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): November 25, 2023

Personalis, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**001-38943**	**27-5411038**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)
6600 Dumbarton Circle **Fremont, California**		**94555**
(Address of Principal Executive Offices)		(Zip Code)

(650) 752-1300
Registrant's Telephone Number, Including Area Code

Not Applicable
(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 (see General Instructions A.2. below):

☐ 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, $0.0001 par value per share	PSNL	The Nasdaq Global Market

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 November 25, 2023 (the "Effective Date"), Personalis, Inc. (the "Company") and Tempus Labs, Inc. ("Tempus") entered into a Commercialization and Reference Laboratory Agreement (the "Tempus Agreement") pursuant to which Tempus will market the Company's NeXT Personal® Dx assay (the "Assay") in the United States and the Company will conduct development activities to validate the Assay in breast cancer, lung cancer and immuno-oncology monitoring indications (the "Indications"). The term of the Tempus Agreement is five years from the Effective Date, which may be extended for successive one-year renewal terms upon the parties' mutual agreement (the "Term").

Tempus will use commercially reasonable efforts to market and promote the Assay in the same or substantially same manner that it markets and promotes its own tests. The Company will use commercially reasonable efforts to validate the Assay in the Indications and to generate evidence to seek reimbursement from payors in each such Indication. The Company will perform tests using the Assay ordered by customers through Tempus and will bill such customers or payors for the performance of such tests. The Company granted to Tempus a license to certain intellectual property of the Company necessary for Tempus to perform the Assay, which license is exercisable by Tempus upon certain failures by the Company to perform tests using the Assay ordered under the Tempus Agreement, subject to certain limitations.

In consideration of the Company performing such development activities, Tempus will pay to the Company fees of up to $12,000,000 in the aggregate (the "Market Development Fee"), consisting of an activation fee of $3,000,000 (the "Activation Fee"), a first milestone fee of $3,000,000 (upon achievement of a specified clinical validation milestone), and a second milestone fee payable in six quarterly installments totaling $6,000,000 (subject to the Company achieving certain specified additional clinical validation milestones (collectively, the "Second Milestone")). If the Company does not achieve the Second Milestone by a specified date, Tempus may withhold such installment payments until the Company achieves such Second Milestone, and Tempus will have the right to terminate the Tempus Agreement or convert it to a non-exclusive arrangement; upon any such termination or conversion, the Company will refund to Tempus any Market Development Fee other than the Activation Fee paid to Tempus as of the date of such termination or conversion, subject to certain reductions. If the Company is unable to offer the Assay for use in any Indication in accordance with a schedule set forth in the Tempus Agreement, the Company will refund to Tempus any Market Development Fee other than the Activation Fee paid to Tempus as of the date of such failure to meet such schedule and subject to certain reductions.

From the Effective Date through a specified period for each Indication, the Company will not allow any third party (other than an acquiror of the Company or any affiliates of such acquiror) to market the Assay in such Indication and Tempus will not market another tumor-informed molecular residual disease assay indicated for use in such Indication (whether its own or that of a third party), in each case subject to certain exceptions. Such exclusivity obligations terminate on December 31, 2027 to the extent they do not expire earlier. In addition, each party has the right to convert the Tempus Agreement to a non-exclusive arrangement upon the occurrence of certain specified events.

The Company will compensate Tempus for the fair market value of order requisition and results delivery services rendered with respect to tests using the Assay ordered under the Tempus Agreement on a per-test basis. In addition, the parties will perform certain co-promotion activities with respect to Personalis' reference laboratory services and Personalis will compensate Tempus for the fair market value of promotional and commercialization services provided by Tempus in connection therewith in an amount up to $9,600,000.

The Tempus Agreement also grants Tempus access to certain initial and longitudinal genomic data derived from performance of the Assay and Tempus will have the right to use such data in accordance with applicable laws. If Tempus or its affiliate licenses such data to a third party and Tempus recognizes revenue from such license, Tempus will pay to the Company a percentage of its gross revenue received that is attributable to such license in the range of 10 to 20 percent. Such revenue share shall be payable during the Term and for 10 years thereafter.

Additionally, in consideration of Tempus' obligations to the Company under the Tempus Agreement, on November 28, 2023, the Company issued to Tempus (1) a warrant to purchase up to 4,609,400 shares of the Company's common stock (the "Common Stock") at an exercise price per share of $1.50, with an expiration date of December 31, 2024 (the "First Warrant"), and (2) a warrant to purchase up to 4,609,400 shares of Common Stock at an exercise price per share of $2.50, with an expiration date of December 31, 2025 (the "Second Warrant" and, together with the First Warrant, the "Warrants"). The Warrants are exercisable for cash at any time prior to the applicable expiration date, may be net exercised in certain circumstances, and will be automatically net exercised in connection with a change of control of the Company if the value ascribed to the consideration to be paid for one share of Common Stock in such change of control is greater than the applicable exercise price. The number of shares issuable upon exercise of the Warrants and the exercise prices of the Warrants are subject to adjustment by reason of stock dividends, splits, recapitalizations, reclassifications and the like. If Tempus acquires any shares of Common Stock directly from the Company other than by exercising the Warrants (any such shares, "Non-Warrant Shares"), then the total number of shares issuable upon exercise of the Warrants will be reduced by the Non-Warrant Shares on a share-for-share basis, proportionally between the First Warrant and the Second Warrant based on how many shares are then underlying the Warrants. The Company agreed to register the resale of the shares underlying the Warrants by filing a registration statement with the U.S. Securities and Exchange Commission (the "SEC") within 30 calendar days of the issuance date of the Warrants.

Under the Tempus Agreement, Tempus agreed to certain customary standstill restrictions that apply (a) whenever Tempus (together with its affiliates) owns at least 9,218,800 shares of Common Stock until the parties' exclusivity obligations expire or terminate under the Tempus Agreement and (b) from the Effective Date through the first anniversary of the Effective Date, to the extent the parties' exclusivity obligations expire or terminate under the Tempus Agreement and Tempus (together with its affiliates) owns at least 5% of the outstanding shares of Common Stock. These standstill restrictions are subject to suspension in certain cases set forth in the

Tempus Agreement. In addition, the Company has agreed to notify Tempus in certain circumstances if the Company is pursuing a change of control transaction for the Company.

With respect to any shares it acquires from exercising the Warrants, Tempus also agreed to certain voting commitments under the Tempus Agreement. These voting commitments require Tempus to vote any shares it acquires from exercising the Warrants in accordance with the recommendations of the majority of the Company's board of directors, and generally apply to director nominations for any meeting of the Company's stockholders occurring on or before December 31, 2025, various compensation-related matters, and ratification of auditors. These voting commitments terminate on the later of (i) when the parties' exclusivity obligations expire or terminate under the Tempus Agreement and (ii) the first anniversary of the Effective Date.

Either party may terminate the Tempus Agreement upon the other party's material breach or insolvency, if the other party assigns the agreement to a competitor of the terminating party, if there are certain materially adverse changes to certain of the other party's licenses, permits or certifications or if the other party or its personnel have any materially adverse personal or professional conflicts of interest, subject to certain notice periods. After the first anniversary of the Effective Date, either party may terminate the Tempus Agreement for convenience upon 18 months' prior written notice. Tempus may terminate the agreement if the Company does not achieve the Second Milestone by a specified date.

The foregoing summary of the Tempus Agreement is qualified in its entirety by reference to the full text of the Tempus Agreement, a copy of which is attached to this report as Exhibit 10.1, which is incorporated herein by reference.

The foregoing summary of the Warrants is qualified in its entirety by reference to the full text of (i) the First Warrant, a copy of which is attached to this report as Exhibit 4.1, which is incorporated herein by reference, and (ii) the Second Warrant, a copy of which is attached to this report as Exhibit 4.2, which is incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities.

The information related to the issuance of the Warrants contained in Item 1.01 of this report is incorporated herein by reference. The issuance of the Warrants was, and the issuance of the shares underlying the Warrants upon exercise thereof will be, exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder. Tempus represented to the Company that it is an "accredited investor" as defined in Rule 501 of the Securities Act and that the Warrants are being acquired for investment purposes and not with a view to, or for sale in connection with, any distribution thereof, and appropriate legends will be affixed to any certificates for the shares issued upon exercise of the Warrants.

Forward-Looking Statements.

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are based upon current expectations or beliefs, as well as a number of assumptions about future events. Although the Company believes that the expectations reflected in the forward-looking statements and the assumptions upon which they are based are reasonable, the Company can give no assurance that such expectations and assumptions will prove to be correct. Forward-looking statements include all statements that are not historical facts and can generally be identified by terms such as "estimate," "expect," "may" or "will" or similar expressions and the negatives of those terms. These statements include, but are not limited to, statements regarding activities, milestones and potential benefits under or from the Tempus Agreement. Such forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by the forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, without limitation, risks and uncertainties related to commercial success under the Tempus Agreement, the Company's ability to obtain reimbursement and in adequate amounts, the ability to achieve the milestones under the Tempus Agreement, and third-party performance. For a further description of these and other risks and uncertainties that could cause actual results to differ materially from those expressed in these forward-looking statements, as well as risks relating to the business of the Company in general, see the Company's most recent Quarterly Report on Form 10-Q filed with the SEC on November 7, 2023, and any subsequent current and periodic reports filed with the SEC. The Company undertakes no obligation to update or revise any forward-looking statements.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
4.1	Warrant to Purchase Shares of Common Stock of Personalis, Inc., dated November 28, 2023, and expiring December 31, 2024 (the "First Warrant").
4.2	Warrant to Purchase Shares of Common Stock of Personalis, Inc., dated November 28, 2023, and expiring December 31, 2025 (the "Second Warrant").
10.1*#	Commercialization and Reference Laboratory Agreement, between Personalis, Inc. and Tempus Labs, Inc., dated November 25, 2023.
104	Cover Page Interactive Data File (embedded within the inline XBRL document).

* Pursuant to Item 601(a)(5) of Regulation S-K promulgated by the SEC, certain schedules and attachments to this exhibit have been omitted because they do not contain information material to an investment or voting decision and that information is not otherwise disclosed in the exhibit.

Pursuant to Item 601(b)(10)(iv) of Regulation S-K promulgated by the SEC, certain portions of this exhibit have been redacted because the Company customarily and actually treats such omitted information as private or confidential and because such omitted information is not material.

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 thereunto duly authorized.

Date: November 28, 2023

Personalis, Inc.

By: /s/ Aaron Tachibana
Aaron Tachibana
Chief Financial Officer and Chief Operating Officer

Exhibit 4.1

EXECUTION COPY

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATES IN THE UNITED STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE TERMS OF THIS WARRANT, THE SECURITIES ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

PERSONALIS, INC.

