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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 29, 2025

Carlsmed, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-42756**	**83-1081863**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**
1800 Aston Ave, Suite 100 Carlsbad, California		**92008**
(Address of Principal Executive Offices)		**(Zip Code)**

Registrant's Telephone Number, Including Area Code: (760) 766-1923

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, $0.00001 par value per share	CARL	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

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 13(a) of the Exchange Act. ☒

Item 1.01 Entry into a Material Definitive Agreement.

On October 29, 2025, Carlsmed, Inc. (the "Company") entered into the Fifth Amendment (the "Fifth Amendment") to the Loan and Security Agreement, dated as of December 20, 2022, with Customers Bank (the "Customers Loan Agreement"). The Fifth Amendment provides the Company with a credit facility consisting of (i) a term loan in the principal amount of up to $50.0 million (the "Term Loan"), $17.5 million of which is contingent upon the achievement of requisite revenue milestones, and (ii) a $10.0 million non-formula revolving line of credit (the "Non-Formula Revolving Line") that is immediately available in full, provided that at no time shall the aggregate amount advanced under the Term Loan and the Non-Formula Revolving Line exceed $50.0 million. The applicable per annum interest rate on the Term Loan and Non-Formula Revolving Line is the *greater of* (a) the WSJ Prime Rate + 0.25% or (b) 5.25%, which, as of September 30, 2025, totaled 7.50%.

The Term Loan will mature on October 15, 2030, with an interest-only period through October 15, 2027, followed by principal repayment over 36 months thereafter. Upon achievement of certain revenue milestones, the interest-only period and repayment terms of the Term Loan may be extended through October 15, 2028, followed by principal repayment over 24 months thereafter. The Non-Formula Revolving Line will mature on October 15, 2028.

The Company is required to maintain an operating account with Customers Bank with at least $20.0 million in cash at all times. Additionally, if the Company's cash on deposit with Customers Bank is less than 100% of the outstanding debt balance, the Company is required to achieve certain minimum revenue thresholds.

In connection with the Third Amendment to the Customers Loan Agreement, the Company issued Customers Bank a warrant to purchase up to 58,420 shares of the Company's Series B Preferred Stock, par value $0.00001 per share, with an exercise price of $6.93 per share (as amended pursuant to the Fourth Amendment to the Customers Loan Agreement, the "Series B Warrant"), and in connection with the Fourth Amendment to the Customers Loan Agreement, the Company issued Customers Bank a warrant to purchase up to 20,375 shares of the Company's Series C Preferred Stock, par value $0.00001 per share, with an exercise price of $10.74 per share (the "Series C Warrant"). Each of the Series B Warrant and Series C Warrant automatically converted to a warrant to purchase a corresponding number of shares of the Company's common stock, par value $0.00001 per share ("Common Stock") immediately prior to the closing of the Company's initial public offering.

Pursuant to the Fifth Amendment, the Company partially modified the Series B Warrant, reducing the number of shares of Common Stock exercisable subject to future draws under the Customers Loan Agreement as of the date of the Fifth Amendment from 58,420 to 52,776 (the "Amended Series B Warrant"). In addition, the Company partially modified the Series C Warrant, reducing the number of shares of Common Stock exercisable subject to future draws under the Customers Loan Agreement as of the date of the Fifth Amendment from 20,375 to 10,188 (the "Amended Series C Warrant" and, together with the Amended Series B Warrant, the "Amended Warrants"). As a result of the Amended Warrants, Customers Bank's contingent rights to exercise the Warrants for an aggregate of 15,831 shares of Common Stock were cancelled.

The foregoing descriptions of the Amended Series B Warrant, the Amended Series C Warrant and the Fifth Amendment do not purport to be complete and are qualified in their entirety by reference to the full text of the Amended Series B Warrant, the Amended Series C Warrant and the Customers Loan Agreement (as amended by the Fifth Amendment), which are filed with this Current Report on Form 8-K as Exhibits 4.1, 4.2 and 10.1, respectively, and incorporated herein by reference.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information set forth under Item 1.01 above is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(a) Exhibits

Exhibit No.	Description
4.1+	Second Amended and Restated Warrant to Purchase Stock, by and between Customers Bank and the Registrant, dated as of October 29, 2025.
4.2+	Second Amended and Restated Second Warrant to Purchase Stock, by and between Customers Bank and the Registrant, dated as of October 29, 2025.
10.1	Fifth Amendment to the Loan and Security Agreement, dated as of October 29, 2025, by and between Customers Bank and the Registrant.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

+ Certain of the schedules and attachments to this exhibit have been omitted pursuant to Regulation S-K, Item 601(a)(5). The Registrant hereby undertakes to provide further information regarding such omitted materials to the SEC upon request.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

CARLSMED, INC.

Date: October 30, 2025

By: /s/ Michael Cordonnier
Michael Cordonnier
Chief Executive Officer and President

Exhibit 4.1

THIS SECOND AMENDED AND RESTATED WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN COMPLIANCE WITH APPLICABLE LAW.

SECOND AMENDED AND RESTATED WARRANT TO PURCHASE STOCK

Company:	Carlsmed, Inc.
Number of Shares:	52,776
Type/Series of Stock:	Common Stock
Warrant Price:	$6.9203 per share
Original Issue Date:	March 7, 2024
Issue Date:	October 29, 2025
Expiration Date:	December 30, 2034
Credit Facility:	This Second Amended and Restated Warrant to Purchase Stock (this "**Warrant**") is issued in connection with that certain Loan and Security Agreement dated as of December 20, 2022 between Customers Bank (as successor-in-interest to Signature Bank) and Company, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 21, 2023, that certain Second Amendment to Loan and Security Agreement dated as of October 2, 2023, that certain Third Amendment to Loan and Security Agreement dated as of March 7, 2024, that certain Fourth Amendment to Loan and Security Agreement dated as of December 30, 2024, and that certain Fifth Amendment to Loan and Security Agreement dated on or about the Issue Date (as the same may be further amended, restated, or otherwise modified from time to time, the "**Loan Agreement**") and amends and restates that certain Amended and Restated Warrant to Purchase Stock entered into on July 23, 2025 (the "**Original Warrant**"). Customers Bank and Company hereby agree that the Original Warrant is amended and restated in its entirety as set forth herein.

THIS SECOND AMENDED AND RESTATED WARRANT CERTIFIES THAT Customers Bank (together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, "**Holder**") is entitled to purchase the number of fully paid and non-assessable shares (the "**Shares**") of the above-stated Type/Series of Stock (the "**Class**") of Company at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by Company), or other form of payment acceptable to Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, Company shall issue to Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to Company. If Company's common stock is then traded in a Trading Market and the Class is a series of Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to Company multiplied by the number of shares of Company's common stock into which a Share is then convertible. If Company's common stock is not traded in a Trading Market, the Company's Board of Directors shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to Company or, in the case of mutilation, on surrender of this Warrant to Company for cancellation, Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of Company; (ii) any merger or consolidation of Company into or with another person or entity (other than a merger or consolidation effected exclusively to change Company's domicile), or any other corporate reorganization, in which the stockholders of Company in their capacity as such immediately prior to such merger, consolidation, or reorganization own less than a majority of Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation, or reorganization; or (iii) any sale or other transfer by the stockholders of Company of shares representing at least a majority of Company's then-total outstanding combined voting power.

