23.2	<a href="#">Consent of Cooley LLP (included in Exhibit 5.1)</a>
24.1+	<a href="#">Power of Attorney</a>
25.1**	Statement of Eligibility of Trustee on Form T-1 under the Trust Indenture Act of 1939, as amended, under the Indenture

+ Previously filed.

\* To be filed by amendment or by a report filed under the Exchange Act and incorporated herein by reference, if applicable.

\*\* To be filed, if necessary, separately under electronic form type "305B2" in accordance with Section 305(b)(2) of the Trust Indenture Act of 1939, as amended.

## SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Newtown, Commonwealth of Pennsylvania, on the 14th day of November, 2018.

### HELIUS MEDICAL TECHNOLOGIES, INC.

By: /s/ Philippe Deschamps  
Philippe Deschamps  
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this Post-Effective Amendment No. 1 to the Registration Statement 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/ Philippe Deschamps</u> Philippe Deschamps	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	November 14, 2018
<u>/s/ Joyce LaViscount</u> Joyce LaViscount	Chief Financial Officer and Chief Operating Officer <i>(Principal Financial Officer and Principal Accounting Officer)</i>	November 14, 2018
<u>Dane Andreeff</u>	Director	November 14, 2018
<u>*</u> Blane Walter	Director	November 14, 2018
<u>*</u> Thomas Griffin	Director	November 14, 2018
<u>*</u> Edward M. Strawt	Director	November 14, 2018
<u>*</u> Huaizheng Peng	Director	November 14, 2018
<u>*</u> Mitchell E. Tyler	Director	November 14, 2018

\* By: /s/ Philippe Deschamps  
Philippe Deschamps  
*Attorney-in-Fact*



Darren K. DeStefano  
+1 703 456 8034  
ddestefano@cooley.com

November 14, 2018

Helius Medical Technologies, Inc.  
Suite 100, 642 Newtown Yardley Road  
Newtown, Pennsylvania 18940

Ladies and Gentlemen:

We have acted as counsel to Helius Medical Technologies, Inc., a Delaware corporation (the "Company"), in connection with the filing of a Registration Statement on Form S-3 (the "**Registration Statement**") by the Company under the Securities Act of 1933, as amended (the "**Securities Act**"). The Registration Statement includes a prospectus (the "**Base Prospectus**") that provides it will be supplemented in the future by one or more prospectus supplements (each, a "**Prospectus Supplement**"). The Registration Statement, including the Base Prospectus (as supplemented from time to time by one or more Prospectus Supplements) provides for the registration by the Company of:

- shares of Class A Common Stock, par value \$0.001 per share, of the Company ("**Common Stock**");
- debt securities, in one or more series (the "**Debt Securities**"), which may be issued pursuant to an indenture to be dated on or about the date of the first issuance of Debt Securities thereunder, by and between a trustee to be selected by the Company (the "**Trustee**") and the Company, in the form filed as Exhibit 4.6 to the Registration Statement and one or more indentures supplemental thereto with respect to any particular series of Debt Securities (the "**Indenture**"); and
- warrants to purchase Common Stock or Debt Securities (the "**Warrants**"), which may be issued under one or more warrant agreements, to be dated on or about the date of the first issuance of the Warrants thereunder, by and between a warrant agent to be selected by the Company (the "**Warrant Agent**") and the Company, in the forms filed as Exhibits 4.7 and 4.8 to the Registration Statement, respectively (each, a "**Warrant Agreement**").

The Common Stock, the Debt Securities and the Warrants are collectively referred to herein as the "**Securities**." The Securities have been registered for offer and sale from time to time pursuant to Rule 415 under the Securities Act. The aggregate public offering price of the Securities being registered is \$100,000,000.

In connection with this opinion, we have examined and relied upon originals, or copies certified to our satisfaction, of such records, documents, certificates, opinions, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents.