WARRANT TO PURCHASE COMMON STOCK

November 28, 2023

This certifies that, for value received, **Tempus Labs, Inc.**, with a principal office at the address set forth on the signature page hereto, or such person's or entity's permitted assigns (the "***Holder***"), is entitled to subscribe for and purchase from **Personalis, Inc.**, a Delaware corporation (the "***Company***"), up to **4,609,400** shares of Common Stock ("***Exercise Shares***") at the Exercise Price (each subject to adjustment as provided herein); provided, however, that the total aggregate number of shares issuable under this Warrant (subject to adjustment as provided herein) and the Second Warrant (as defined in the Commercialization Agreement (as defined below)) shall be reduced on a share-for-share basis by any other shares of Common Stock that the Holder acquires directly from the Company (excluding any shares acquired pursuant to exercise of this Warrant or the Second Warrant) and such reduction of shares shall be pro rata between this Warrant and the Second Warrant (rounded for each to the nearest whole share) based on the number of shares then underlying each warrant. For example, if the Holder acquires 1,000,000 shares directly from the Company and immediately prior to such acquisition there are 2,000,000 remaining Exercise Shares available for issuance pursuant to a cash exercise of this Warrant and there are 4,609,400 remaining shares available for issuance upon cash exercise of the Second Warrant, then the number of Exercise Shares issuable upon exercise of this Warrant would be reduced by 302,599 shares and the number of shares issuable upon exercise of the Second Warrant would be reduced by 697,401 shares.

This Warrant is being issued pursuant to Section 1.d of that certain Commercialization and Reference Laboratory Agreement, by and between the Company and Tempus Labs, Inc., dated as of the Effective Date (as defined therein) (the "***Commercialization Agreement***"), and is the First Warrant as defined thereunder.

1. Definitions. As used herein, the following terms have the following respective meanings:

(a) "***Affiliate***" means, with respect to any Person (as defined below), any other Person controlling, controlled by or under direct or indirect common control with such Person (for the purposes of this definition "***control***," when used with respect to any specified Person, shall mean the power to direct the management and policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise; and the terms "***controlling***" and "***controlled***" shall have meanings correlative to the foregoing).

(b) "***Business Day***" means any day except any Saturday, any Sunday, any day that is a federal legal holiday in the United States or any day on which Nasdaq is authorized or required by law or other governmental action to remain closed.

(c) "***Change of Control***" means (i) any consolidation or merger of the Company with or into any other corporation or other entity or person, in which the Company is not the surviving entity, or any other corporate reorganization, other than any such consolidation, merger or reorganization in which the stockholders of the Company immediately prior to such consolidation, merger or reorganization, continue to hold at least a majority of the voting power of the surviving entity in substantially the same proportions (or, if the surviving entity is a wholly owned subsidiary, its parent) immediately after such consolidation, merger or reorganization, (ii) any sale by the Company to any other corporation or other entity or person of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer of the Company (whether by the Company or a third party), in which holders of capital stock who tender shares representing at least a majority of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, or (iv) any reclassification of the Common Stock of the Company or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 6.1 herein).

(d) "***Common Stock***" means the Company's Common Stock, par value $0.0001 per share.

(e) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

(f) "***Exercise Period***" means the period commencing on the date hereof and ending on December 31, 2024, unless sooner terminated as provided below.

(g) "***Exercise Price***" means $1.50 per Exercise Share, subject to adjustment pursuant to Section 6 below.

(h) "***Person***" means any person, individual, corporation, limited liability company, partnership, trust or other nongovernmental entity or any governmental agency, court, authority or other body (whether foreign, federal, state, local or otherwise).

(i) "***Securities***" means, collectively, this Warrant and the Exercise Shares.

(j) "***Securities Act***" means the Securities Act of 1933, as amended.

(k) "***Trading Day***" means any day on which the Common Stock is traded on the Trading Market.

(l) "***Trading Market***" means the principal securities exchange or securities market, including an over-the-counter market, on which the Common Stock is then traded in the United States.

(m) "***Transfer Agent***" means the transfer agent for the Common Stock.

2. Exercise of Warrant.

2.1 **Exercise**. The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period (unless prohibited by Section 1.e of the Commercialization Agreement), by

delivery of the following to the Company at its address set forth on the signature page hereto (or at such other address as it may designate by notice in writing to the Holder):

(a) An original executed copy, or a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment), of the Notice of Exercise in the form attached hereto as **Exhibit A** ("***Notice of Exercise***"); and

(b) Payment of the Exercise Price (which may take the form of a "cashless exercise" if permitted by Section 2.2 below and so indicated in the Notice of Exercise) either by check or wire transfer to an account designated by the Company.

The Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Exercise Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Exercise Shares hereunder in an amount equal to the applicable number of Exercise Shares purchased. The Holder and the Company shall maintain records showing the number of Exercise Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, (i) by reason of the provisions of this paragraph, following the purchase of a portion of the Exercise Shares hereunder, and (ii) by reason of the provisions of the introductory paragraph of this Warrant, the number of Exercise Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

2.2 Cashless Exercise. If, and only if, at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Exercise Shares to the Holder (*provided, however*, the unavailability of the prospectus will not apply to any (i) proposed distribution by the Holder that is not covered by the "Plan of Distribution" section of the prospectus included in the Registration Statement (as defined in Section 3.12) or any supplement thereto or (ii) any suspension of the Registration Statement by the Company pursuant to Section 3.12(b), the basis for which is a circumstance or event caused wholly or in significant part by Holder or any of its Affiliates), then this Warrant may, at Holder's election, be exercised, in whole or in part, at such time by means of a "cashless exercise" (*provided, however*, no such cashless exercise will be permitted prior to the 11th Business Day after the SEC notifies the Company (orally or in writing, whichever is earlier) that it will not review, or has completed its review of, the Registration Statement, provided the Company has filed the Registration Statement with the SEC within 30 days after the date hereof and uses its commercially reasonable efforts to address any comments by the SEC related to the Registration Statement), in which event the Company shall issue to the Holder the number of Exercise Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act, determined as follows:

X = Y [(A-B)/A]

where:

X" equals the number of Exercise Shares to be issued to the Holder;

"Y" equals the total number of Exercise Shares with respect to which this Warrant is then being exercised;

"A" equals the closing price of the shares of Common Stock (as reported by The Nasdaq Stock Market) as of the Trading Day on the date immediately preceding the Date of Exercise; and

"B" equals the Exercise Price then in effect for the applicable Exercise Shares at the time of such exercise.

For purposes of Rule 144 promulgated under the Securities Act ("***Rule 144***"), it is intended, understood and acknowledged that the Exercise Shares issued in a "cashless exercise" transaction shall be deemed to have been acquired by the Holder, and the holding period for the Exercise Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the SEC continues to take the position that such treatment is proper at the time of such exercise).

If Exercise Shares are issued in such a cashless exercise, the Company acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Exercise Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrants being exercised may be tacked on to the holding period of the Exercise Shares (provided that the SEC continues to take the position that such treatment is proper at the time of such exercise).

2.3 Automatic Net Exercise Upon Change of Control. Notwithstanding any provisions herein to the contrary, solely in connection with the closing of a Change of Control prior to the end of the Exercise Period, if the fair market value of one Exercise Share (computed as set forth below in this Section 2.3) is greater than the Exercise Price, this Warrant will be automatically net exercised immediately prior to the closing of the Change of Control and converted into the right to receive the number of Exercise Shares computed using the following formula:

$$X = \frac{Y\,(A-B)}{A}$$

Where X = the number of Exercise Shares to be issued to the Holder

Y = the remaining number of Exercise Shares purchasable under this Warrant (at the date of such calculation)

A = the fair market value of one Exercise Share (at the date of such calculation)

B = Exercise Price (as adjusted to the date of such calculation)

For purposes of the above calculation, the fair market value of one Exercise Share shall be the value ascribed to the consideration to be paid in respect of one share of the Exercise Shares in the definitive agreement(s) relating to such Change of Control, or if no such value is set forth in the definitive agreements(s) relating to such Change of Control, as determined in good faith by the Company's Board of Directors.

2.4 Delivery of Exercise Shares Upon Exercise. Upon delivery of the Notice of Exercise to the Company and upon payment of the Exercise Price (which may take the form of a "cashless exercise" if permitted by Section 2.2 above and so indicated in the Notice of Exercise) for the Exercise Shares being purchased, the Company shall promptly issue and deliver to the Holder (or its designee) a certificate or evidence of book-entry position with the Transfer Agent ("***book-entry position***"), as determined by Holder, for the Exercise Shares issuable upon such exercise, such delivery to be made promptly, but in any case within two Trading Days after the Date of Exercise (as defined below). As used herein, a "***Date of***

Exercise" means the date on which the Holder has delivered to the Company (i) the Notice of Exercise, appropriately completed and duly signed and (ii) payment of the Exercise Price for the Exercise Shares being purchased. Notwithstanding the foregoing, if the Exercise Shares being purchased have been sold or otherwise transferred by Holder (1) pursuant to a registration statement, Rule 144, or another exemption from the registration requirements, and (2) in compliance with the transfer restrictions set forth in the Commercialization Agreement, and subject to the Holder's delivery to the Company and/or the Transfer Agent of appropriate representations and other documentation reasonably acceptable to the Company and/or the Transfer Agent ("***Transfer Documents***"), the Holder may direct the Company by written notice to have the Exercise Shares credited to the account of Holder's prime broker with the DTC System as directed by the Holder. Such Exercise Shares shall be delivered to Holder within two Trading Days following the later of (i) the Date of Exercise and (ii) the date the Transfer Documents have been delivered by Holder to the Company and/or the Transfer Agent. The Company shall be responsible for the fees of its Transfer Agent and all DTC fees associated with such issuance.

2.5 Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with (i) the Holder's Affiliates, (ii) any other Persons acting as a group together with the Holder or any of the Holder's Affiliates and (iii) any other Persons whose beneficial ownership of Common Stock would or could be aggregated with the Holder's for the purposes of Section 13(d) of the Exchange Act (such Persons, "***Attribution Parties***")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2.5, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2.5 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2.5, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the "***Reported Outstanding Share Number***"). If the Company receives an Notice of Exercise from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of

shares of Common Stock then outstanding and, to the extent that such Notice of Exercise would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 2.5, to exceed the Beneficial Ownership Limitation, the Holder must notify the Company of a reduced number of Exercise Shares to be purchased pursuant to such Notice of Exercise (the number of shares by which such purchase is reduced, the "***Reduction Shares***") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any Exercise Price paid by the Holder for the Reduction Shares. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "***Beneficial Ownership Limitation***" shall be 19.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2.5, provided that the Beneficial Ownership Limitation in no event exceeds 19.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of the Exercise Shares upon exercise of this Warrant held by the Holder and the provisions of this Section 2.5 shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Beneficial Ownership Limitation shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) of the Exchange Act or Rule 16a-1(a)(1) promulgated under the Exchange Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2.5 to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

3. Representations, Warranties and Covenants of the Company.

3.1 Valid Issuance. The Exercise Shares have been duly and validly authorized and reserved for issuance and, upon exercise of this Warrant in accordance with its terms, including the payment of the Exercise Price, will be validly issued, fully paid and nonassessable and will be free and clear of all encumbrances and restrictions, except for restrictions on transfer set forth in this Warrant or imposed by applicable securities laws, or encumbrances imposed by the Holder. The Exercise Shares will be issued in compliance with all applicable federal and state securities laws.

3.2 Conflicts. The issuance of this Warrant and the Exercise Shares in accordance with the terms hereof will not (A) conflict with or result in a breach or violation of any material agreement or instrument to which the Company is a party; (B) result in any violation of the provisions of the certificate of incorporation or bylaws of the Company; or (C) result in any violation of any statute or any judgment, order, rule or regulation of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Company or any of its properties.