(b) In the event of an Acquisition in which the consideration to be received by Company's stockholders consists solely of cash, solely of Marketable Securities, or solely a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or Section 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) Company shall provide Holder with written notice of a Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice) not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event Company does not provide such

notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date, this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it has not previously been exercised, and Company shall promptly notify Holder of the number of Shares (or such other securities) issued upon such exercise to Holder, and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of this Warrant as of the date thereof. If, immediately prior to the Cash/Public Acquisition, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be less than the Warrant Price in effect on such date, then this Warrant will expire and be terminated in its entirety immediately prior to the consummation of such Cash/Public Acquisition.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition, Holder shall have the option to (i) deem this Warrant to have been automatically converted pursuant to Section 1.2 simultaneously with the closing of the Acquisition, and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of Company or (ii) cause the successor entity to assume the obligations of this warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant. Holder shall give the Company written notice of its election with respect to the above within five (5) Business Days after Holder receives notice of the Acquisition and information reasonably necessary for Holder to evaluate the treatment of this Warrant in connection with the Acquisition.

(e) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market, and (iii) following the closing of the Acquisition, Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in applicable FINRA rules, or any successor provisions or amendments thereto).

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If Company declares or pays a dividend or distribution on the outstanding shares of the Class, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of property that Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the outstanding shares of the Class are split or subdivided, by reclassification or otherwise, into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations, substitutions, replacements or other similar events.

2.3 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant, and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of this Warrant, Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (a) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (b) the then-effective Warrant Price.

2.4 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, Company, at Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

2.5 Acknowledgement of Reverse Split and Preferred Stock Conversion. The Number of Shares and Warrant Price reflected in the caption of this Warrant give effect to (i) the 5.58-for-1 reverse stock split of the Company's common and preferred stock, effected on July 10, 2025 (the "**Reverse Split**") and (ii) the automatic conversion of the Company's preferred stock into common stock, effected on July 23, 2025 (the "**Preferred Stock Conversion**"). The number of Shares issued pursuant to this Section 2.5 shall reflect any other adjustments made pursuant to other provisions of this Warrant.

SECTION 3. REPRESENTATIONS AND COVENANTS OF COMPANY.

3.1 Representations and Warranties. Company represents and warrants to, and agrees with, Holder as follows:

(a) The Warrant Price referenced on the first page of this Warrant is the price per share at which Company most recently sold shares of its Series B Preferred Stock to institutional investors prior to the Original Issue Date, as adjusted for the Reverse Split and the Preferred Stock Conversion.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and, if applicable, the conversion of the Shares into common stock or such other securities.

(c) Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Original Issue Date.

3.2 Notice of Certain Events. During the time in which the Warrant is outstanding, if Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to holders of the outstanding shares of the Class any additional shares of any class or series of Company's stock (other than pursuant to contractual pre-emptive rights) in connection with which Holder could purchase such additional shares if this Warrant were exercised;

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class; or

(d) effect an Acquisition or to liquidate, dissolve or wind up;

then, in connection with each such event, Company shall give Holder:

(1) for the matters referred to in (a) and (b) above, at least seven (7) Business Days' prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date, if then known, on which holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any; and

(2) for the matters referred to in (c) and (d) above, at least seven (7) Business Days' prior written notice of the date when the same will take place (and specifying the date, if then known, on which Holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

Notwithstanding anything to the contrary, in no event shall the Company be required to provide information under this Warrant: (i) as prohibited by applicable law, rule, regulation, court order, stock exchange rules or agreement or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel or result in a conflict of interest. With respect to any confidential information that Holder receives under this Warrant, Holder agrees to be bound by the confidentiality provisions contained in Section 13.8 of the Loan Agreement whether or not the Loan Agreement otherwise remains in effect.

3.3 Registration Rights. The Shares issuable upon exercise of this Warrant shall, at the option of Holder, be "Registrable Securities", and Holder shall have the rights of an "Investor", under that certain Amended and Restated Investors' Rights Agreement dated as of March 12, 2024, among Company and its stockholders named therein (as amended from time to time, the "**Investor Rights Agreement**"), subject to and contingent upon both Holder's compliance with Section 4.7 and the Investors' Rights Agreement being in effect at the time of such exercise.

SECTION 4. REPRESENTATIONS AND COVENANTS OF HOLDER.

Holder represents and warrants to Company and agrees as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to their public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of Company's business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Standoff. Holder agrees to be bound by the Market Standoff provision set forth in Section 2.11 of the Investor Rights Agreement so long as all other holders of the same class of shares as the Shares are also bound by that provision.

4.7 Holder's Obligation to Execute Investors Rights Agreement and Voting Agreement. Upon or after any exercise of this Warrant, at the request of the Company, Holder, to the extent not already a party thereto, agrees to promptly take such actions as requested by the Company to become a party to each of (i) the Investors Rights Agreement and (ii) that certain Amended and Restated Voting Agreement, dated March 12, 2024, by and among the Company and certain other parties thereto, in each case as the same may be amended, modified or restated from time to time.

SECTION 5. MISCELLANEOUS.

5.1 Term and Automatic Conversion Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern Time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise Upon Expiration. In the event that, upon the Expiration Date, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it has not previously been exercised, and Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. The Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form, together with any additional legends required by the Company's Bylaws or any agreement to which the Holder, this Warrant or the Shares is then subject:

> THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN SECOND AMENDED AND RESTATED WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO CUSTOMERS BANK DATED AS OF OCTOBER 29, 2025, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal and state securities laws by the transferor and the transferee. Customers Bank may transfer this Warrant or the Shares issuable upon exercise of this Warrant to a parent, subsidiary, or other affiliate, and any such transferee may make subsequent assignments to its parent, subsidiary, or other affiliate, so long as, in each case, (i) Holder gives Company notice of the portion of this Warrant or Shares being transferred and the identity of the transferee, (ii) such transferee is an "accredited investor" pursuant to Rule 501 under the Act and (iii) transferee agrees in writing to be bound by all of the terms and conditions of this Warrant and any agreement to which the Holder, this Warrant or the Shares is then subject (any such transfer, an "Affiliate Transfer"). In addition, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee that is an "accredited investor" pursuant to Rule 501 under the Act, so long as (a) in connection with such transfer, Holder gives Company notice of the portion of this Warrant or Shares being transferred and surrenders this Warrant to Company for reissuance to the transferee(s), and (b) such transfer complies with the Company's Bylaws and any agreement to which the Holder, this Warrant or the Shares is then subject. By acceptance of this Warrant, any subsequent transferee shall agree in writing with Company to be bound by all of the terms and conditions of this Warrant and to the extent requested by the Company, any agreement to which the Holder, this Warrant or the Shares is then subject. Company shall not require Holder to provide an opinion of counsel for a transfer to any parent, subsidiary, or other affiliate of Holder or if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Notices. All notices shall be deemed delivered and effective (a) when given personally, (b) upon actual receipt if given by electronic mail, or (c) on the first Business Day following delivery to a reliable overnight courier service, in any case at such address as may have been furnished to Company or Holder, as the case may be, in writing by Company or Holder from time to time in accordance with the provisions of this Section. All notices to Holder shall be addressed as follows until Company receives notice of a change of address in connection with a transfer or otherwise:

