

SPECTRAL MEDICAL INC.

SENIOR SECURED PROMISSORY NOTE

May 6, 2025

Effective as of the date set forth above (the “*Effective Date*”), SPECTRAL MEDICAL INC., a corporation incorporated under the laws of the Province of Ontario, Canada (the “*Company*”), for value received, promises to pay to the order of VANTIVE US HEALTHCARE LLC (together with its successors and registered assigns, the “*Holder*”) an amount equal to the Aggregate Outstanding Principal Amount (as defined below) plus all accrued but unpaid interest thereon (collectively, the “*Debt*”). The Debt shall be payable in full in immediately available funds by 2 p.m. (New York City time) on May 6, 2029 (the “*Repayment Date*”).

The following is a statement of the rights of the Holder and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. **Definitions.** As used in this Note, the following terms, unless the context otherwise requires, have the following meanings:

1.1 “*Advance Date*” shall mean, as to any Advance, the date on which such Advance is funded.

1.2 “*Aggregate Outstanding Principal Amount*” shall mean, as of any date of determination, the aggregate outstanding principal amount of all Advances made under this Note (including all capitalized interest thereon as provided in Section 3 herein), less any repayments made to the Holder in accordance with Section 10.6 of this Note.

1.3 “*Business Day*” shall mean any day excluding Saturday, Sunday and any other day on which banking institutions are authorized by law or other governmental actions to close, or are in fact closed, in the State of New York.

1.4 “*FDA*” shall mean the United States Food and Drug Administration.

1.5 “*Interest Rate*” shall mean the lesser of (i) 9.00% per annum and (ii) the highest rate permitted by applicable law.

1.6 “*Note*” shall mean this Senior Secured Promissory Note, as the same may from time to time be amended, restated, amended and restated, modified or supplemented.

1.7 “*Note Documents*” shall mean this Note, the Security Agreement and any other documents executed in connection with the Debt or the transactions contemplated hereby, as the same may from time to time be amended, restated, amended and restated, modified or supplemented.

1.8 “*November 2025 Warrants*” shall mean the warrants issued by the Company with a CUSIP no. 847577137 (ISIN no. CA8475771371) pursuant to the warrant

indenture dated as of November 2, 2022 between the Company, as issuer, and Computershare Trust Company of Canada, as warrant agent.

1.9 “**PMX Product**” shall mean the Company’s licensed extracorporeal blood purification device known as the Toraymyxin Hemoperfusion Absorption Column.

1.10 “**Security Agreement**” shall mean that certain General Security Agreement, dated as of the Effective Date, made by the Company in favour of the Holder, as the same may from time to time be amended, restated, amended and restated, modified or supplemented.

1.11 “**TIGRIS Study**” shall mean the clinical trial sponsored by Spectral Diagnostics (US) Inc. entitled Safety and Efficacy of Polymyxin B Hemoperfusion (PMX) for Endotoxemic Septic Shock in a Randomized, Open-Label Study (ClinicalTrials.gov Identifier: NCT03901807).

1.12 “**Tranche B Milestone**” shall mean the Holder’s receipt of evidence satisfactory to Holder that the Company has released top-line data from the TIGRIS Study demonstrating an absolute mortality benefit over the control arm of at least (a) 7.0% at 28 days in the treatment arm and (b) 10.0% at 90 days in the treatment arm.

1.13 “**Tranche C Milestone**” shall mean the Holder’s receipt of evidence satisfactory to Holder that, as of the expiration date of the November 2025 Warrants, the Company has received aggregate gross proceeds of less than One Million Dollars (\$1,000,000) from the exercise of the November 2025 Warrants.

1.14 “**Tranche D Milestone**” shall mean the Holder’s receipt of evidence satisfactory to Holder that the FDA has confirmed by a letter that the premarket approval submission of the PMX Product has been accepted for filing and that the FDA will proceed with substantive scientific review (the “**PMA Filing Letter**”) on or prior to January 31, 2026 (or, in the event such PMA Filing Letter is unexpectedly delayed solely as a result of staffing or other administrative disruptions affecting the FDA through no fault of the Company, such later date as the Holder and the Company may reasonably agree).

2. **Advances.** Subject to the terms and conditions of this Note, including the conditions precedent set forth in Section 6:

2.1 **Tranche A Advance.** On the Effective Date, Holder agrees to make, and the Company agrees to draw, a term loan denominated in U.S. Dollars in an amount equal to Four Million Dollars (\$4,000,000) (the “**Tranche A Advance**”).