3.3 Consents. The issuance of this Warrant and the Exercise Shares requires no consent of, action by or in respect of, or filing with, any person, governmental body, agency, or official, including, without limitation, any consent, action by, or approval of shareholders of the Company, other than (A) filings that have been made pursuant to applicable state securities laws, (B) post-sale filings pursuant to applicable state and federal securities laws, and (C) filings pursuant to the rules and regulations of the Nasdaq Stock Market LLC ("***Nasdaq***"), each of which the Company has filed or undertakes to file within the applicable

time, and (D) filings required to be made by, or consents or action required to be obtained by, Holder or its affiliates.

3.4 **SEC Filings**. The Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof (collectively, the "***SEC Filings***"). At the time of filing thereof, the SEC filings complied in all material respects with the requirements of the Securities Act or the Exchange Act, as applicable, and the rules and regulations of the U.S. Securities and Exchange Commission (the "***SEC***") thereunder.

3.5 **Compliance with Nasdaq Continued Listing Requirements**. The Company is in compliance with applicable Nasdaq continued listing requirements. There are no proceedings pending or threatened against the Company relating to the continued listing of the Common Stock on Nasdaq and the Company has not received any notice of, nor is there any reasonable basis for, the delisting of the Common Stock from Nasdaq.

3.6 **Private Placement**. Assuming the accuracy of the representations and warranties of Holder set forth herein and compliance by Holder with applicable federal and state securities laws with respect to such issuance, no registration under the Securities Act is required for the issuance of this Warrant by the Company to Holder or the exercise of this Warrant by Holder.

3.7 **Shell Company Status**. The Company is not, and has never been, an issuer identified in Rule 144(i)(1) of the Securities Act.

3.8 **Nasdaq Listing**. The Company will use commercially reasonable efforts to continue the listing and trading of its Common Stock on Nasdaq and, in accordance therewith, will use commercially reasonable efforts to comply in all material respects with the Company's reporting, filing and other obligations under the bylaws or rules of such market or exchange, as applicable.

3.9 **No Integration**. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities to Holder, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction. The Company shall not take any action or steps that would adversely affect reliance by the Company on Section 4(a)(2) of the Securities Act for the exemption from registration for the transactions contemplated hereby or require registration of the Securities under the Securities Act.

3.10 **Reservation of Common Stock**. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue all of the Exercise Shares upon exercise of this Warrant.

3.11 **Nasdaq Listing**. The Company has filed with Nasdaq a Notification Form: Listing of Additional Shares for the listing of the Exercise Shares, and Nasdaq has raised no objection to the consummation of the transactions contemplated by this Warrant.

3.12 **Registration Rights**.

(a) The Company agrees (A) to file with the SEC a registration statement on Form S-3 (or Form S-1 if the Company is not permitted to use Form S-3) (such registration statement and any successor registration, the "***Registration Statement***"), covering the resale by Holder of the Exercise Shares within 30 calendar days after the date hereof, (B) to use its reasonable best efforts to have the Registration Statement declared effective as soon as reasonably practicable after the filing thereof, but in no event later than the 10th Business Day after the SEC notifies the Company (orally or in writing, whichever is earlier) that it will not review, or has completed its review of, the Registration Statement and (C) and to keep such Registration Statement effective at all times until all Exercise Shares registered thereunder have been sold or may be sold without restriction or volume limitation under Rule 144. In no event shall the Holder be identified as a statutory underwriter in the Registration Statement without its prior written consent.

(b) Notwithstanding anything to the contrary contained herein, the Company may, upon written notice to Holder, suspend the use of any Registration Statement, including any prospectus that forms a part of a Registration Statement, if the Company (a) determines that it would be required to make disclosure of material information in the Registration Statement that the Company has a bona fide business purpose for preserving as confidential, (b) the Company determines it must amend or supplement the Registration Statement or the related prospectus so that such Registration Statement or prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the prospectus in light of the circumstances under which they were made, not misleading or (c) has experienced or is experiencing some other material nonpublic event, including a pending transaction involving the Company, the disclosure of which at such time, in the good faith judgment of the Company, would adversely affect the Company; provided, however, that in no event shall Holder be suspended from selling Exercise Shares pursuant to the Registration Statement for a period that exceeds 30 consecutive Trading Days or 60 total Trading Days in any 365-day period. Upon disclosure of such information or the termination of the condition described above, the Company shall provide prompt notice to Holder, and shall promptly terminate any suspension of sales it has put into effect and shall take such other reasonable actions to permit registered sales of Exercise Shares as contemplated hereby.

(c) The Company shall: (A) advise the Holder by email to legal@tempus.com (1) as promptly as practicable after a Registration Statement or any amendment thereto has been filed with the SEC and when such Registration Statement or any post-effective amendment thereto has become effective other than, in each case, the filing or effectiveness of any amendment or deemed amendment that is made through the filing of any incorporated document; (2) as promptly as practicable of any request by the SEC for amendments or supplements to any Registration Statement or the prospectus included therein or for additional information with respect thereto other than, in each case, for any such request or such additional information that relates to documents incorporated in any Registration Statement or prospectus; (3) within two Trading Days after the date of the issuance by the SEC of any stop order suspending the effectiveness of any Registration Statement or the initiation of any proceedings for such purpose; (4) within two Trading Days after the receipt by the Company of any notification with respect to the suspension of the qualification of the shares of Common Stock included therein for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and (5) within four Business Days after the occurrence of any event that requires the making of any changes in any Registration Statement or prospectus or the documents incorporated therein so that, as of such date, the statements therein are not misleading and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of a prospectus, in the light of the circumstances under which they were made) not misleading; provided that the Company will not have any obligation to advise the Holder pursuant to this clause (c)(A)(5) to the extent that the information is filed with the SEC within such four Business Days; and provided further that the Company shall not, when so advising the Holder of such events pursuant to this clause (c)(A)(5), be required to provide the Holder with any material, non-public information regarding the Company other than to the extent that providing notice to the Holder of the occurrence of the events listed in this clause (c)(A)(5) may constitute material, nonpublic information regarding the Company, and (B) with a view to making available

to the Holder the benefits of Rule 144 that may, at such times as Rule 144 is available to the Holder, permit the Holder to sell securities of the Company to the public without registration, the Company agrees to, for so long as the Holder owns any Exercise Shares or this Warrant remains outstanding, use commercially reasonable efforts to: (1) make and keep public information available, as those terms are understood and defined in Rule 144, if necessary to permit Holder to sell Exercise Shares pursuant to Rule 144 and (2) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144.

(d) The Company agrees to indemnify and hold harmless, to the extent permitted by law, Holder, its directors, officers, employees, advisors and agents, and each person who controls Holder (within the meaning of the Securities Act or the Exchange Act) and each affiliate of Holder (within the meaning of Rule 405 under the Securities Act) from and against any and all losses, claims, damages, liabilities, costs and out-of-pocket expenses (including, without limitation, any reasonable and documented attorneys' fees and expenses incurred in connection with defending or investigating any such action or claim) ("***Losses***") that arise out of, are based on or are caused by (A) any untrue or alleged untrue statement of material fact contained in any Registration Statement, prospectus included in any Registration Statement or any amendment thereof or supplement thereto or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or any amendment thereof or supplement thereto, in light of the circumstances under which they were made) not misleading, or (B) subject to the accuracy of the representations and warranties of Holder in Section 4 below and compliance by Holder with applicable federal and state securities laws with respect to this Warrant and the Exercise Shares, any violation by the Company of the Securities Act, the Exchange Act or any state securities law or any rule or regulation thereunder relating to action or inaction required of the Company in connection with registration of any Warrants or Exercise Shares thereunder, except to the extent, but only to the extent, such Losses are based solely upon information regarding Holder furnished in writing to the Company by or on behalf of Holder expressly for use therein or and was reviewed and approved in writing by Holder expressly for use in the Registration Statement.

(e) Holder agrees to indemnify and hold harmless the Company, its directors and officers and agents and each person who controls the Company (within the meaning of the Securities Act) against any Losses that arise out of, are based on or are caused by (A) any breach or violation of any representations and warranties of Holder in Section 4 below, or any failure by Holder to comply with applicable federal and state securities laws with respect to the issuance or transfer of any Warrants or Exercise Shares, (B) any untrue or alleged untrue statement of material fact contained in any Registration Statement, prospectus included in any Registration Statement or preliminary prospectus or any amendment thereof or supplement thereto or any omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or preliminary prospectus or any amendment thereof or supplement thereto, in light of the circumstances under which they were made) not misleading, but only to the extent that such untrue statement or omission is based on information regarding Holder furnished in writing to the Company by or on behalf of Holder expressly for use therein, and (C) the use by Holder of a prospectus during an allowed suspension after the Company has notified Holder in writing of such suspension. In no event shall the aggregate liability of Holder under this clause (v) be greater in amount than the dollar amount of the net proceeds received by Holder upon the sale of the Exercise Shares issued pursuant to this Warrant giving rise to such indemnification obligation.

3.13 Notices of Record Date. In the event of any taking by the Company of a record of the holders of the class and/or series of equity securities constituting the Exercise Shares for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, the Company shall give to the Holder, at least five days prior to the Record Date (as defined below), a notice specifying the date on which

any such record is to be taken for the purpose of such dividend or distribution (such date, the "***Record Date***").

4. Representations of Holder. The Holder hereby represents and warrants to the Company as of the date hereof as follows:

4.1 Acquisition for Own Account. The Holder is acquiring the Securities solely for the Holder's own account and beneficial interest for investment and not for sale or with a view to distribution of the Securities or any part thereof in violation of the Securities Act, and has no present intention of selling (in connection with a distribution or otherwise), granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, however, to the Holder's right at all times to sell or otherwise dispose of all or any part of the Securities in compliance with applicable federal and state securities laws.

4.2 Information and Sophistication. The Holder has been furnished with all relevant materials relating to the business, finances and operations of the Company necessary to make an investment decision, and materials relating to the offer and sale of the Securities, that have been requested by the Holder, including, without limitation, the SEC Filings, and the Holder has had the opportunity to review the SEC Filings. The Holder has been afforded the opportunity to ask questions of the Company. The Holder specifically understands and acknowledges that, on the date of this Warrant, the Company may have in its possession non-public information that could be material to the market price of the Common Stock. The Holder hereby represents and warrants that, in accepting this Warrant, it does not require the disclosure of such non-public information to it by the Company in order to make an investment in the Securities. The Holder also specifically acknowledges that the Company would not enter into this Warrant or any related documents in the absence of such Holder's representations and acknowledgments set out in this Warrant, and that this Warrant, including such representations and acknowledgments, are a fundamental inducement to the Company, and a substantial portion of the consideration provided by such Holder, in this transaction, and that the Company would not enter into this transaction but for this inducement.

4.3 Ability to Bear Economic Risk. The Holder acknowledges that investment in the Securities involves a high degree of risk, and represents that the Holder is able, without materially impairing the Holder's financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of the Holder's investment.

4.4 Further Limitations on Disposition. Without in any way limiting the representations set forth above, the Holder further agrees not to make any disposition of all or any portion of the Securities (other than exercise of the Warrant) unless and until:

(a) There is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement; or

(b) The Holder shall have furnished the Company with an opinion of counsel, reasonably satisfactory to the Company, that such disposition will not require registration under the Securities Act or any applicable state securities laws; *provided* that no such opinion shall be required for dispositions in compliance with Rule 144 under the Securities Act.