Customers Bank
701 Reading Avenue
West Reading, PA 19611
Attn: Matt Jacobs
Email: warrants@customersbank.com

Notice to Company shall be addressed as follows until Holder receives notice of a change in address:

Carlsmed, Inc.
1800 Aston Avenue, Suite 100
Carlsbad, CA 92008
Attn: Michael Cordonnier, Chief Executive Officer
Email: mike@carlsmed.com

5.5 Amendment. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.6 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.7 Counterparts; Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically shall be binding to the same extent as an original signature page.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of New York, without giving effect to its principles regarding conflicts of law.

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IN WITNESS WHEREOF, the parties have caused this Second Amended and Restated Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

"COMPANY"

Carlsmed, Inc.

By: /s/ Michael Cordonnier

Name: Michael Cordonnier

Title: Chief Executive Officer and President

"HOLDER"

Customers Bank

By: /s/ Mara Huntington

Name: Mara Huntington

Title: Managing Group Director

[Signature Page to Second Amended and Restated Warrant to Purchase Stock]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right purchase _____ shares of the common stock of Carlsmed, Inc. ("Company") in accordance with the attached Second Amended and Restated Warrant to Purchase Stock and tenders payment of the aggregate Warrant Price for such shares as follows:

[ ] check in the amount of $_____ payable to order of Company enclosed herewith

[ ] Wire transfer of immediately available funds to Company's account

[ ] Cashless Exercise pursuant to Section 1.2 of the Warrant

[ ] Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____
Holder's Name

_____

_____
(Address)

3. By its execution below and for the benefit of Company, Holder hereby restates each of the representations and warranties in Section 4 of the Second Amended and Restated Warrant to Purchase Stock as of the date hereof.

HOLDER:

By: _____

Name: _____

Title: _____

Date: _____

SCHEDULE 1

COMPANY CAPITALIZATION TABLE

Exhibit 4.2

THIS SECOND AMENDED AND RESTATED SECOND WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN COMPLIANCE WITH APPLICABLE LAW.

SECOND AMENDED AND RESTATED SECOND WARRANT TO PURCHASE STOCK

Company:	Carlsmed, Inc.
Number of Shares:	10,188
Type/Series of Stock:	Common Stock
Warrant Price:	$10.7359 per share
Original Issue Date:	December 30, 2024
Issue Date:	October 29, 2025
Expiration Date:	December 30, 2034

Credit Facility: This Second Amended and Restated Second Warrant to Purchase Stock (this "**Warrant**") is issued in connection with that certain Loan and Security Agreement dated as of December 20, 2022 between Customers Bank (as successor-in-interest to Signature Bank) and Company, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 21, 2023, that certain Second Amendment to Loan and Security Agreement dated as of October 2, 2023, that certain Third Amendment to Loan and Security Agreement dated as of March 7, 2024, that certain Fourth Amendment to Loan and Security Agreement dated as of December 30, 2024, and that certain Fifth Amendment to Loan and Security Agreement dated on or about the Issue Date (as the same may be further amended, restated, or otherwise modified from time to time, the "**Loan Agreement**") and amends and restates that certain Amended and Restated Second Warrant to Purchase Stock entered into on July 23, 2025, (the "**Original Warrant**"). Customers Bank and Company hereby agree that the Original Warrant is amended and restated in its entirety as set forth herein.

THIS SECOND AMENDED AND RESTATED SECOND WARRANT CERTIFIES THAT Customers Bank (together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, "**Holder**") is entitled to purchase the number of fully paid and non-assessable shares (the "**Shares**") of the above-stated Type/Series of Stock (the "**Class**") of Company at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant.

SECTION 1. EXERCISE.

1.1 Method of Exercise. Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by Company), or other form of payment acceptable to Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, Company shall issue to Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 Fair Market Value. If Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to Company. If Company's common stock is then traded in a Trading Market and the Class is a series of Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to Company multiplied by the number of shares of Company's common stock into which a Share is then convertible. If Company's common stock is not traded in a Trading Market, the Company's Board of Directors shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to Company or, in the case of mutilation, on surrender of this Warrant to Company for cancellation, Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of Company; (ii) any merger or consolidation of Company into or with another person or entity (other than a merger or consolidation effected exclusively to change Company's domicile), or any other corporate reorganization, in which the stockholders of Company in their capacity as such immediately prior to such merger, consolidation, or reorganization own less than a majority of Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation, or reorganization; or (iii) any sale or other transfer by the stockholders of Company of shares representing at least a majority of Company's then-total outstanding combined voting power.

(b) In the event of an Acquisition in which the consideration to be received by Company's stockholders consists solely of cash, solely of Marketable Securities, or solely a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), either (i) Holder shall exercise this Warrant pursuant to Section 1.1 and/or Section 1.2 and such exercise will be deemed effective immediately prior to and contingent upon the consummation of such Acquisition or (ii) if Holder elects not to exercise the Warrant, this Warrant will expire immediately prior to the consummation of such Acquisition.

(c) Company shall provide Holder with written notice of a Cash/Public Acquisition (together with such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such contemplated Cash/Public Acquisition giving rise to such notice) not less than seven (7) Business Days prior to the closing of the proposed Cash/Public Acquisition. In the event Company does not provide such notice, then if, immediately prior to the Cash/Public Acquisition, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be greater than

the Warrant Price in effect on such date, this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it has not previously been exercised, and Company shall promptly notify Holder of the number of Shares (or such other securities) issued upon such exercise to Holder, and Holder shall be deemed to have restated each of the representations and warranties in Section 4 of this Warrant as of the date thereof. If, immediately prior to the Cash/Public Acquisition, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above would be less than the Warrant Price in effect on such date, then this Warrant will expire and be terminated in its entirety immediately prior to the consummation of such Cash/Public Acquisition.

(d) Upon the closing of any Acquisition other than a Cash/Public Acquisition, Holder shall have the option to (i) deem this Warrant to have been automatically converted pursuant to Section 1.2 simultaneously with the closing of the Acquisition, and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of Company or (ii) cause the successor entity to assume the obligations of this warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant. Holder shall give the Company written notice of its election with respect to the above within five (5) Business Days after Holder receives notice of the Acquisition and information reasonably necessary for Holder to evaluate the treatment of this Warrant in connection with the Acquisition.

(e) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market, and (iii) following the closing of the Acquisition, Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in applicable FINRA rules, or any successor provisions or amendments thereto).