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With respect to our opinion as to the Common Stock, we have assumed that, at the time of issuance and sale, a sufficient number of shares of Common Stock is authorized and available for issuance and that the consideration for the issuance and sale of the Common Stock (or Debt Securities convertible into, or Warrants exercisable for, Common Stock) is in an amount that is not less than the par value of the Common Stock. We have also assumed that any Debt Securities or Warrants offered under the Registration Statement, and the related Indenture and Warrant Agreement will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein. We have also assumed that with respect to any Securities issuable upon conversion of any convertible Debt Securities or upon exercise of any Warrants, such convertible Debt Securities or Warrants constitute valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware and, as to the Debt Securities and the Warrants constituting valid and legally binding obligations of the Company, the laws of the State of New York. Our opinion is based on these laws as in effect on the date hereof. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that:

1. With respect to the Common Stock offered under the Registration Statement, provided that (i) any required post-effective amendment to the Registration Statement has become effective under the Securities Act and the Base Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the issuance of the Common Stock has been duly authorized by all necessary corporate action on the part of the Company; (iii) the issuance and sale of the Common Stock do not violate any applicable law, are in conformity with the Company's then operative certificate of incorporation (the "**Certificate of Incorporation**") and bylaws (the "**Bylaws**"), do not result in a default under or breach of any agreement or instrument binding upon the Company and comply with any applicable requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (iv) the certificates, if any, for the Common Stock have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment therefor, then the Common Stock, when issued and sold as contemplated in the Registration Statement, the Base Prospectus and the related Prospectus Supplement(s) and in accordance with a duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon conversion of any convertible Debt Securities in accordance with their terms, or upon exercise of any Warrants in accordance with their terms, will be validly issued, fully paid and non-assessable.
2. With respect to any series of the Debt Securities issued under the Indenture and offered under the Registration Statement, provided that (i) any required post-effective amendment to the Registration Statement has become effective under the Securities Act and the Base Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the Indenture has been duly authorized by the Company and the Trustee by all necessary corporate action; (iii) the Indenture in substantially the form filed as an exhibit to the Registration Statement, has been duly executed and delivered by the Company and the Trustee and has been qualified under the Trust Indenture Act of 1939, as amended; (iv) the issuance and terms of the Debt Securities have been duly authorized by the Company by all necessary corporate action; (v) the terms of the Debt Securities and of their issuance and sale have been duly established in conformity with the Indenture so as not to violate

any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the notes representing the Debt Securities have been duly executed and delivered by the Company and authenticated by the Trustee pursuant to the Indenture and delivered against payment therefor, then the Debt Securities, when issued and sold in accordance with the Indenture and a duly authorized, executed and delivered purchase, underwriting or similar agreement, or upon exercise of any Warrants in accordance with their terms, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and by general equitable principles (regardless of whether such enforceability is considered in a proceeding at law or in equity).

3. With respect to the Warrants issued under the Warrant Agreements and offered under the Registration Statement, provided that (i) any required post-effective amendment to the Registration Statement has become effective under the Securities Act and the Base Prospectus and any and all Prospectus Supplement(s) required by applicable laws have been delivered and filed as required by such laws; (ii) the Warrant Agreement has been duly authorized by the Company and the Warrant Agent by all necessary corporate action; (iii) the Warrant Agreement has been duly executed and delivered by the Company and the Warrant Agent; (iv) the issuance and terms of the Warrants have been duly authorized by the Company by all necessary corporate action; (v) the terms of the Warrants and of their issuance and sale have been duly established in conformity with the Warrant Agreement and as described in the Registration Statement, the Base Prospectus and the related Prospectus Supplement(s), so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company, so as to be in conformity with the Certificate of Incorporation and Bylaws, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company; and (vi) the Warrants have been duly executed and delivered by the Company and authenticated by the Warrant Agent pursuant to the Warrant Agreement and delivered against payment therefor, then the Warrants, when issued and sold as contemplated in the Registration Statement, the Base Prospectus and the Prospectus Supplement(s) and in accordance with the Warrant Agreement and a duly authorized, executed and delivered purchase, underwriting or similar agreement, will be valid and legally binding obligations of the Company, enforceable against the Company in accordance with their terms, except as enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and by general equitable principles (regardless of whether such enforceability is considered in a proceeding at law or in equity).

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We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Base Prospectus. We further consent to the incorporation by reference of this opinion into any registration statement or post-effective amendment thereto filed pursuant to Rule 462(b) under the Securities Act with respect to additional Securities, and any such additional Securities will also be covered by this opinion.

Our opinion set forth above is limited to the matters expressly set forth in this letter, and no opinion is implied or may be inferred beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof, and we undertake no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

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November 14, 2018

Page Four

Very truly yours,

COOLEY LLP

By: /s/ Darren K. DeStefano

Darren K. DeStefano

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