Notwithstanding the provisions of paragraphs (a) and (b) above, no such registration statement or opinion of counsel shall be necessary for a transfer by the Holder to any Affiliate of the Holder, or a partner (or retired partner) or member (or retired member) of the Holder in accordance with partnership or limited liability company interests, or transfers by gift, will or intestate succession to any spouse or lineal

descendants or ancestors, if all transferees agree in writing to be subject to the terms hereof to the same extent as if the applicable party were the Holder hereunder.

4.5 **Accredited Investor Status**. The Holder is an "accredited investor" as such term is defined in Rule 501 under the Securities Act.

4.6 **Foreign Holder**. If the Holder is not a United States person (as defined by Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended), the Holder hereby represents that the Holder it has satisfied itself as to the full observance of the laws of the Holder's jurisdiction in connection with any invitation to subscribe for the Securities or any use of this Warrant, including (a) the legal requirements within the Holder's jurisdiction for the purchase of the Securities, (b) any foreign exchange restrictions applicable to such purchase, (c) any governmental or other consents that may need to be obtained, and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Securities. The Holder's subscription, payment for and continued beneficial ownership of the Securities will not violate any applicable securities or other laws of the Holder's jurisdiction.

4.7 **Forward-Looking Statements**. With respect to any forecasts, projections of results and other forward-looking statements and information provided to the Holder, the Holder acknowledges that such statements were prepared based upon assumptions deemed reasonable by the Company at the time of preparation. There is no assurance that such statements will prove accurate, and the Company has no obligation to update such statements.

5. **Restrictive Legends**. The Holder understands and agrees that all certificates evidencing the Exercise Shares may bear the following legend:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATES IN THE UNITED STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SHARES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS."

(b) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO TRANSFER RESTRICTIONS AS SET FORTH IN THAT CERTAIN COMMERCIALIZATION AND REFERENCE LABORATORY AGREEMENT, BY AND BETWEEN THE COMPANY AND TEMPUS LABS, INC., DATED AS OF THE EFFECTIVE DATE (AS DEFINED THEREIN), AS MAY BE AMENDED FROM TIME TO TIME, AND MAY NOT BE TRANSFERRED EXCEPT IN COMPLIANCE THEREWITH."

In connection with any sale or other transfer of Exercise Shares that complies with all applicable securities laws and the transfer restrictions in the Commercialization Agreement, and subject to the Company's and/or the Transfer Agent's receipt from the Holder of the Transfer Documents, the Company shall, within two (2) Trading Days of any request therefor from the Holder that is accompanied by the Transfer Documents, (A) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall make a new, unlegended entry for such book entry position Exercise Shares, and (B) cause its counsel to deliver to the Transfer Agent one or more opinions to the effect that the removal of such legends in such circumstances may be effected under the Securities Act and the terms of the Commercialization Agreement if required by the Transfer Agent to effect the removal of the legend in accordance with the provisions

hereof. Any Exercise Shares subject to legend removal under this paragraph may be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's prime broker with the DTC System as directed by the Holder. The Company shall be responsible for the fees of its Transfer Agent and all DTC fees associated with such issuance.

6. Adjustment of Exercise Price and Number of Exercise Shares; Fractional Shares.

6.1 Changes in Securities. In the event of changes in the class and/or series of equity securities of the Company comprising the Exercise Shares by reason of stock dividends, splits, recapitalizations, reclassifications, combinations or exchanges of shares, reorganizations, or other similar transactions, the number and class and/or series of Exercise Shares available under this Warrant in the aggregate and the Exercise Price shall be correspondingly adjusted to give the Holder of this Warrant, on exercise for the same aggregate Exercise Price, the total number and class and/or series of shares as the Holder would have owned had this Warrant been exercised prior to the event and had the Holder continued to hold such shares until after the event requiring adjustment. The form of this Warrant need not be changed because of any adjustment in the number of Exercise Shares subject to this Warrant.

6.2 Fractional Shares. No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All Exercise Shares (including fractions) to be issued upon exercise of this Warrant shall be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the then current fair market value of one Exercise Share by such fraction.

7. No Stockholder Rights; No Settlement in Cash. This Warrant in and of itself shall not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company. Without limiting any rights of a Holder to receive Exercise Shares on a "cashless" or net-exercise basis pursuant to Section 2.2 and Section 2.3, in no event shall the Company be required to net cash settle an exercise of this Warrant.

8. Transfer of Warrant. In addition to any other restrictions on transfer set forth in this Warrant, neither this Warrant nor any interest therein shall be transferred or assigned, in whole or in part, directly or indirectly, without the prior written consent of the Company, and any attempted transfer or assignment without such consent shall be void; provided, however, that this Warrant may be transferred without such consent in compliance with applicable laws and the provisions of the Commercialization Agreement, including Section 1.g thereof. Subject to the foregoing restrictions, applicable laws and the restriction on transfer set forth on the first page of this Warrant, in connection with any transfer of this Warrant, the Holder shall deliver this Warrant and the form of assignment attached hereto as **Exhibit B** to the Company, and the transferee shall sign an investment representation letter in form and substance satisfactory to the Company.

9. Lost, Stolen, Mutilated or Destroyed Warrant. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as this Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

10. Cumulative Remedies. The rights and remedies provided in this Warrant are cumulative and are not exclusive of, and are in addition to and not in substitution for, any other rights or remedies available at law, in equity or otherwise.

11. Equitable Relief. Each of the Company and the Holder acknowledges that a breach or threatened breach by such party of any of its obligations under this Warrant would give rise to irreparable harm to the other party hereto for which monetary damages would not be an adequate remedy and hereby agrees that in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to equitable relief, including a restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction.

12. Notices, etc. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given (a) upon personal delivery to the party to be notified, (b) when sent by electronic transmission if sent during normal business hours of the recipient, if not, then on the next Business Day, (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to each of the Company and the Holder at the address listed on their respective signature pages hereto or at such other address as the Company or Holder may designate by ten days' advance written notice to the other party.

13. Successor and Assigns. Subject to compliance with the restrictions on transfer set forth in this Warrant, this Warrant and the rights evidenced hereby shall be binding upon and shall inure to the benefit of the parties hereto and the successors of the Company and the successors and permitted assigns of the Holder, and such successors and/or permitted assigns of the Holder shall be deemed to be a Holder for all purposes hereunder.

14. No Third-Party Beneficiaries. This Warrant is for the sole benefit of the Company and the Holder and their respective successors and, in the case of the Holder, permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

15. Headings. The headings in this Warrant are for reference only and shall not affect the interpretation of this Warrant.

16. Amendment and Modification; Waiver. Except as otherwise provided herein, this Warrant may only be amended, modified or supplemented by an agreement in writing signed by the Company and the Holder. No waiver by the Company or the Holder of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

17. Severability. If any term or provision of this Warrant is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant or invalidate or render unenforceable such term or provision in any other jurisdiction.

18. Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

19. Governing Law. This Warrant and all rights, obligations and liabilities hereunder shall be governed by and construed under the laws of the State of Delaware as applied to agreements among

Delaware residents, made and to be performed entirely within the State of Delaware without giving effect to conflicts of laws principles.

20. Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. Counterparts may be delivered via facsimile, electronic mail (including .pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[Signature pages follow]

The parties have caused this Warrant to be executed as of the date first written above.

COMPANY:

Personalis, Inc.

By: /s/ Stephen Moore

Name: Stephen Moore
Title: VP, General Counsel & Corp. Sec.

Email:

Address: 6600 Dumbarton Circle
Fremont, California 94555

The parties have caused this Warrant to be executed as of the date first written above.

HOLDER:

Tempus Labs, Inc.

By: /s/ Jim Rogers

Name: Jim Rogers
Title: Treasurer and CFO

Email:

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Exhibit A

NOTICE OF EXERCISE

TO: Personalis, Inc.

(1) ☐ The undersigned hereby elects to purchase _____ shares of Common Stock (the "***Exercise Shares***") of Personalis, Inc. (the "***Company***") pursuant to the terms of the attached Warrant.

(2) The Holder intends that payment of the Exercise Price shall be made as (check one):

☐ Cash Exercise

☐ "Cashless Exercise" under Section 2.2 of the Warrant

(3) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of $_____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(4) Please issue a certificate or certificates representing said Exercise Shares in the name of the undersigned or in such other name as is specified below:

_____

(5) The undersigned represents and warrants as follows:

(a) By its delivery of this Notice of Exercise, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 2.4 of the Warrant to which this notice relates.

(b) [The undersigned acknowledges and agrees that the Exercise Shares are subject to the provisions of Sections 1.f and 1.g of the Commercialization Agreement (as defined in the attached Warrant).] (To be included if the Holder is Tempus Labs, Inc. or any Affiliate thereof.)

HOLDER: Tempus Labs, Inc.

By: _____

Name:
Title:

Email: _____

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Dated: _____

Exhibit B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

For Value Received, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____

(Please Print)

HOLDER:

Tempus Labs, Inc.

By: _____

Name:
Title:

Email: _____

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Dated: _____

Acknowledged and Agreed: Assignee

(if an individual)

Signature: ___

(if a trust)

Signature: ___

_____, as [co-]trustee of the _____

(if an entity)

By: ____
Name:___
Title:____

Address: _____

Email: _____

NOTE: The Holder's signature to this Assignment Form must correspond with the name as it appears on the face of the foregoing Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Any terms that are capitalized but not defined in this Exhibit B have the meanings ascribed to them in the foregoing Warrant.

Exhibit 4.2

EXECUTION COPY

THIS WARRANT AND THE SECURITIES ISSUABLE UPON THE EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATES IN THE UNITED STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE TERMS OF THIS WARRANT, THE SECURITIES ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

PERSONALIS, INC.

WARRANT TO PURCHASE COMMON STOCK

November 28, 2023

This certifies that, for value received, **Tempus Labs, Inc.**, with a principal office at the address set forth on the signature page hereto, or such person's or entity's permitted assigns (the "***Holder***"), is entitled to subscribe for and purchase from **Personalis, Inc.**, a Delaware corporation (the "***Company***"), up to **4,609,400** shares of Common Stock ("***Exercise Shares***") at the Exercise Price (each subject to adjustment as provided herein); provided, however, that the total aggregate number of shares issuable under this Warrant (subject to adjustment as provided herein) and the First Warrant (as defined in the Commercialization Agreement (as defined below)) shall be reduced on a share-for-share basis by any other shares of Common Stock that the Holder acquires directly from the Company (excluding any shares acquired pursuant to exercise of this Warrant or the First Warrant) and such reduction of shares shall be pro rata between this Warrant and the First Warrant (rounded for each to the nearest whole share) based on the number of shares then underlying each warrant. For example, if the Holder acquires 1,000,000 shares directly from the Company and immediately prior to such acquisition there are 2,000,000 remaining Exercise Shares available for issuance pursuant to a cash exercise of this Warrant and there are 4,609,400 remaining shares available for issuance upon cash exercise of the First Warrant, then the number of Exercise Shares issuable upon exercise of this Warrant would be reduced by 302,599 shares and the number of shares issuable upon exercise of the First Warrant would be reduced by 697,401 shares.

This Warrant is being issued pursuant to Section 1.d of that certain Commercialization and Reference Laboratory Agreement, by and between the Company and Tempus Labs, Inc., dated as of the Effective Date (as defined therein) (the "***Commercialization Agreement***"), and is the Second Warrant as defined thereunder.