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If Company declares or pays a dividend or distribution on the outstanding shares of the Class, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of property that Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the outstanding shares of the Class are split or subdivided, by reclassification or otherwise, into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations, substitutions, replacements or other similar events.

2.3 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant, and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of this Warrant, Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (a) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (b) the then-effective Warrant Price.

2.4 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, Company, at Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

2.5 Acknowledgement of Reverse Split and Preferred Stock Conversion. The Number of Shares and Warrant Price reflected in the caption of this Warrant give effect to (i) the 5.58-for-1 reverse stock split of the Company's common and preferred stock, effected on July 10, 2025 (the "**Reverse Split**") and (ii) the automatic conversion of the Company's preferred stock into common stock, effected on July 23, 2025 (the "**Preferred Stock Conversion**"). The number of Shares issued pursuant to this Section 2.5 shall reflect any other adjustments made pursuant to other provisions of this Warrant.

SECTION 3. REPRESENTATIONS AND COVENANTS OF COMPANY.

3.1 Representations and Warranties. Company represents and warrants to, and agrees with, Holder as follows:

(a) The Warrant Price referenced on the first page of this Warrant is the price per share at which Company most recently sold shares of its Series C Preferred Stock to institutional investors prior to the Original Issue Date, as adjusted for the Reverse Split and the Preferred Stock Conversion.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and, if applicable, the conversion of the Shares into common stock or such other securities.

(c) Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Original Issue Date.

3.2 Notice of Certain Events. During the time in which the Warrant is outstanding, if Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

(b) offer for subscription or sale pro rata to holders of the outstanding shares of the Class any additional shares of any class or series of Company's stock (other than pursuant to contractual pre-emptive rights) in connection with which Holder could purchase such additional shares if this Warrant were exercised;

(c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class; or

(d) effect an Acquisition or to liquidate, dissolve or wind up; then, in connection with each such event, Company shall give Holder:

(1) for the matters referred to in (a) and (b) above, at least seven (7) Business Days' prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date, if then known, on which holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any; and

(2) for the matters referred to in (c) and (d) above, at least seven (7) Business Days' prior written notice of the date when the same will take place (and specifying the date, if then known, on which Holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event).

Reference is made to Section 1.6(c) whereby this Warrant will be deemed to be exercised pursuant to Section 1.2 hereof if Company does not give written notice to Holder of a Cash/Public Acquisition as required by the terms hereof. Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

Notwithstanding anything to the contrary, in no event shall the Company be required to provide information under this Warrant: (i) as prohibited by applicable law, rule, regulation, court order, stock exchange rules or agreement or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel or result in a conflict of interest. With respect to any confidential information that Holder receives under this Warrant, Holder agrees to be bound by the confidentiality provisions contained in Section 13.8 of the Loan Agreement whether or not the Loan Agreement otherwise remains in effect.

3.3 Registration Rights. The Shares issuable upon exercise of this Warrant shall, at the option of Holder, be "Registrable Securities", and Holder shall have the rights of an "Investor", under that certain Amended and Restated Investors' Rights Agreement dated as of March 12, 2024 among Company and its stockholders named therein (as amended from time to time, the "**Investor Rights Agreement**"), subject to and contingent upon both Holder's compliance with Section 4.7 and the Investors' Rights Agreement being in effect at the time of such exercise.

SECTION 4. REPRESENTATIONS AND COVENANTS OF HOLDER.

Holder represents and warrants to Company and agrees as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to their public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of Company's business affairs and financial condition and has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Standoff. Holder agrees to be bound by the Market Standoff provision set forth in Section 2.11 of the Investor Rights Agreement so long as all other holders of the same class of shares as the Shares are also bound by that provision.

4.7 Holder's Obligation to Execute Investors Rights Agreement and Voting Agreement. Upon or after any exercise of this Warrant, at the request of the Company, Holder, to the extent not already a party thereto, agrees to promptly take such actions as requested by the Company to become a party to each of (i) the Investors Rights Agreement and (ii) that certain Amended and Restated Voting Agreement, dated March 12, 2024, by and among the Company and certain other parties thereto, in each case as the same may be amended, modified or restated from time to time.

SECTION 5. MISCELLANEOUS.

5.1 Term and Automatic Conversion Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Eastern Time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise Upon Expiration. In the event that, upon the Expiration Date, the fair market value of one (1) Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it has not previously been exercised, and Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. The Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form, together with any additional legends required by the Company's Bylaws or any agreement to which the Holder, this Warrant or the Shares is then subject:

> THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN SECOND AMENDED AND RESTATED SECOND WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO CUSTOMERS BANK DATED AS OF OCTOBER 29, 2025, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal and state securities laws by the transferor and the transferee. Customers Bank may transfer this Warrant or the Shares issuable upon exercise of this Warrant to a parent, subsidiary, or other affiliate, and any such transferee may make subsequent assignments

to its parent, subsidiary, or other affiliate, so long as, in each case, (i) Holder gives Company notice of the portion of this Warrant or Shares being transferred and the identity of the transferee, (ii) such transferee is an "accredited investor" pursuant to Rule 501 under the Act and (iii) transferee agrees in writing to be bound by all of the terms and conditions of this Warrant and any agreement to which the Holder, this Warrant or the Shares is then subject (any such transfer, an "Affiliate Transfer"). In addition, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee that is an "accredited investor" pursuant to Rule 501 under the Act, so long as (a) in connection with such transfer, Holder gives Company notice of the portion of this Warrant or Shares being transferred and surrenders this Warrant to Company for reissuance to the transferee(s), and (b) such transfer complies with the Company's Bylaws and any agreement to which the Holder, this Warrant or the Shares is then subject. By acceptance of this Warrant, any subsequent transferee shall agree in writing with Company to be bound by all of the terms and conditions of this Warrant and to the extent requested by the Company, any agreement to which the Holder, this Warrant or the Shares is then subject. Company shall not require Holder to provide an opinion of counsel for a transfer to any parent, subsidiary, or other affiliate of Holder or if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Notices. All notices shall be deemed delivered and effective (a) when given personally, (b) upon actual receipt if given by electronic mail, or (c) on the first Business Day following delivery to a reliable overnight courier service, in any case at such address as may have been furnished to Company or Holder, as the case may be, in writing by Company or Holder from time to time in accordance with the provisions of this Section. All notices to Holder shall be addressed as follows until Company receives notice of a change of address in connection with a transfer or otherwise:

Customers Bank
701 Reading Avenue
West Reading, PA 19611
Attn: Matt Jacobs
Email: warrants@customersbank.com

Notice to Company shall be addressed as follows until Holder receives notice of a change in address:

Carlsmed, Inc.
1800 Aston Avenue, Suite 100
Carlsbad, CA 92008
Attn: Michael Cordonnier, Chief Executive Officer
Email: mike@carlsmed.com

5.5 Amendment. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.6 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.7 Counterparts; Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Any signature page delivered electronically shall be binding to the same extent as an original signature page.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of New York, without giving effect to its principles regarding conflicts of law.