2.2 **Tranche B Advance.** Subject to satisfaction of the Tranche B Milestone, the Company may request, and the Holder agrees to make, an additional term loan denominated in U.S. Dollars in an amount equal to Three Million Dollars (\$3,000,000) (the “**Tranche B Advance**”).

2.3 **Tranche C Advance.** Subject to satisfaction of the Tranche B Milestone and the Tranche C Milestone, the Company may request, and the Holder agrees to make, an

additional term loan denominated in U.S. Dollars in an amount equal to One Million Dollars (\$1,000,000) (the “*Tranche C Advance*”).

2.4 ***Tranche D Advance.*** Subject to satisfaction of the Tranche B Milestone and the Tranche D Milestone, the Company may request, and the Holder agrees to make, an additional term loan denominated in U.S. Dollars in an amount equal to Two Million Dollars (\$2,000,000) (the “*Tranche D Advance*” and, together with the Tranche A Advance, the Tranche B Advance and the Tranche C Advance, the “*Advances*”).

3. ***PIK Interest.*** The principal balance of each Advance (including any capitalized interest thereon as provided in this Section 3) shall bear interest thereon from such Advance Date at the Interest Rate based on a year consisting of three hundred sixty (360) days, with interest computed daily based on the actual number of days elapsed, which amount shall be added to the outstanding principal balance so as to increase the outstanding principal balance of such Advance on the first day of each fiscal quarter of the Company. For the purposes of the *Interest Act* (Canada) and disclosure thereunder, whenever any interest or any fee to be paid under any Note Document is to be calculated on the basis of a 360-day year, the yearly rate of interest to which the rate used in such calculation is equivalent is the rate so used multiplied by the actual number of days in the calendar year in which the same is to be ascertained and divided by 360. The rates of interest under this Note are nominal rates, and not effective rates or yields.

4. ***Withholding.*** Any and all payments received by the Holder from the Company under the Note Documents will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any governmental authority (including any interest, additions to tax or penalties applicable thereto), except as required by applicable law. If any applicable law requires the Company to make any withholding or deduction from any such payment or other sum payable under the Note Documents to the Holder, the Company hereby covenants and agrees that the amount due from the Company with respect to such payment or other sum payable under the Note Documents will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, the Holder receives a net sum equal to the sum which it would have received had no withholding or deduction been required, and the Company shall pay the full amount withheld or deducted to the relevant governmental authority. The Company will, upon request, furnish the Holder with proof reasonably satisfactory to the Holder indicating that the Company has made such withholding payment. The agreements and obligations of the Company contained in this Section 4 shall survive any assignment of rights by the Holder and the repayment, satisfaction or discharge of all obligations under any Note Document.

5. ***Indebtedness.*** The Company shall not, and shall not permit any of its subsidiaries to, incur, create, assume, or permit to exist any secured indebtedness for borrowed money or secured obligations evidenced by notes, bonds, debentures, or similar instruments, with the exception of reimbursement obligations under credit cards in the ordinary course of business, which shall not exceed a total cap of \$200,000.

6. ***Conditions Precedent to Advances.*** The obligations of the Holder to make the Advances hereunder are subject to the satisfaction by the Company of the following conditions:

6.1 **Tranche A Advance.** On or prior to the Effective Date, the Company shall have delivered to the Holder the following:

(a) duly executed copies of the Note Documents and all other documents and instruments reasonably required by the Holder to effectuate the transactions contemplated hereby, in all cases in form and substance reasonably acceptable to Holder; and

(b) a copy of resolutions of the Company's Board of Directors, certified by an officer of the Company, evidencing (i) approval of the Note Documents and other transactions evidenced by the Note Documents, (ii) authorizing a specified officer or officers to execute the Note Documents to which it is a party on its behalf, (iii) authorizing a specified officer or officers, on its behalf, to sign and/or dispatch all documents and notices (including, if relevant, any borrowing notice or other relevant notice) to be signed and/or dispatched by it under or in connection with the Note Documents to which it is a party, and (iv) acknowledging that the Board of Directors are acting for a proper purpose and that the Note Documents are in the best interests of the Company and for its commercial benefit.