1. Definitions. As used herein, the following terms have the following respective meanings:

(a) "***Affiliate***" means, with respect to any Person (as defined below), any other Person controlling, controlled by or under direct or indirect common control with such Person (for the purposes of this definition "***control***," when used with respect to any specified Person, shall mean the power to direct the management and policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise; and the terms "***controlling***" and "***controlled***" shall have meanings correlative to the foregoing).

(b) "***Business Day***" means any day except any Saturday, any Sunday, any day that is a federal legal holiday in the United States or any day on which Nasdaq is authorized or required by law or other governmental action to remain closed.

(c) "***Change of Control***" means (i) any consolidation or merger of the Company with or into any other corporation or other entity or person, in which the Company is not the surviving entity, or any other corporate reorganization, other than any such consolidation, merger or reorganization in which the stockholders of the Company immediately prior to such consolidation, merger or reorganization, continue to hold at least a majority of the voting power of the surviving entity in substantially the same proportions (or, if the surviving entity is a wholly owned subsidiary, its parent) immediately after such consolidation, merger or reorganization, (ii) any sale by the Company to any other corporation or other entity or person of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer of the Company (whether by the Company or a third party), in which holders of capital stock who tender shares representing at least a majority of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, or (iv) any reclassification of the Common Stock of the Company or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 6.1 herein).

(d) "***Common Stock***" means the Company's Common Stock, par value $0.0001 per share.

(e) "***Exchange Act***" means the Securities Exchange Act of 1934, as amended.

(f) "***Exercise Period***" means the period commencing on the date hereof and ending on December 31, 2025, unless sooner terminated as provided below.

(g) "***Exercise Price***" means $2.50 per Exercise Share, subject to adjustment pursuant to Section 6 below.

(h) "***Person***" means any person, individual, corporation, limited liability company, partnership, trust or other nongovernmental entity or any governmental agency, court, authority or other body (whether foreign, federal, state, local or otherwise).

(i) "***Securities***" means, collectively, this Warrant and the Exercise Shares.

(j) "***Securities Act***" means the Securities Act of 1933, as amended.

(k) "***Trading Day***" means any day on which the Common Stock is traded on the Trading Market.

(l) "***Trading Market***" means the principal securities exchange or securities market, including an over-the-counter market, on which the Common Stock is then traded in the United States.

(m) "***Transfer Agent***" means the transfer agent for the Common Stock.

2. Exercise of Warrant.

2.1 **Exercise**. The rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period (unless prohibited by Section 1.e of the Commercialization Agreement), by

delivery of the following to the Company at its address set forth on the signature page hereto (or at such other address as it may designate by notice in writing to the Holder):

(a) An original executed copy, or a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment), of the Notice of Exercise in the form attached hereto as **Exhibit A** ("***Notice of Exercise***"); and

(b) Payment of the Exercise Price (which may take the form of a "cashless exercise" if permitted by Section 2.2 below and so indicated in the Notice of Exercise) either by check or wire transfer to an account designated by the Company.

The Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Exercise Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Exercise Shares hereunder in an amount equal to the applicable number of Exercise Shares purchased. The Holder and the Company shall maintain records showing the number of Exercise Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, (i) by reason of the provisions of this paragraph, following the purchase of a portion of the Exercise Shares hereunder, and (ii) by reason of the provisions of the introductory paragraph of this Warrant, the number of Exercise Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

2.2 Cashless Exercise. If, and only if, at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Exercise Shares to the Holder (*provided, however*, the unavailability of the prospectus will not apply to any (i) proposed distribution by the Holder that is not covered by the "Plan of Distribution" section of the prospectus included in the Registration Statement (as defined in Section 3.12) or any supplement thereto or (ii) any suspension of the Registration Statement by the Company pursuant to Section 3.12(b), the basis for which is a circumstance or event caused wholly or in significant part by Holder or any of its Affiliates), then this Warrant may, at Holder's election, be exercised, in whole or in part, at such time by means of a "cashless exercise" (*provided, however*, no such cashless exercise will be permitted prior to the 11th Business Day after the SEC notifies the Company (orally or in writing, whichever is earlier) that it will not review, or has completed its review of, the Registration Statement, provided the Company has filed the Registration Statement with the SEC within 30 days after the date hereof and uses its commercially reasonable efforts to address any comments by the SEC related to the Registration Statement), in which event the Company shall issue to the Holder the number of Exercise Shares in an exchange of securities effected pursuant to Section 3(a)(9) of the Securities Act, determined as follows:

X = Y [(A-B)/A]

where:

X" equals the number of Exercise Shares to be issued to the Holder;

"Y" equals the total number of Exercise Shares with respect to which this Warrant is then being exercised;

"A" equals the closing price of the shares of Common Stock (as reported by The Nasdaq Stock Market) as of the Trading Day on the date immediately preceding the Date of Exercise; and

"B" equals the Exercise Price then in effect for the applicable Exercise Shares at the time of such exercise.

For purposes of Rule 144 promulgated under the Securities Act ("***Rule 144***"), it is intended, understood and acknowledged that the Exercise Shares issued in a "cashless exercise" transaction shall be deemed to have been acquired by the Holder, and the holding period for the Exercise Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the SEC continues to take the position that such treatment is proper at the time of such exercise).

If Exercise Shares are issued in such a cashless exercise, the Company acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Exercise Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrants being exercised may be tacked on to the holding period of the Exercise Shares (provided that the SEC continues to take the position that such treatment is proper at the time of such exercise).

2.3 Automatic Net Exercise Upon Change of Control. Notwithstanding any provisions herein to the contrary, solely in connection with the closing of a Change of Control prior to the end of the Exercise Period, if the fair market value of one Exercise Share (computed as set forth below in this Section 2.3) is greater than the Exercise Price, this Warrant will be automatically net exercised immediately prior to the closing of the Change of Control and converted into the right to receive the number of Exercise Shares computed using the following formula:

$$X = \frac{Y\,(A-B)}{A}$$

Where X = the number of Exercise Shares to be issued to the Holder

Y = the remaining number of Exercise Shares purchasable under this Warrant (at the date of such calculation)

A = the fair market value of one Exercise Share (at the date of such calculation)

B = Exercise Price (as adjusted to the date of such calculation)

For purposes of the above calculation, the fair market value of one Exercise Share shall be the value ascribed to the consideration to be paid in respect of one share of the Exercise Shares in the definitive agreement(s) relating to such Change of Control, or if no such value is set forth in the definitive agreements(s) relating to such Change of Control, as determined in good faith by the Company's Board of Directors.

2.4 Delivery of Exercise Shares Upon Exercise. Upon delivery of the Notice of Exercise to the Company and upon payment of the Exercise Price (which may take the form of a "cashless exercise" if permitted by Section 2.2 above and so indicated in the Notice of Exercise) for the Exercise Shares being purchased, the Company shall promptly issue and deliver to the Holder (or its designee) a certificate or evidence of book-entry position with the Transfer Agent ("***book-entry position***"), as determined by Holder, for the Exercise Shares issuable upon such exercise, such delivery to be made promptly, but in any case within two Trading Days after the Date of Exercise (as defined below). As used herein, a "***Date of***

Exercise" means the date on which the Holder has delivered to the Company (i) the Notice of Exercise, appropriately completed and duly signed and (ii) payment of the Exercise Price for the Exercise Shares being purchased. Notwithstanding the foregoing, if the Exercise Shares being purchased have been sold or otherwise transferred by Holder (1) pursuant to a registration statement, Rule 144, or another exemption from the registration requirements, and (2) in compliance with the transfer restrictions set forth in the Commercialization Agreement, and subject to the Holder's delivery to the Company and/or the Transfer Agent of appropriate representations and other documentation reasonably acceptable to the Company and/or the Transfer Agent ("***Transfer Documents***"), the Holder may direct the Company by written notice to have the Exercise Shares credited to the account of Holder's prime broker with the DTC System as directed by the Holder. Such Exercise Shares shall be delivered to Holder within two Trading Days following the later of (i) the Date of Exercise and (ii) the date the Transfer Documents have been delivered by Holder to the Company and/or the Transfer Agent. The Company shall be responsible for the fees of its Transfer Agent and all DTC fees associated with such issuance.

2.5 Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with (i) the Holder's Affiliates, (ii) any other Persons acting as a group together with the Holder or any of the Holder's Affiliates and (iii) any other Persons whose beneficial ownership of Common Stock would or could be aggregated with the Holder's for the purposes of Section 13(d) of the Exchange Act (such Persons, "***Attribution Parties***")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2.5, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2.5 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2.5, in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the SEC, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the "***Reported Outstanding Share Number***"). If the Company receives an Notice of Exercise from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of

shares of Common Stock then outstanding and, to the extent that such Notice of Exercise would otherwise cause the Holder's beneficial ownership, as determined pursuant to this Section 2.5, to exceed the Beneficial Ownership Limitation, the Holder must notify the Company of a reduced number of Exercise Shares to be purchased pursuant to such Notice of Exercise (the number of shares by which such purchase is reduced, the "***Reduction Shares***") and (ii) as soon as reasonably practicable, the Company shall return to the Holder any Exercise Price paid by the Holder for the Reduction Shares. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "***Beneficial Ownership Limitation***" shall be 19.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2.5, provided that the Beneficial Ownership Limitation in no event exceeds 19.9% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of the Exercise Shares upon exercise of this Warrant held by the Holder and the provisions of this Section 2.5 shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Company. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Beneficial Ownership Limitation shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) of the Exchange Act or Rule 16a-1(a)(1) promulgated under the Exchange Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2.5 to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

3. Representations, Warranties and Covenants of the Company.

3.1 Valid Issuance. The Exercise Shares have been duly and validly authorized and reserved for issuance and, upon exercise of this Warrant in accordance with its terms, including the payment of the Exercise Price, will be validly issued, fully paid and nonassessable and will be free and clear of all encumbrances and restrictions, except for restrictions on transfer set forth in this Warrant or imposed by applicable securities laws, or encumbrances imposed by the Holder. The Exercise Shares will be issued in compliance with all applicable federal and state securities laws.

3.2 Conflicts. The issuance of this Warrant and the Exercise Shares in accordance with the terms hereof will not (A) conflict with or result in a breach or violation of any material agreement or instrument to which the Company is a party; (B) result in any violation of the provisions of the certificate of incorporation or bylaws of the Company; or (C) result in any violation of any statute or any judgment, order, rule or regulation of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Company or any of its properties.

3.3 Consents. The issuance of this Warrant and the Exercise Shares requires no consent of, action by or in respect of, or filing with, any person, governmental body, agency, or official, including, without limitation, any consent, action by, or approval of shareholders of the Company, other than (A) filings that have been made pursuant to applicable state securities laws, (B) post-sale filings pursuant to applicable state and federal securities laws, and (C) filings pursuant to the rules and regulations of the Nasdaq Stock Market LLC ("***Nasdaq***"), each of which the Company has filed or undertakes to file within the applicable

time, and (D) filings required to be made by, or consents or action required to be obtained by, Holder or its affiliates.

3.4 **SEC Filings**. The Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof (collectively, the "***SEC Filings***"). At the time of filing thereof, the SEC filings complied in all material respects with the requirements of the Securities Act or the Exchange Act, as applicable, and the rules and regulations of the U.S. Securities and Exchange Commission (the "***SEC***") thereunder.