[*Balance of Page Intentionally Left Blank*]

IN WITNESS WHEREOF, the parties have caused this Second Amended and Restated Second Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

"COMPANY"

Carlsmed, Inc.

By: /s/ Michael Cordonnier

Name: Michael Cordonnier

Title: Chief Executive Officer and President

"HOLDER"

Customers Bank

By: /s/ Mara Huntington

Name: Mara Huntington

Title: Managing Group Director

[Signature Page to Second Amended and Restated Second Warrant to Purchase Stock]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right purchase _____ shares of the common stock of Carlsmed, Inc. ("Company") in accordance with the attached Second Amended and Restated Second Warrant to Purchase Stock and tenders payment of the aggregate Warrant Price for such shares as follows:

[ ] check in the amount of $_____ payable to order of Company enclosed herewith

[ ] Wire transfer of immediately available funds to Company's account

[ ] Cashless Exercise pursuant to Section 1.2 of the Warrant

[ ] Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

_____
Holder's Name

_____

_____
(Address)

3. By its execution below and for the benefit of Company, Holder hereby restates each of the representations and warranties in Section 4 of the Second Amended and Restated Second Warrant to Purchase Stock as of the date hereof.

HOLDER:

_____

By: _____

Name: _____

Title: _____

Date: _____

SCHEDULE 1

COMPANY CAPITALIZATION TABLE

Exhibit 10.1

FIFTH AMENDMENT TO LOAN AND SECURITY AGREEMENT

This Fifth Amendment to Loan and Security Agreement (this "**Amendment**") is entered into as of October 29, 2025, by and between CUSTOMERS BANK ("**Bank**") and CARLSMED, INC. ("**Borrower**").

RECITALS

A. Borrower and Bank are parties to that certain Loan and Security Agreement dated as of December 20, 2022, as amended by that certain First Amendment to Loan and Security Agreement dated as of March 21, 2023, that certain Second Amendment to Loan and Security Agreement dated as of October 2, 2023, that certain Third Amendment to Loan and Security Agreement dated as of March 7, 2024, and that certain Fourth Amendment to Loan and Security Agreement dated as of December 30, 2024 (the "**Original Loan Agreement**", as amended from time to time, including by this Amendment, the "**Loan Agreement**"). All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

B. From and after the date hereof, Bank and Borrower desire to amend and supplement the terms and provisions of the Original Loan Agreement as provided herein.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the agreements contained herein, and for other good and valuable consideration, the receipt, adequacy and sufficiency of which are hereby acknowledged, the parties hereto (intending to be legally bound) hereby agree as follows:

1. Amendment to Original Loan Agreement. Subject to the terms and conditions of this Amendment, including, without limitation, the conditions to effectiveness set forth in Section 6 below, the Original Loan Agreement is hereby amended as follows:

1.1. The following defined terms are hereby added to Section 1.1 of the Original Loan Agreement, as follows:

"**Aggregate Borrowing Limit**" means Fifty Million Dollars ($50,000,000).

"**Ancillary Services**" means any products or services requested by Borrower and approved by Bank under the Non-Formula Revolving Line, including, without limitation, Automated Clearing House transactions, corporate credit card services, FX Contracts, Letters of Credit, controlled disbursement accounts, check cashing services, or other cash management services.

"**Ancillary Services Usage Amount**" means the aggregate of (a) the Letter of Credit Exposure, (b) the aggregate limits of corporate credit card services provided to Borrower, (c) the total amount of any Automated Clearing House processing reserves, (d) the applicable Foreign Exchange Reserve, and (e) any other outstanding amount or reserves taken by Bank in connection with other cash management services requested by Borrower and approved by Bank.

"**Covenant Measurement Period**" means, for any day on which Loan Parties' unrestricted cash at Bank is less than the aggregate outstanding Credit Extensions (a "**Trigger Date**"), the period (a) beginning on the last day of the most recently completed month preceding that Trigger Date for which Borrower has provided monthly financial reporting in accordance with Section 6.3(a) hereof and (b) ending on the first date thereafter that is not a Trigger Date.

"**Fifth Amendment Effective Date**" means October 29, 2025.

"**Foreign Exchange Reserve**" means a reserve in an amount equal to a percentage of the value of any FX Contracts executed by Loan Parties as determined by Bank, in its reasonable discretion from time to time. The initial percentage for such Foreign Exchange Reserve shall be ten percent (10%).

"**FX Contracts**" means contracts between Borrower and Bank for foreign exchange transactions.

"**Letter of Credit**" or "**Letters of Credit**" means a commercial or standby letter of credit or similar undertaking issued by Bank (or any of its correspondent banks) at Borrower's request.

"**Letter of Credit Exposure**" means, as of any date of determination, the sum, without duplication, of (a) the aggregate undrawn amount of all outstanding Letters of Credit and any obligations of Bank related to purchased participations or indemnity or reimbursement obligations with respect to Letters of Credit, plus (b) the aggregate unreimbursed amount of all drawn Letters of Credit until such amount becomes a Non- Formula Revolving Line Advance under the terms of this Agreement.

"**Non-Formula Revolving Line**" means a credit extension of up to Ten Million Dollars ($10,000,000) (inclusive of the Ancillary Services Usage Amount).

"**Non-Formula Revolving Line Advance**" or "**Non-Formula Revolving Line Advances**" means **a cash advance or cash advances under the Non-Formula Revolving Line.**

"**Non-Formula Revolving Line Maturity Date**" means October 15, 2028.

"**Revenue Milestone 1**" means Loan Parties' achievement of Trailing Twelve-Month Revenue of at least Sixty Million Dollars ($60,000,000), as determined by Bank in its good-faith business judgment with reference to the financial information provided under Section 6.3(a) hereof, on or prior to December 31, 2026.

"**Revenue Milestone 2**" means Loan Parties' achievement of Trailing Twelve-Month Revenue of at least Ninety Million Dollars ($90,000,000), as determined by Bank in its good-faith business judgment with reference to the financial information provided under Section 6.3(a) hereof, on or prior to December 31, 2027.

"**Trailing Twelve-Month Revenue**" means Revenue for the most recent twelve (12) calendar months for which Borrower has delivered to Bank the monthly financial reporting required by Section 6.3(a).

1.2. The following defined terms in Section 1.1 of the Original Loan Agreement are hereby amended and restated, as follows:

"**Availability End Date**" means October 15, 2027; provided that

(a) if Loan Parties achieve Revenue Milestone 1, "**Availability End Date**" will instead mean April 15, 2028; and

(b) if Loan Parties achieve Revenue Milestone 1 and Revenue Milestone 2, "**Availability End Date**" will instead mean October 15, 2028.

"**Credit Extension**" means each Non-Formula Revolving Line Advance, Term Loan Advance, use of the Ancillary Services, or any other extension of credit by Bank for the benefit of Borrower hereunder.