6.2 **All Advances.** On each Advance Date:

(a) the Company shall have delivered to the Holder a request for an Advance ("**Advance Request**") that sets forth the applicable tranche for such Advance, the aggregate principal amount to be disbursed on such Advance Date, the Company's wire instructions for disbursement of such funds and the desired Advance Date (which shall be not less than seven (7) Business Days after the date on which the Company delivers such notice to the Holder);

(b) the representations and warranties made by the Company contained in the Note Documents shall be true and correct in all material respects on and as of the applicable Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date;

(c) in respect of any Advance other than the Tranche A Advance, the Company shall have (i) fully satisfied the Tranche B Milestone, the Tranche C Milestone or the Tranche D Milestone, as applicable, and (ii) delivered to the Holder evidence of such satisfaction as the Holder may reasonably request;

(d) no Event of Default (as defined below) shall have occurred and be continuing as of such Advance Date; and

(e) each Advance Request shall be deemed to constitute a representation and warranty by the Company on the relevant Advance Date as to the matters specified in Section 6.2(b), Section 6.2(c) and Section 6.2(d) and as to the matters set forth in the Advance Request.

7. **Representations and Warranties.** The Company represents and warrants to the Holder that:

7.1 The Company is a duly formed corporation, validly existing and in good standing under the laws of the jurisdiction of its formation and has all corporate power and authority to carry on its business as presently conducted and as proposed to be conducted.

7.2 This Note and each other Note Document has been duly authorized, executed and delivered by the Company and constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, or similar laws affecting the enforcement of creditors' rights generally or by equitable principles relating to enforceability. The Company has all requisite power and authority to own its assets, carry on its business as currently conducted and execute, deliver and perform its obligations under this Note and each other Note Document.

7.3 The execution, delivery and performance by the Company of this Note and each other Note Document will not (a) contravene any of the organizational documents of the Company, (b) violate any material law or regulation applicable to the Company, (c) require any action by, filing, registration, qualification with, or approval, consent or withholding of objections from, any governmental authority or any other person, except those which have been obtained and are in full force and effect, (d) result in the creation of any lien on any of the Company's property and assets other than liens securing the Holder's right, title and interest in, to and under this Note, or (e) result in any breach of or constitute a default under, or permit the termination or acceleration of, any material agreement to which the Company is a party.

7.4 No actions (including, without limitation, derivative actions), suits, proceedings or investigations are pending or, to the knowledge of the Company, threatened in writing against the Company at law or in equity in any court or before any other governmental authority that if adversely determined (a) would result in a material adverse effect not covered by insurance or (b) seeks to enjoin, either directly or indirectly, the execution, delivery or performance by the Company of this Note or any other Note Document or the transactions contemplated by this Note or any other Note Document.

7.5 Neither this Note nor any of the documents contemplated by this Note (taken as a whole) furnished to the Holder prior to or on the Effective Date by or on behalf of the Company in connection with this Note or any other Note Document or the transactions contemplated by this Note or any other Note Document contained any untrue statement of a material fact or omitted a material fact necessary to make the written factual statements or written information contained therein (taken as a whole), in light of the circumstances under which they were made, not materially misleading at such time (after giving effect to all supplements so furnished prior to the Effective Date).

8. **Defaults.** The Holder may declare the Debt immediately due and payable, by a notice in writing to the Company if any of the following events shall occur (the "**Events of Default**"); provided that, the Debt shall automatically be due and payable, without any action required by the Holder, upon the occurrence of any event described in Section 8.5 or Section 8.6:

8.1 Default in the payment of the Debt on the Repayment Date;

8.2 The Company shall fail to observe or perform any other covenant, obligation, condition or agreement contained in any Note Document and such failure shall continue for ten (10) days; provided, however, that if such default is capable of being cured and the Company is diligently pursuing such cure, the cure period shall be extended to thirty (30) days;

8.3 Any representation or warranty made by the Company in any Note Document shall, in any case, be incorrect in any material respect when made or deemed made;

8.4 Any default under the Security Agreement;

8.5 The institution by the Company of applications, petitions or proceedings to be adjudicated as bankrupt or insolvent, or the consent by it to institution of bankruptcy or insolvency proceedings against it under the Bankruptcy Act, the *Bankruptcy and Insolvency Act* (Canada), the *Companies' Creditors Arrangement Act* (Canada), the *Winding-up and Restructuring Act* (Canada) or any other applicable federal, state, provincial or territorial law, including any applicable corporations legislation to the extent the relief sought under such corporations legislation relates to or involves the compromise, settlement, adjustment or arrangement of debt, or the consent by it to, or acquiescence in, the filing of any such petition or the appointment of an interim receiver, receiver, receiver/manager, monitor, liquidator, assignee, trustee, or other similar official, of the Company, or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due; or

8.6 Within sixty (60) days after the commencement of applications, petitions or proceedings against the Company seeking any bankruptcy, insolvency, liquidation, dissolution or similar relief under any present or future statute, law or regulation, such action shall not have been dismissed or all orders or proceedings thereunder affecting the operations or the business of the Company stayed, or the stay of any such order or proceedings shall thereafter be set aside, or, within sixty (60) days after the appointment without the consent or acquiescence of the Company of any trustee, interim receiver, receiver, receiver/manager, monitor, or liquidator of the Company or of all or any substantial part of the properties of the Company, such appointment shall not have been vacated.