3.5 **Compliance with Nasdaq Continued Listing Requirements**. The Company is in compliance with applicable Nasdaq continued listing requirements. There are no proceedings pending or threatened against the Company relating to the continued listing of the Common Stock on Nasdaq and the Company has not received any notice of, nor is there any reasonable basis for, the delisting of the Common Stock from Nasdaq.

3.6 **Private Placement**. Assuming the accuracy of the representations and warranties of Holder set forth herein and compliance by Holder with applicable federal and state securities laws with respect to such issuance, no registration under the Securities Act is required for the issuance of this Warrant by the Company to Holder or the exercise of this Warrant by Holder.

3.7 **Shell Company Status**. The Company is not, and has never been, an issuer identified in Rule 144(i)(1) of the Securities Act.

3.8 **Nasdaq Listing**. The Company will use commercially reasonable efforts to continue the listing and trading of its Common Stock on Nasdaq and, in accordance therewith, will use commercially reasonable efforts to comply in all material respects with the Company's reporting, filing and other obligations under the bylaws or rules of such market or exchange, as applicable.

3.9 **No Integration**. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Securities to Holder, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction. The Company shall not take any action or steps that would adversely affect reliance by the Company on Section 4(a)(2) of the Securities Act for the exemption from registration for the transactions contemplated hereby or require registration of the Securities under the Securities Act.

3.10 **Reservation of Common Stock**. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue all of the Exercise Shares upon exercise of this Warrant.

3.11 **Nasdaq Listing**. The Company has filed with Nasdaq a Notification Form: Listing of Additional Shares for the listing of the Exercise Shares, and Nasdaq has raised no objection to the consummation of the transactions contemplated by this Warrant.

3.12 **Registration Rights**.

(a) The Company agrees (A) to file with the SEC a registration statement on Form S-3 (or Form S-1 if the Company is not permitted to use Form S-3) (such registration statement and any successor registration, the "***Registration Statement***"), covering the resale by Holder of the Exercise Shares within 30 calendar days after the date hereof, (B) to use its reasonable best efforts to have the Registration Statement declared effective as soon as reasonably practicable after the filing thereof, but in no event later than the 10th Business Day after the SEC notifies the Company (orally or in writing, whichever is earlier) that it will not review, or has completed its review of, the Registration Statement and (C) and to keep such Registration Statement effective at all times until all Exercise Shares registered thereunder have been sold or may be sold without restriction or volume limitation under Rule 144. In no event shall the Holder be identified as a statutory underwriter in the Registration Statement without its prior written consent.

(b) Notwithstanding anything to the contrary contained herein, the Company may, upon written notice to Holder, suspend the use of any Registration Statement, including any prospectus that forms a part of a Registration Statement, if the Company (a) determines that it would be required to make disclosure of material information in the Registration Statement that the Company has a bona fide business purpose for preserving as confidential, (b) the Company determines it must amend or supplement the Registration Statement or the related prospectus so that such Registration Statement or prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the prospectus in light of the circumstances under which they were made, not misleading or (c) has experienced or is experiencing some other material nonpublic event, including a pending transaction involving the Company, the disclosure of which at such time, in the good faith judgment of the Company, would adversely affect the Company; provided, however, that in no event shall Holder be suspended from selling Exercise Shares pursuant to the Registration Statement for a period that exceeds 30 consecutive Trading Days or 60 total Trading Days in any 365-day period. Upon disclosure of such information or the termination of the condition described above, the Company shall provide prompt notice to Holder, and shall promptly terminate any suspension of sales it has put into effect and shall take such other reasonable actions to permit registered sales of Exercise Shares as contemplated hereby.

(c) The Company shall: (A) advise the Holder by email to legal@tempus.com (1) as promptly as practicable after a Registration Statement or any amendment thereto has been filed with the SEC and when such Registration Statement or any post-effective amendment thereto has become effective other than, in each case, the filing or effectiveness of any amendment or deemed amendment that is made through the filing of any incorporated document; (2) as promptly as practicable of any request by the SEC for amendments or supplements to any Registration Statement or the prospectus included therein or for additional information with respect thereto other than, in each case, for any such request or such additional information that relates to documents incorporated in any Registration Statement or prospectus; (3) within two Trading Days after the date of the issuance by the SEC of any stop order suspending the effectiveness of any Registration Statement or the initiation of any proceedings for such purpose; (4) within two Trading Days after the receipt by the Company of any notification with respect to the suspension of the qualification of the shares of Common Stock included therein for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and (5) within four Business Days after the occurrence of any event that requires the making of any changes in any Registration Statement or prospectus or the documents incorporated therein so that, as of such date, the statements therein are not misleading and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of a prospectus, in the light of the circumstances under which they were made) not misleading; provided that the Company will not have any obligation to advise the Holder pursuant to this clause (c)(A)(5) to the extent that the information is filed with the SEC within such four Business Days; and provided further that the Company shall not, when so advising the Holder of such events pursuant to this clause (c)(A)(5), be required to provide the Holder with any material, non-public information regarding the Company other than to the extent that providing notice to the Holder of the occurrence of the events listed in this clause (c)(A)(5) may constitute material, nonpublic information regarding the Company, and (B) with a view to making available

to the Holder the benefits of Rule 144 that may, at such times as Rule 144 is available to the Holder, permit the Holder to sell securities of the Company to the public without registration, the Company agrees to, for so long as the Holder owns any Exercise Shares or this Warrant remains outstanding, use commercially reasonable efforts to: (1) make and keep public information available, as those terms are understood and defined in Rule 144, if necessary to permit Holder to sell Exercise Shares pursuant to Rule 144 and (2) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144.

(d) The Company agrees to indemnify and hold harmless, to the extent permitted by law, Holder, its directors, officers, employees, advisors and agents, and each person who controls Holder (within the meaning of the Securities Act or the Exchange Act) and each affiliate of Holder (within the meaning of Rule 405 under the Securities Act) from and against any and all losses, claims, damages, liabilities, costs and out-of-pocket expenses (including, without limitation, any reasonable and documented attorneys' fees and expenses incurred in connection with defending or investigating any such action or claim) ("***Losses***") that arise out of, are based on or are caused by (A) any untrue or alleged untrue statement of material fact contained in any Registration Statement, prospectus included in any Registration Statement or any amendment thereof or supplement thereto or any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or any amendment thereof or supplement thereto, in light of the circumstances under which they were made) not misleading, or (B) subject to the accuracy of the representations and warranties of Holder in Section 4 below and compliance by Holder with applicable federal and state securities laws with respect to this Warrant and the Exercise Shares, any violation by the Company of the Securities Act, the Exchange Act or any state securities law or any rule or regulation thereunder relating to action or inaction required of the Company in connection with registration of any Warrants or Exercise Shares thereunder, except to the extent, but only to the extent, such Losses are based solely upon information regarding Holder furnished in writing to the Company by or on behalf of Holder expressly for use therein or and was reviewed and approved in writing by Holder expressly for use in the Registration Statement.

(e) Holder agrees to indemnify and hold harmless the Company, its directors and officers and agents and each person who controls the Company (within the meaning of the Securities Act) against any Losses that arise out of, are based on or are caused by (A) any breach or violation of any representations and warranties of Holder in Section 4 below, or any failure by Holder to comply with applicable federal and state securities laws with respect to the issuance or transfer of any Warrants or Exercise Shares, (B) any untrue or alleged untrue statement of material fact contained in any Registration Statement, prospectus included in any Registration Statement or preliminary prospectus or any amendment thereof or supplement thereto or any omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or preliminary prospectus or any amendment thereof or supplement thereto, in light of the circumstances under which they were made) not misleading, but only to the extent that such untrue statement or omission is based on information regarding Holder furnished in writing to the Company by or on behalf of Holder expressly for use therein, and (C) the use by Holder of a prospectus during an allowed suspension after the Company has notified Holder in writing of such suspension. In no event shall the aggregate liability of Holder under this clause (v) be greater in amount than the dollar amount of the net proceeds received by Holder upon the sale of the Exercise Shares issued pursuant to this Warrant giving rise to such indemnification obligation.

3.13 **Notices of Record Date**. In the event of any taking by the Company of a record of the holders of the class and/or series of equity securities constituting the Exercise Shares for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, the Company shall give to the Holder, at least five days prior to the Record Date (as defined below), a notice specifying the date on which

any such record is to be taken for the purpose of such dividend or distribution (such date, the "***Record Date***").

4. Representations of Holder. The Holder hereby represents and warrants to the Company as of the date hereof as follows:

4.1 Acquisition for Own Account. The Holder is acquiring the Securities solely for the Holder's own account and beneficial interest for investment and not for sale or with a view to distribution of the Securities or any part thereof in violation of the Securities Act, and has no present intention of selling (in connection with a distribution or otherwise), granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, however, to the Holder's right at all times to sell or otherwise dispose of all or any part of the Securities in compliance with applicable federal and state securities laws.

4.2 Information and Sophistication. The Holder has been furnished with all relevant materials relating to the business, finances and operations of the Company necessary to make an investment decision, and materials relating to the offer and sale of the Securities, that have been requested by the Holder, including, without limitation, the SEC Filings, and the Holder has had the opportunity to review the SEC Filings. The Holder has been afforded the opportunity to ask questions of the Company. The Holder specifically understands and acknowledges that, on the date of this Warrant, the Company may have in its possession non-public information that could be material to the market price of the Common Stock. The Holder hereby represents and warrants that, in accepting this Warrant, it does not require the disclosure of such non-public information to it by the Company in order to make an investment in the Securities. The Holder also specifically acknowledges that the Company would not enter into this Warrant or any related documents in the absence of such Holder's representations and acknowledgments set out in this Warrant, and that this Warrant, including such representations and acknowledgments, are a fundamental inducement to the Company, and a substantial portion of the consideration provided by such Holder, in this transaction, and that the Company would not enter into this transaction but for this inducement.

4.3 Ability to Bear Economic Risk. The Holder acknowledges that investment in the Securities involves a high degree of risk, and represents that the Holder is able, without materially impairing the Holder's financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of the Holder's investment.

4.4 Further Limitations on Disposition. Without in any way limiting the representations set forth above, the Holder further agrees not to make any disposition of all or any portion of the Securities (other than exercise of the Warrant) unless and until:

(a) There is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement; or

(b) The Holder shall have furnished the Company with an opinion of counsel, reasonably satisfactory to the Company, that such disposition will not require registration under the Securities Act or any applicable state securities laws; *provided* that no such opinion shall be required for dispositions in compliance with Rule 144 under the Securities Act.

Notwithstanding the provisions of paragraphs (a) and (b) above, no such registration statement or opinion of counsel shall be necessary for a transfer by the Holder to any Affiliate of the Holder, or a partner (or retired partner) or member (or retired member) of the Holder in accordance with partnership or limited liability company interests, or transfers by gift, will or intestate succession to any spouse or lineal

descendants or ancestors, if all transferees agree in writing to be subject to the terms hereof to the same extent as if the applicable party were the Holder hereunder.

4.5 **Accredited Investor Status**. The Holder is an "accredited investor" as such term is defined in Rule 501 under the Securities Act.