"**Term Loan**" means credit extensions of up to Thirty-Two Million Five Hundred Thousand Dollars ($32,500,000); provided that

(a) if Loan Parties achieve Revenue Milestone 1, "**Term Loan**" will instead mean credit extensions of up to Forty Million Dollars ($40,000,000); and

(b) if Loan Parties achieve Revenue Milestone 1 and Revenue Milestone 2, "**Term Loan**" will instead mean credit extensions of up to Fifty Million Dollars ($50,000,000).

"**Term Loan Maturity Date**" means October 15, 2030.

1.3. The defined terms "**Cumulative Revenue Milestone**", "**Fifth Monthly Revenue Milestone**", "**Fourth Monthly Revenue Milestone**", "**Liquidity Ratio**", "**Second Monthly Revenue**

Milestone", "**Sixth Monthly Revenue Milestone**", "**Term Sheet Milestone**", "**Third Monthly Revenue Milestone**", "**Trailing Six-Month Revenue**", and "**Trailing Three-Month Revenue**" and their respective definitions in Section 1.1 of the Original Loan Agreement are hereby deleted.

1.4. Section 2.1(a) of the Original Loan Agreement is hereby amended and restated, as follows:

(a) Term Loan Advances.

(i) Outstanding Term Loan Advances. Bank has previously made Term Loan Advances to Borrower. As of the Fifth Amendment Effective Date, the aggregate principal amount of Term Loan Advances outstanding is Fifteen Million Six Hundred Twenty-Five Thousand Dollars ($15,625,000).

(ii) Term Loan. Subject to and upon the terms and conditions of this Agreement, Borrower may request, at any time from the date hereof through the Availability End Date, and Bank agrees to make Term Loan Advances to Borrower in an aggregate amount not to exceed the Term Loan (inclusive of Term Loan Advances advanced prior to the Fifth Amendment Effective Date). Interest shall accrue from the date of each Term Loan Advance at the rate specified in Section 2.3 and shall be payable monthly on the 15th day of each month so long as any Term Loan Advances are outstanding. Any Term Loan Advances that are outstanding on the Availability End Date shall be payable in thirty-six (36) equal monthly installments of principal (provided, however, that (A) upon achievement of Revenue Milestone 1, any Term Loan Advances that are outstanding on the Availability End Date shall be payable in thirty (30) equal monthly installments of principal, and (B) upon achievement of Revenue Milestone 1 and Revenue Milestone 2, any Term Loan Advances that are outstanding on the Availability End Date shall be payable in twenty-four (24) equal monthly installments of principal), plus all accrued interest, beginning on the 15th day of the month following the month in which the Availability End Date occurs, and continuing on the same day of each month thereafter through the Term Loan Maturity Date, at which time all amounts owing under this Section 2.1(a) and any other amounts owing under this Agreement shall be immediately due and payable. Term Loan Advances, once repaid, may not be reborrowed. Borrower may prepay any Term Loan Advances, in whole or in part, without penalty or premium.

(iii) Advance Request Form. When Borrower desires to obtain a Term Loan Advance, Borrower shall notify Bank (which notice shall be irrevocable) by electronic mail to be received no later than 3:00 p.m. Eastern time three (3) Business Days before the day on which the Term Loan Advance is to be made. Such notice shall be substantially in the form set forth in the Client Reporting File. The notice shall be signed by a Responsible Officer or its designee.

1.5. A new Section 2.1(b) is hereby added to the Original Loan Agreement, as follows:

(b) Non-Formula Revolving Line Advances.

(i) Non-Formula Revolving Line. Subject to and upon the terms and conditions of this Agreement, Borrower may request Non-Formula Revolving Line Advances in an aggregate outstanding amount not to exceed the Non-Formula Revolving Line minus the Ancillary Services Usage Amount. Subject to the terms and conditions of this Agreement, amounts borrowed pursuant to this Section 2.1(b) may be repaid and reborrowed at any time prior to the Non-Formula Revolving Line Maturity Date, interest hereunder shall be due and payable on the 15th calendar day each month during the term hereof and on the Non-Formula Revolving Line Maturity Date, and all Non-Formula Revolving Line Advances under this Section 2.1(b) shall be immediately due and payable on the Non-Formula Revolving Line Maturity Date. Borrower may prepay any Non-Formula Revolving Line Advances without penalty or premium.

(ii) Advance Request Form. Whenever Borrower desires a Non-Formula Revolving Line Advance, Borrower will notify Bank no later than 12:00 p.m. Eastern time, on the Business Day that the Non-Formula Revolving Line Advance is to be made. Each such notification shall be made (A) by telephone or in-person followed by written confirmation from Borrower within twenty-four (24) hours, (B) by electronic mail or facsimile transmission, or (C) by delivering to Bank an Advance Request Form in substantially the form set forth in the Client Reporting File. Bank is authorized to make Non-Formula Revolving Line Advances under this Agreement based upon instructions received from a Responsible Officer or a designee of a Responsible Officer, or without instructions if in Bank's discretion such Non-Formula Revolving Line Advances are necessary to meet Obligations which have become due and remain unpaid. Bank shall be entitled to rely on any notice given by a person who Bank reasonably believes to be a Responsible Officer or a designee thereof, and Borrower shall indemnify and hold Bank harmless for any damages or loss suffered by Bank as a result of such reliance. Bank will credit the amount of Non-Formula Revolving Line Advances made under this Section 2.1(b) to Borrower's deposit account.

(iii) Ancillary Services. Subject to the terms and conditions of this Agreement and availability under the Non-Formula Revolving Line, at any time and from time to time from the date hereof through the Business Day immediately prior to the Non-Formula Revolving Line Maturity Date, Borrower may request the provision of Ancillary Services from Bank. The aggregate limit of the Ancillary Services shall not exceed the Non-Formula Revolving Line, provided that availability under the Non-Formula Revolving Line shall be reduced by the Ancillary Services Usage Amount. In addition, Bank may, in its sole discretion, charge as Non-Formula Revolving Line Advances any amounts that become due or owing to Bank or for which Bank becomes liable in connection with the provision of the Ancillary Services, including, without limitation, the unreimbursed amount on any drawn but unreimbursed Letter of Credit. The terms and conditions of such Ancillary Services shall be subject to the terms and conditions of Bank's standard forms of application and agreement for the applicable Ancillary Services, including without limitation Bank's form of standard application and letter of credit agreement (the "**Application**"), which Borrower hereby agrees to execute in connection with any request for Ancillary Services. Borrower shall pay Bank's standard fees in connection with Ancillary Services, including without limitation Letter of Credit fees set forth in the Application and fees that Bank notifies Borrower it will be charging for issuing and processing FX Contracts. All Letters of Credit shall be, in form and substance, acceptable to Bank in its sole discretion. The obligation of Borrower to reimburse Bank for drawings made under Letters of Credit shall be absolute, unconditional and irrevocable and shall be performed strictly in accordance with the terms of this Agreement, the Application, and such Letters of Credit, under all circumstances whatsoever. Borrower shall indemnify, defend, protect, and hold Bank harmless from any loss, cost, expense, or liability, including, without limitation, reasonable attorneys' fees, arising out of or in connection with any Letters of Credit, except for expenses caused by Bank's gross negligence or willful misconduct.