9. **Security.** This Note is secured pursuant to the terms of the Security Agreement.

10. **Miscellaneous.**

10.1 **Waiver and Amendment.** Any provision of this Note may be amended, waived or modified only upon the written consent of the Company and the Holder;

10.2 **Restrictions on Transfer; Assignment.** The Company may not transfer or assign all or any part of this Note without the approval of the Holder. All rights and obligations of the Company and the Holder under this Note shall be binding upon and benefit the respective successors, assigns, heirs and administrators of the parties.

10.3 **Fees and Expenses.** The Company shall reimburse the Holder for all out-of-pocket expenses incurred by the Holder (including the fees, charges and disbursements of attorneys and advisors for the Holder), in connection with any default, evaluation of the Company

or the enforcement or protection of the Holder's rights (i) in connection with this Note and the other Note Documents, including its rights under this section, or (ii) in connection with the Advances made hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Advances, whether or not any litigation is filed. Without limiting the generality of the foregoing, the Company shall reimburse the Holder for all fees and costs the Holder incurs (including without limitation fees and costs of the Holder's attorneys), in order to do the following: analyze, evaluate and report on the business, financial condition and future prospects of the Company; enforce, or seek to enforce, any of its rights; commence, intervene in, or defend any action or proceeding; initiate any complaint to be relieved of the automatic stay in any bankruptcy or insolvency proceeding; file or prosecute any probate claim, bankruptcy claim, third-party claim, or other claim; protect, obtain possession of, lease, dispose of, or otherwise enforce the Holder's security interest in, the collateral; represent the Holder in connection with any sale by the Holder of this Note or any interest or participation in this Note, including without limitation the preparation and negotiation of documentation relating to the same; and otherwise represent the Holder in any litigation relating to the Company or the collateral. If the Holder files any lawsuit against the Company or the collateral predicated on a breach of this Note, the Holder shall be entitled to recover from the Company and the Company shall pay to the Holder its costs and attorneys' fees, including (but not limited to) attorneys' fees and costs incurred in the enforcement of, execution upon or defense of any order, decree, award or judgment. Notwithstanding any provision in this Note to the contrary, the provisions set forth in this Section 10.3 shall survive any termination of this Note and shall for all purposes continue in full force and effect.

10.4 **Indemnification.** The Company shall indemnify and hold harmless the Holder and the Holder's affiliates, and each of their respective officers, directors, employees, attorneys, agents, consultants, auditors, accountants, appraisers and representatives (each, an "**Indemnified Person**"), from and against any and all suits, actions, proceedings, claims, judgments, damages, penalties, losses, liabilities, costs and expenses (including attorneys' fees and disbursements and other costs of investigation or defense, including those incurred upon any appeal) of any kind or nature whatsoever and whether incurred in connection with any investigative, administrative or judicial proceeding (in each case whether commenced or threatened) and the settlement thereof or otherwise, which may be instituted or asserted against or incurred by any such Indemnified Person as the result of credit having been extended, suspended or terminated under this Note and the other Note Documents, the use of such credit, and the administration of such credit, and in connection with or arising out of the transactions contemplated hereunder and thereunder and any actions or failures to act in connection therewith and legal costs and expenses arising out of or incurred in connection with disputes between or among any parties to any of the Note Documents and, for the avoidance of doubt, any and all claims, demands, liabilities, damages, losses, costs, charges and expenses (including attorneys' fees and allocated costs of internal counsel) arising in connection with any claim, investigation, litigation or proceeding brought against an Indemnified Person by the Company or any of its subsidiaries or any other person; provided that the Company shall not be liable for any indemnification to an Indemnified Person to the extent that any such suit, action, proceeding, claim, damage, loss, liability or expense results solely from that Indemnified Person's gross negligence or willful misconduct, as finally determined by a court of competent jurisdiction. NO INDEMNIFIED PERSON SHALL BE RESPONSIBLE OR LIABLE TO ANY OTHER PARTY TO ANY NOTE DOCUMENT, ANY SUCCESSOR, ASSIGNEE OR THIRD PARTY