4.6 **Foreign Holder**. If the Holder is not a United States person (as defined by Section 7701(a)(30) of the Internal Revenue Code of 1986, as amended), the Holder hereby represents that the Holder it has satisfied itself as to the full observance of the laws of the Holder's jurisdiction in connection with any invitation to subscribe for the Securities or any use of this Warrant, including (a) the legal requirements within the Holder's jurisdiction for the purchase of the Securities, (b) any foreign exchange restrictions applicable to such purchase, (c) any governmental or other consents that may need to be obtained, and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Securities. The Holder's subscription, payment for and continued beneficial ownership of the Securities will not violate any applicable securities or other laws of the Holder's jurisdiction.

4.7 **Forward-Looking Statements**. With respect to any forecasts, projections of results and other forward-looking statements and information provided to the Holder, the Holder acknowledges that such statements were prepared based upon assumptions deemed reasonable by the Company at the time of preparation. There is no assurance that such statements will prove accurate, and the Company has no obligation to update such statements.

5. **Restrictive Legends**. The Holder understands and agrees that all certificates evidencing the Exercise Shares may bear the following legend:

(a) "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATES IN THE UNITED STATES. THESE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER THE SECURITIES ACT AND THE APPLICABLE STATE SECURITIES LAWS, PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. THE ISSUER OF THESE SHARES MAY REQUIRE AN OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER TO THE EFFECT THAT ANY PROPOSED TRANSFER OR RESALE IS IN COMPLIANCE WITH THE SECURITIES ACT AND ANY APPLICABLE STATE SECURITIES LAWS."

(b) "THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO TRANSFER RESTRICTIONS AS SET FORTH IN THAT CERTAIN COMMERCIALIZATION AND REFERENCE LABORATORY AGREEMENT, BY AND BETWEEN THE COMPANY AND TEMPUS LABS, INC., DATED AS OF THE EFFECTIVE DATE (AS DEFINED THEREIN), AS MAY BE AMENDED FROM TIME TO TIME, AND MAY NOT BE TRANSFERRED EXCEPT IN COMPLIANCE THEREWITH."

In connection with any sale or other transfer of Exercise Shares that complies with all applicable securities laws and the transfer restrictions in the Commercialization Agreement, and subject to the Company's and/or the Transfer Agent's receipt from the Holder of the Transfer Documents, the Company shall, within two (2) Trading Days of any request therefor from the Holder that is accompanied by the Transfer Documents, (A) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall make a new, unlegended entry for such book entry position Exercise Shares, and (B) cause its counsel to deliver to the Transfer Agent one or more opinions to the effect that the removal of such legends in such circumstances may be effected under the Securities Act and the terms of the Commercialization Agreement if required by the Transfer Agent to effect the removal of the legend in accordance with the provisions

hereof. Any Exercise Shares subject to legend removal under this paragraph may be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's prime broker with the DTC System as directed by the Holder. The Company shall be responsible for the fees of its Transfer Agent and all DTC fees associated with such issuance.

6. Adjustment of Exercise Price and Number of Exercise Shares; Fractional Shares.

6.1 Changes in Securities. In the event of changes in the class and/or series of equity securities of the Company comprising the Exercise Shares by reason of stock dividends, splits, recapitalizations, reclassifications, combinations or exchanges of shares, reorganizations, or other similar transactions, the number and class and/or series of Exercise Shares available under this Warrant in the aggregate and the Exercise Price shall be correspondingly adjusted to give the Holder of this Warrant, on exercise for the same aggregate Exercise Price, the total number and class and/or series of shares as the Holder would have owned had this Warrant been exercised prior to the event and had the Holder continued to hold such shares until after the event requiring adjustment. The form of this Warrant need not be changed because of any adjustment in the number of Exercise Shares subject to this Warrant.

6.2 Fractional Shares. No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All Exercise Shares (including fractions) to be issued upon exercise of this Warrant shall be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the then current fair market value of one Exercise Share by such fraction.

7. No Stockholder Rights; No Settlement in Cash. This Warrant in and of itself shall not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company. Without limiting any rights of a Holder to receive Exercise Shares on a "cashless" or net-exercise basis pursuant to Section 2.2 and Section 2.3, in no event shall the Company be required to net cash settle an exercise of this Warrant.

8. Transfer of Warrant. In addition to any other restrictions on transfer set forth in this Warrant, neither this Warrant nor any interest therein shall be transferred or assigned, in whole or in part, directly or indirectly, without the prior written consent of the Company, and any attempted transfer or assignment without such consent shall be void; provided, however, that this Warrant may be transferred without such consent in compliance with applicable laws and the provisions of the Commercialization Agreement, including Section 1.g thereof. Subject to the foregoing restrictions, applicable laws and the restriction on transfer set forth on the first page of this Warrant, in connection with any transfer of this Warrant, the Holder shall deliver this Warrant and the form of assignment attached hereto as **Exhibit B** to the Company, and the transferee shall sign an investment representation letter in form and substance satisfactory to the Company.

9. Lost, Stolen, Mutilated or Destroyed Warrant. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as this Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

10. Cumulative Remedies. The rights and remedies provided in this Warrant are cumulative and are not exclusive of, and are in addition to and not in substitution for, any other rights or remedies available at law, in equity or otherwise.

11. Equitable Relief. Each of the Company and the Holder acknowledges that a breach or threatened breach by such party of any of its obligations under this Warrant would give rise to irreparable harm to the other party hereto for which monetary damages would not be an adequate remedy and hereby agrees that in the event of a breach or a threatened breach by such party of any such obligations, the other party hereto shall, in addition to any and all other rights and remedies that may be available to it in respect of such breach, be entitled to equitable relief, including a restraining order, an injunction, specific performance and any other relief that may be available from a court of competent jurisdiction.

12. Notices, etc. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given (a) upon personal delivery to the party to be notified, (b) when sent by electronic transmission if sent during normal business hours of the recipient, if not, then on the next Business Day, (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to each of the Company and the Holder at the address listed on their respective signature pages hereto or at such other address as the Company or Holder may designate by ten days' advance written notice to the other party.

13. Successor and Assigns. Subject to compliance with the restrictions on transfer set forth in this Warrant, this Warrant and the rights evidenced hereby shall be binding upon and shall inure to the benefit of the parties hereto and the successors of the Company and the successors and permitted assigns of the Holder, and such successors and/or permitted assigns of the Holder shall be deemed to be a Holder for all purposes hereunder.

14. No Third-Party Beneficiaries. This Warrant is for the sole benefit of the Company and the Holder and their respective successors and, in the case of the Holder, permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other person any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Warrant.

15. Headings. The headings in this Warrant are for reference only and shall not affect the interpretation of this Warrant.

16. Amendment and Modification; Waiver. Except as otherwise provided herein, this Warrant may only be amended, modified or supplemented by an agreement in writing signed by the Company and the Holder. No waiver by the Company or the Holder of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No waiver by any party shall operate or be construed as a waiver in respect of any failure, breach or default not expressly identified by such written waiver, whether of a similar or different character, and whether occurring before or after that waiver. No failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Warrant shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

17. Severability. If any term or provision of this Warrant is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Warrant or invalidate or render unenforceable such term or provision in any other jurisdiction.

18. Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

19. Governing Law. This Warrant and all rights, obligations and liabilities hereunder shall be governed by and construed under the laws of the State of Delaware as applied to agreements among

Delaware residents, made and to be performed entirely within the State of Delaware without giving effect to conflicts of laws principles.

20. Counterparts. This Warrant may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. Counterparts may be delivered via facsimile, electronic mail (including .pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[Signature pages follow]

The parties have caused this Warrant to be executed as of the date first written above.

COMPANY:

Personalis, Inc.

By: /s/ Stephen Moore

Name: Stephen Moore
Title: VP, General Counsel & Corp. Sec.

Email:

Address: 6600 Dumbarton Circle
Fremont, California 94555

The parties have caused this Warrant to be executed as of the date first written above.

HOLDER:

Tempus Labs, Inc.

By: /s/ Jim Rogers

Name: Jim Rogers
Title: Treasurer and CFO

Email:

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Exhibit A

NOTICE OF EXERCISE

TO: Personalis, Inc.

(1) ☐ The undersigned hereby elects to purchase _____ shares of Common Stock (the "***Exercise Shares***") of Personalis, Inc. (the "***Company***") pursuant to the terms of the attached Warrant.

(2) The Holder intends that payment of the Exercise Price shall be made as (check one):

☐ Cash Exercise

☐ "Cashless Exercise" under Section 2.2 of the Warrant

(3) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of $_____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(4) Please issue a certificate or certificates representing said Exercise Shares in the name of the undersigned or in such other name as is specified below:

_____

(5) The undersigned represents and warrants as follows:

(a) By its delivery of this Notice of Exercise, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 2.4 of the Warrant to which this notice relates.

(b) [The undersigned acknowledges and agrees that the Exercise Shares are subject to the provisions of Sections 1.f and 1.g of the Commercialization Agreement (as defined in the attached Warrant).] (To be included if the Holder is Tempus Labs, Inc. or any Affiliate thereof.)

HOLDER: Tempus Labs, Inc.

By: _____

Name:
Title:

Email: _____

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Dated: _____

Exhibit B

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

For Value Received, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____

(Please Print)

HOLDER:

Tempus Labs, Inc.

By: _____

Name:
Title:

Email: _____

Address: 600 West Chicago Ave.
Suite 510
Chicago, Illinois 60654

Dated: _____

Acknowledged and Agreed: Assignee

(if an individual)

Signature: ___

(if a trust)

Signature: ___

_____, as [co-]trustee of the _____

(if an entity)

By: ____
Name:___
Title:____

Address: _____

Email: _____

NOTE: The Holder's signature to this Assignment Form must correspond with the name as it appears on the face of the foregoing Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

Any terms that are capitalized but not defined in this Exhibit B have the meanings ascribed to them in the foregoing Warrant.

In accordance with Item 601(b)(10)(iv) of Regulation S-K, information indicated with "[***]" has been redacted because it is both not material and is the type that the registrant treats as private or confidential.

Commercialization and Reference Laboratory Agreement

This Commercialization and Reference Laboratory Agreement ("Agreement") is entered into by and between Tempus Labs, Inc., with its principal place of business at 600 West Chicago Ave., Suite 510, Chicago, Illinois 60654 ("Tempus"), and Personalis, Inc., with its principal place of business at 6600 Dumbarton Circle, Fremont, CA 94555 ("Personalis"). Tempus and Personalis may each be referred to individually as a "Party" and collectively as the "Parties."

Background

Tempus is a precision medicine company dedicated to improving healthcare through its proprietary genomic sequencing, data structuring, and analytics technology and related services. Personalis is a precision oncology company committed to transforming active management of cancer through personalized testing. The Parties would like to collaborate to develop, commercialize, and make the Personalis Assay (defined below) more widely available to ordering clinicians as an integral part of the Tempus platform to improve patient outcomes, and to make de-identified molecular residual disease ("MRD") sequencing data available to life sciences companies, academic researchers, and other customers for the purpose of promoting discovery and innovation in healthcare.