(iv) Collateralization of Obligations Extending Beyond Maturity. Borrower shall take such actions as Bank may reasonably request to cause its obligations with respect to any Ancillary Services to be secured to Bank's reasonable satisfaction as of the Non-Formula Revolving Line Maturity Date or as of such earlier date the Non-Formula Revolving Line is terminated or otherwise ceases to exist, and, effective as of such date, the balance in any of Borrower's deposit accounts held by Bank and the certificates of deposit or time deposit accounts issued by Bank in Borrower's name (and any interest paid thereon or proceeds thereof, including any amounts payable upon the maturity or liquidation of such certificates or accounts) shall automatically secure such Obligations to the extent of the then continuing or outstanding Ancillary Services. Borrower authorizes Bank to hold such balances in pledge and to decline to honor any drafts thereon or any requests by Borrower or any other Person to pay or otherwise transfer any part of such balances for so long as the applicable Ancillary Services are outstanding or continue.

1.6. Section 2.2 of the Original Loan Agreement is hereby amended and restated, as follows:

2.2 Aggregate Borrowing Limit; Overadvances. At no time will the aggregate outstanding Credit Extensions exceed the Aggregate Borrowing Limit. If (a) the aggregate amount of the outstanding Non-Formula Revolving Line Advances plus the Ancillary Services Usage Amount exceeds the Non-Formula Revolving Line at any time, (b) the aggregate amount of the outstanding Term Loan Advances exceeds the Term Loan at any time, or (c) the aggregate amount of Credit Extensions exceeds the Aggregate Borrowing Limit at any time, Borrower shall immediately pay to Bank, in cash, the amount of such excess.

1.7. Section 2.3(a) of the Original Loan Agreement is hereby amended and restated, as follows:

(a) Interest Rates.

(i) Term Loan Advances. Except as set forth in Section 2.3(b), the Term Loan Advances shall bear interest, on the outstanding Daily Balance thereof, at an annual rate equal to the greater of (i) twenty-five hundredths percent (0.25%) above the Prime Rate and (ii) five and twenty-five hundredths percent (5.25%).

(ii) Non-Formula Revolving Line Advances. Except as set forth in Section 2.3(b), the Non-Formula Revolving Line Advances shall bear interest, on the outstanding Daily Balance thereof, at an annual rate equal to the greater of (i) twenty-five hundredths percent (0.25%) above the Prime Rate and (ii) five and twenty-five hundredths percent (5.25%).

1.8. Section 2.3(c) of the Original Loan Agreement is hereby amended and restated, as follows:

(c) Payments. Bank may, at its option, charge accrued interest, all Bank Expenses, all

Periodic Payments and all other amounts due and owing in accordance with the terms of this Agreement against any of Borrower's deposit accounts, or against the Non-Formula Revolving Line, in which case those amounts shall thereafter accrue interest at the rate then applicable hereunder; provided that, if funds in Borrower's deposit accounts at Bank are insufficient to cover any payment, Bank shall not be obligated to advance funds to cover such payment. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder. All payments shall be free and clear of any taxes, withholdings, duties, impositions or other charges to the end that Bank will receive the entire amount of any Obligations payable hereunder, regardless of source of payment.

1.9. Section 5.4 of the Original Loan Agreement is hereby amended and restated, as follows:

5.4 Revenue Contracts. The contracts yielding Revenue included in the calculation of Revenue Milestone 1 and Revenue Milestone 2 are bona fide existing obligations. The property and services giving rise to such contracts have been delivered or rendered to the account debtor or to the account debtor's agent for immediate and unconditional acceptance by the account debtor. No Loan Party has received notice of an actual or imminent Insolvency Proceeding of any account debtor under a contract yielding Revenue included in the calculation of Revenue Milestone 1 and Revenue Milestone 2.

1.10. Section 6.7 of the Original Loan Agreement is hereby amended and restated, as follows:

6.7 Accounts. Each Loan Party shall (a) maintain and shall cause each of its Subsidiaries to maintain all of its depository and operating accounts and its primary investment accounts with Bank and (b) endeavor to utilize and shall cause each of its Subsidiaries to endeavor to utilize Bank for all ACH activity and other banking services required by such Loan Party, including, but not limited to, foreign currency wires, hedges, swaps, foreign exchange contracts, letters of credit and Bank's International Banking Division for any international banking services related to the foregoing. Notwithstanding the foregoing, Loan Parties may keep, outside Bank,

(w) a Credit Card Cash Collateral Account, and such account need not be subject to an account control agreement;

(x) other accounts so long as (A) the aggregate balance therein does not exceed One Million Dollars ($1,000,000); except that, at all times when Loan Parties' unrestricted cash at Bank equals or exceeds the product of (1) outstanding Credit Extensions multiplied by (2) 1.50, then such limit will instead be an amount not to exceed thirty percent (30%) of Loan Parties' total unrestricted cash (in each case, the "**COB Threshold**"), (B) except for accounts holding no more than $1,500,000 in aggregate during the 30-day period after the Fifth Amendment Effective Date, such accounts are subject to an account control agreement reasonably acceptable to Bank, and (C) amounts in excess of the COB Threshold ("**Excess Cash**") are transferred to accounts maintained at Bank (1) within fifteen (15) days after the end of each calendar quarter, if such Excess Cash is a result of income earned on Loan Parties' unrestricted cash held outside Bank or (2) immediately, if such Excess Cash is a result of deposits or other transfers to Loan Parties' accounts outside Bank; and

(y) the credit cards described in clause (f) of the definition of "Permitted Indebtedness".

1.11. Section 6.11 of the Original Loan Agreement is hereby amended and restated, as follows:

6.11 Financial Covenants. Loan Parties shall maintain (a) the financial covenant in Section 6.11(a) below at all times and (b) the financial covenant in Section 6.11(b) below at all times during a Covenant Measurement Period. In addition, if, as of the last day of a month, no minimum Revenue covenant level has been established in Section 6.11(b) below, then Loan Parties must maintain unrestricted cash at Bank of an amount at least equal to the aggregate outstanding Credit Extensions on that day and at all times thereafter until minimum Revenue covenant levels for future periods have again been established in Section 6.11(b).

(a) Minimum Cash at Bank. Loan Parties shall maintain unrestricted cash at Bank of at least Twenty Million Dollars ($20,000,000), tested on a continuous basis.

(b) Minimum Revenue. Measured quarterly as of the last day of each calendar quarter and calculated on a trailing-six-months basis, Loan Parties shall achieve consolidated Revenue of at least the amounts shown in the table immediately below for the corresponding measurement periods. For subsequent measurement periods, Bank and Loan Parties shall work together in good faith to establish minimum Revenue amounts for such periods, which amounts shall be incorporated herein by an amendment, which Loan Parties agree to execute by March 31st of the applicable year.