BENEFICIARY OF SUCH PERSON OR ANY OTHER PERSON ASSERTING CLAIMS DERIVATIVELY THROUGH SUCH PARTY, FOR INDIRECT, PUNITIVE, EXEMPLARY, MULTIPLE OR CONSEQUENTIAL DAMAGES WHICH MAY BE ALLEGED AS A RESULT OF CREDIT HAVING BEEN EXTENDED, SUSPENDED OR TERMINATED UNDER ANY NOTE DOCUMENT OR AS A RESULT OF ANY OTHER TRANSACTION CONTEMPLATED HEREUNDER OR THEREUNDER. This Section 10.4 shall not apply with respect to taxes other than any taxes that represent losses, claims, damages, liabilities and related expenses arising from any non-tax claim.

10.5 **Governing Law.** This Note and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed by, and construed in accordance with, the laws of the State of New York, without regard to conflict of law principles that would result in the application of any law other than the law of the State of New York. Each party hereto consents to exclusive jurisdiction and venue in New York, if in state court, and to the United States District Court for the Southern District of New York, if in United States federal court, for any suit or proceeding relating to, arising out of or arising under this Note; such courts shall have the sole and exclusive in personam, subject matter and other jurisdiction in connection with such suit or proceeding and venue shall be appropriate for all purposes in such courts.

10.6 **Prepayment.** The Company shall have the right and privilege of prepaying the whole or any portion of the Debt from time to time at any time or times, provided that each prepayment shall be subject to a minimum amount of \$1 million and the Company shall be entitled to make up to one prepayment per year, with a total of four (4) opportunities over the life of this Note. Upon any such prepayment, the principal balance of each Advance shall be adjusted *pro rata* to reflect such prepayment across all Advances and the amount of interest payable in accordance with Section 3 shall be calculated on the then-outstanding amount of Advances.

10.7 **Lost or Stolen Note.** Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Note and, in the case of any such loss, theft or destruction, upon receipt of an indemnity reasonably satisfactory to the Company, or in the case of any such mutilation, upon surrender and cancellation of such Note, the Company, at its expense, will make and deliver a new Note, of like tenor, in lieu of the lost, stolen, destroyed or mutilated Note.

10.8 **Notices.** Any notice required or permitted hereunder shall be given in writing and shall be conclusively deemed effectively given upon personal delivery or delivery by courier, or on the first (1st) Business Day after transmission if sent by electronic mail transmission, or five (5) Business Days after being mailed by registered or certified mail, postage prepaid, addressed as set forth below the Company's or the Holder's name, as applicable, on the signature page hereto, or at such other address as the Company or the Holder may designate by ten (10) Business Days' advance written notice to the other party hereto.

10.9 **Severability.** If one or more provisions of this Note are held unenforceable under applicable law, such provision shall be excluded from this Note and the balance of this Note shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

10.10 ***Heading; References.*** All headings used herein are used for convenience only and shall not be used to construe or interpret this Note. Except where otherwise indicated, all references herein to Sections refer to Sections hereof.

10.11 ***Entire Agreement.*** This instrument represents the entire agreement between the parties hereto with respect to this Note and its terms and conditions.

10.12 ***Counterparts.*** This Note may be executed in counterparts, all of which together will constitute one and the same agreement. Delivery of an executed counterpart of a signature page of this Note by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

10.13 ***Electronic Execution of Certain Other Documents.*** The words “execution,” “execute”, “signed,” “signature,” and words of like import in or related to any document to be signed in connection with this Note and the transactions contemplated hereby (including without limitation assignments, assumptions, amendments, waivers and consents) shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Holder, 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 New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this Senior Secured Promissory Note to be issued as of the Effective Date.

Company:

SPECTRAL MEDICAL INC.

a corporation incorporated under the laws of the Province of Ontario, Canada

By: “Chris Seto”

Name: Chris Seto

Title: Chief Executive Officer

Address:

135 The West Mall

Toronto, Ontario, Canada M9C 1C2

Email:

cseto@spectraldx.com

Holder:

VANTIVE US HEALTHCARE LLC

By: “Stephanie D. Miller”

Name: Stephanie D. Miller

Title: Vice President & Secretary

Address:

510 Lake Cook Road

Deerfield, IL 60015

Email:

generalcounsel@vantive.com