Measurement Period Ending	Minimum Revenue
December 31, 2025	$18,408,000
March 31, 2026	$20,110,360
June 30, 2026	$23,066,040
September 30, 2026	$26,043,040
December 31, 2026	$29,653,680
March 31, 2027	$31,785,680
June 30, 2027	$34,297,080
September 30, 2027	$39,154,240
December 31, 2027	$43,525,480

1.12. Section 7.10 of the Original Loan Agreement is hereby amended and restated, as follows:

7.10 Inventory and Equipment. Store Inventory or Equipment (other than Shipped Patient Implants) in excess of One Million Dollars ($1,000,000) with a bailee, warehouseman, or other third party unless the third party has been notified of Bank's security interest and Bank (a) has received an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Bank's benefit or (b) is in pledge possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Store or maintain any Equipment or Inventory (other than Shipped Patient Implants) at any location where Borrower's net fixed assets exceed One Million Dollars ($1,000,000) unless the landlord has been notified of Bank's security interest and Bank has received a landlord waiver in form and substance reasonably satisfactory to Bank, duly executed by such Loan Party and such landlord.

1.13. Section 8.3 of the Original Loan Agreement is hereby amended and restated, as follows:

8.3 Material Adverse Effect. If there occurs any circumstance or circumstances that could reasonably be expected to have a Material Adverse Effect;

1.14. The second entry under "Permitted Indebtedness" in the Schedule (relating to the Credit Card Accounts) is hereby amended and restated, as follows:

One or more credit card accounts with third-party financial institutions, having an outstanding balance not to exceed an aggregate amount of Five Hundred Thousand Dollars ($500,000) (the "**Credit Card Accounts**").

1.15. The second entry under "Permitted Liens" in the Schedule (relating to the Credit Card Cash Collateral Accounts) is hereby amended and restated, as follows:

Liens in cash collateral securing Borrower's reimbursement obligations in connection with any Credit Card Accounts. Borrower may maintain one or more bank accounts with any provider of a Credit Card Account, so long as the aggregate balance in all such accounts does not exceed Five Hundred Thousand Dollars ($500,000) at any time (the "**Credit Card Cash Collateral Accounts**").

2. Release.

2.1. Borrower acknowledges that Bank would not enter into this Amendment without Borrower's assurance hereunder. Except for the obligations arising hereafter under the Loan Agreement, Borrower hereby absolutely discharges and releases Bank, any person or entity that has obtained any interest from Bank under the Loan Agreement, and each of Bank's and such entity's former and present partners, stockholders, officers, directors, employees, successors, assignees, agents, and attorneys from any known or unknown claims which Borrower now has against Bank of any nature, including any claims that Borrower and its successors may in the future discover they would have now had if they had known facts not now known to them, whether founded in contract, in tort, or pursuant to any other theory of liability, including but not limited to any claims arising out of or related to the Loan Agreement or the transactions contemplated thereby.

2.2. The provisions, waivers, and releases set forth in this Section are binding upon Borrower and Borrower's shareholders, agents, employees, assigns, and successors in interest. The provisions, waivers, and releases of this Section shall inure to the benefit of Bank and its agents, employees, officers, directors, assigns, and successors in interest.

2.3. Borrower warrants and represents that Borrower is the sole and lawful owner of all right, title, and interest in and to all of the claims released hereby, and Borrower has not heretofore voluntarily, by operation of law or otherwise, assigned or transferred or purported to assign or transfer to any person any such claim or any portion thereof. Borrower shall indemnify and hold harmless Bank from and against any claim, demand, damage, debt, or liability (including payment of attorneys' fees and costs actually incurred whether or not litigation is commenced) based on or arising out of any assignment or transfer.

2.4. The provisions of this Section shall survive payment in full of the Obligations, full performance of all of the terms of this Amendment and the Loan Agreement, and/or Bank's actions to exercise any remedy available under the Loan Agreement or otherwise.

3. No Course of Dealing; Strict Performance. No course of dealing on the part of Bank or its officers, nor any failure or delay in the exercise of any right by Bank, shall operate as a waiver thereof, and any single or partial exercise of any such right shall not preclude any later exercise of any such right. Bank's failure at any time to require strict performance by Borrower of any provision shall not affect any right of Bank thereafter to demand strict compliance and performance. Any suspension or waiver of a right must be in writing signed by an officer of Bank.

4. Ratification; No Waiver. The Loan Agreement, as amended hereby, shall be and remain in full force and effect in accordance with its respective terms and hereby is ratified and confirmed in all respects. Except as expressly set forth herein, the execution, delivery, and performance of this Amendment shall not operate as a waiver of, or as an amendment of, any right, power, or remedy of Bank under the Loan Agreement, as in effect prior to the date hereof.

5. Representations and Warranties; No Event of Default. Borrower represents and warrants that the representations and warranties contained in the Loan Agreement are true and correct as of the date of this Amendment and that no Event of Default has occurred and is continuing.

6. Conditions to Effectiveness.

6.1. As a condition to the effectiveness of this Amendment, Bank shall have received, in form and substance satisfactory to Bank, the following:

(a) this Amendment, duly executed by Borrower;

(b) an officer's certificate of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Amendment;

(c) a Second Amended and Restated Warrant to Purchase Stock, duly executed by Borrower;

(d) a Second Amended and Restated Second Warrant to Purchase Stock, duly executed by Borrower;

(e) payment of a $50,000 facility fee, which may be debited from any of Borrower's accounts;

(f) payment of all reasonable Bank Expenses incurred through the date of this Amendment, including up to $15,000 of Bank's reasonable and documented out-of-pocket expenses for the documentation of this Amendment and any related documents and any UCC, good standing, or intellectual property search or filing fees in connection therewith, which may be debited from any of Borrower's accounts; and

(g) such other documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

6.2. As a condition to the effectiveness of this Amendment, Borrower shall have received, in form and substance satisfactory to Borrower, this Amendment, duly executed by Bank.

7. Governing Law. This Amendment shall be deemed to have been made under and shall be governed by the laws of the State of New York (without regard to choice of law principles except as set forth in Section 5-1401 of the New York General Obligations Law) in all respects, including matters of construction, validity, and performance, and none of its terms or provisions may be waived, altered, modified, or amended except as Bank may consent thereto in writing duly signed for and on its behalf.

8. Incorporation of Loan Agreement Provisions. The provisions contained in Article 12 (Jurisdiction and Jury Trial Waiver) and in Section 13.2 (Indemnification) of the Loan Agreement are incorporated herein by reference to the same extent as if reproduced herein in their entirety.

9. Counterparts. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

10. Treatment of Final Payment Fee. For the avoidance of doubt, Bank is not collecting the final payment fee described in Section 2.5(b) of the Loan Agreement at this time. Section 2.5(b) remains in effect and applies to all Term Loan Advances made before the Fifth Amendment Effective Date and all Term Loan Advances that may be made after the Fifth Amendment Effective Date.

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IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

CARLSMED, INC.

By: /s/ Michael Cordonnier

Name: Michael Cordonnier

Title: Chief Executive Officer and President

CUSTOMERS BANK

By: /s/ Mara Huntington

Name: Mara Huntington

Title: Managing Group Director