Agreement

In consideration of the mutual promises described below, the Parties agree as follows:

1. Obligations of the Parties.

a. *Services*. During the Term (defined below), the Parties will provide the services and perform the activities described in the Exhibits attached hereto ("Services"):

Exhibit	Description
Exhibit A	Market Development Services
Exhibit B	Reference Laboratory Services
Exhibit C	Commercialization Activities
Exhibit D	Data Activities
Exhibit E	Quality Activities
Exhibit F	Mutual Security Obligations
Exhibit G	Form of Warrant to Purchase Common Stock of Personalis

b. *Joint Steering Committee*. No later than [***] after the Effective Date (defined below), the Parties will establish a Joint Steering Committee ("JSC") to oversee, review, and coordinate activities of the Parties under this Agreement.

i. *JSC Composition*. The JSC shall be composed of four representatives, two from Tempus and two from Personalis, or such other equal number of representatives from each Party as may be agreed from time to time by the Parties. At the invitation of the JSC representatives, other colleagues from Tempus or Personalis may attend JSC meetings as necessary as

non-voting representatives. A Tempus representative and a Personalis representative will serve as co-chairpersons of the JSC.

ii. *JSC Operation*. The JSC shall meet quarterly, or more frequently as necessary, at a mutually agreeable time and place. A quorum of the JSC will be [***] of the members, [***] from each Party. Each Party shall bear its own personnel and travel costs and expenses relating to JSC meetings and members may attend meetings remotely by video or telephone conference. All decision making will be made by unanimous mutual written agreement of the Parties' respective representatives on the JSC. The JSC will not have the power to amend or modify the Agreement or obligate either Party to any act or omission not required under this Agreement.

iii. *JSC Responsibilities*. In addition to overseeing the activities under this Agreement (including managing logistics and operations of the Agreement) and providing a forum for discussion of the Parties' Services, activities, and obligations under the Agreement (including quality metrics related to the Services) and reimbursement issues, the JSC shall have the following responsibilities, and any additional responsibilities as agreed to in writing by the Parties from time to time:

(a) Within [***] after establishing the JSC, the JSC will reach an agreement on a plan for obtaining reimbursement of the Personalis Assay for the Indications (as defined on Exhibit A), and an operational plan for implementing the reference laboratory and related Services described on Exhibit B, including delivery of Specimens (as defined on Exhibit B) to Personalis, and establishment of a technical integration. The Parties will work together in good faith to promptly establish the agreed upon operational plan, and except as otherwise agreed herein, each Party agrees to be responsible for its own costs and expenses associated with implementing the agreed upon operational plan.

(b) The JSC will oversee and monitor regularly the implementation of all further Services contemplated by Exhibits C, D, and E, including the commercialization, data, and quality activities.

(c) Monitor the number of patients tested to ensure that it does not and will not exceed Personalis' [***] set forth in Exhibit A, unless otherwise permitted under Exhibit A or agreed by the JSC.

(d) Help ensure successful development, management, and performance of the activities hereunder, including overseeing specific objectives, timelines, staffing levels, and budget.

(e) Periodically review payments received by each Party to assess the continued fair market value for provided Services.

(f) Consider any proposals for amendments to the Agreement; *provided, however,* that the JSC will not have the power to amend or modify the Agreement, or obligate either Party to any act or omission not required under this Agreement.

(g) Review, consider, and evaluate project ideas submitted by the Parties.

(h) Consider and attempt to resolve any and all issues and disputes arising under the Agreement, including but not limited to disputes resulting from the activities or obligations of the Parties; however, any resolution agreed to by the Parties through the JSC must be formally approved of in writing by each Party's authorized signatory.

iv. *JSC Disagreements*. Disagreements among the JSC will be resolved via good-faith discussions; *provided*, that in the event of a disagreement that cannot be resolved within [***] after the date on which the disagreement arose, the matter shall be referred to the Senior Officers. Such Senior Officers shall use good faith efforts to resolve promptly such matter within [***] after the matter has been referred to the Senior Officers. If the Senior Officers are unable to resolve the disagreement within [***], then the Parties agree to preserve the status quo, and any proposed changes to then-existing contractual requirements will require the written approval of each Party. "Senior Officers" means (a) with respect to Tempus, the Tempus CEO; and (b) with respect to Personalis, the Personalis CEO.

c. *Performance Standards.* Each Party will perform its obligations under this Agreement in a professional, workmanlike manner in accordance with (i) generally accepted industry best practices using personnel appropriately skilled and trained in the art of the Services and, as necessary, holding all required credentials to perform the Services; and (ii) all applicable federal, state, and local laws.

d. *Tempus Warrants.*

i. *First Warrant.* In consideration of Tempus' contributions as described herein, Personalis shall issue to Tempus within 10 days of the Effective Date, a warrant to purchase from Personalis up to four million six hundred nine thousand four hundred (4,609,400) shares of common stock, par value $0.0001 per share, of Personalis (the "Common Stock"), at an exercise price equal to one dollar and fifty cents ($1.50) per share (the "First Warrant"). The First Warrant shall be exercisable for cash solely at the option of Tempus on or before December 31, 2024. The First Warrant shall be substantially in the form attached hereto as Exhibit G.

ii. *Second Warrant*. Separate and independent from the First Warrant, in consideration of Tempus' contributions as described herein, Personalis shall issue to Tempus within 10 days of the Effective Date, a warrant to purchase from Personalis up to four million six hundred nine thousand four hundred (4,609,400) shares of Common Stock at an exercise price equal to two dollars and fifty cents ($2.50) per share (the "Second Warrant" and, together with the First Warrant, the "Warrants"). The Second Warrant shall be exercisable for cash solely at the option of Tempus on or before December 31, 2025. The Second Warrant shall be substantially in the form attached hereto as Exhibit G.

e. *Standstill Agreement*.

i. *Generally.* Tempus agrees that, (x) until the date that the Parties' exclusivity obligations expire or terminate under Section 3 of Exhibit A hereto, whenever Tempus (together with its Affiliates) owns at least 9,218,800 shares of Common Stock (which number is subject to appropriate adjustment for any stock dividends, splits, recapitalizations, reclassifications, combinations or the like) and (y) from the Effective Date until the one year anniversary of the Effective Date, whenever the exclusivity obligations contemplated herein expire or terminate and Tempus (together with its Affiliates) owns at least 5 percent of the outstanding Common Stock of Personalis (each such period, the "Standstill Period"), without Personalis' prior written consent, Tempus and its Affiliates shall not in any manner, directly or indirectly: (1) effect, seek, offer or propose (whether publicly or otherwise) to effect, participate in or facilitate or encourage any other person to effect, seek, offer or propose (whether publicly or otherwise) to effect or participate in, (a) any acquisition of, or obtaining any economic interest in, any securities (including through exercise of the First Warrant and/or the Second Warrant) or beneficial ownership thereof (directly or by means of any derivative securities), or rights or options to acquire, or obtain economic interest in, any securities or beneficial ownership thereof (directly or by means of any derivative securities), or any assets, indebtedness or businesses of Personalis (other than acquisitions or licenses of assets in the ordinary course of business), (b) any tender

offer or exchange offer, merger or other business combination involving Personalis or any of its assets, (c) any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to Personalis, or (d) any "solicitation" of "proxies" (as such terms are used in the Securities Exchange Act of 1934, as amended (the "1934 Act"), and Rule 14a-1 promulgated thereunder) or consents to vote any securities of Personalis, including soliciting consents or taking any other action with respect to the calling of a special meeting of Personalis' stockholders; (2) form, join or in any way participate in a "group" (as defined under the 1934 Act) with respect to Personalis; (3) otherwise act, alone or in concert with others, to seek representation on or to control the board of directors or policies of Personalis or to obtain representation on the board of directors of Personalis; (4) disclose or direct any person to disclose, any intention, plan or arrangement inconsistent with the foregoing; (5) take any action that could reasonably be expected to result in a request by a court of competent jurisdiction or by a governmental body to disclose, or could cause or require either Party to disclose or make a public announcement regarding, any of the transactions contemplated by this Agreement or all or any part of the information contained in the Confidential Information or any matter of the types set forth in this paragraph; (6) advise, assist or knowingly encourage or direct any person to advise, assist or encourage any other persons in connection with any of the foregoing; or (7) request of Personalis or any of its Representatives, directly or indirectly, that Personalis amend or waive any provision of this paragraph (including this sentence); *provided* that, nothing in the foregoing shall restrict Tempus from (x) confidentially communicating to Personalis' board of directors, chief executive officer or chief financial officer any non-public proposals regarding potential transactions in such a manner as would not reasonably be expected to require public disclosure thereof under any law applicable to Personalis or its Representatives or to Tempus or its Representatives; *provided* that any such communication shall first be privately directed to Personalis' chief executive officer and chief financial officer or (y) engaging in discussions with third party financing sources with respect to financing a transaction involving Personalis; *provided* that no Confidential Information of Personalis may be made available to such financing sources without Personalis' prior written consent.

ii. *Suspension and Reinstatement of Standstill Agreement.* Despite the foregoing, each of the restrictions contained in the immediately preceding paragraph shall lapse at such time as (x) Personalis (1) commences a process to evaluate entering into a definitive agreement with any third party with respect to a merger, sale of assets or securities (including a tender offer or exchange offer) or other business combination as a result of which such third party would succeed to or acquire all or substantially all of the voting securities or assets of Personalis (a "Change of Control Transaction"), (2) exchanges bona fide term sheets, engages in bona fide negotiations, or undertakes such other activities with such third parties where Personalis exchanges confidential information with such third parties, and (3) any one of such third parties with whom Personalis is so exchanging or engaging is not subject to a standstill agreement with limitations similar to those set forth in the preceding paragraph (for clarity, such limitations may be included in another agreement, such as a confidentiality or non-disclosure agreement); or (y) if a third party launches a tender offer, exchange offer, or any other publicly announced unsolicited offer with respect to a Change of Control Transaction; *provided* that in the event of either (x) or (y) such lapsed restrictions shall automatically be reinstated from and after such time, if any, that Personalis notifies Tempus (email being sufficient) or (if such process was publicly announced) publicly announces that such evaluation process to enter into a definitive agreement with such third party has been terminated, or such third party announces that it no longer intends to pursue or is otherwise withdrawing such tender offer or exchange offer with respect to a Change of Control Transaction, as applicable.

iii. *Notification Requirements.* Without limiting the foregoing in this Section 1.e, in the event that during the Standstill Period Personalis intends to solicit proposals or indications of interest from third parties for a Change of Control Transaction and Personalis actually

commences such solicitation, or Personalis exchanges bona fide term sheets, or engages in bona fide negotiations, or undertakes such other activities with such third parties for a Change of Control Transaction that involve the exchange of any confidential information, whether or not publicly announced, Personalis will notify Tempus thereof (email being sufficient) within seven (7) days of actually commencing such solicitation or Personalis exchanging such term sheets or engaging in such bona fide negotiations or exchanging such confidential information, including whether each such third party has entered into a standstill agreement as contemplated by subparagraph (ii) above; provided that in no event shall Personalis be required to notify Tempus on more than one occasion under this sentence.

iv. *Tempus Representations.* Tempus acknowledges that, as of the time of the execution of this Agreement, neither it nor its Affiliates beneficially own, directly or indirectly, any debt or equity securities of Personalis or any rights or options to acquire any such securities (or beneficial ownership thereof).

f. *Voting of Shares*. During the period commencing on the Effective Date and ending on the later of (x) the date that the Parties' exclusivity obligations expire or terminate under Section 3 of Exhibit A hereto and (y) the one year anniversary of the Effective Date (the "Voting Agreement Duration"), in any vote or action by written consent of the stockholders of Personalis regarding Specified Voting Matters (as defined below), solely with respect to voting securities of Personalis obtained pursuant to the Warrants described in this Agreement (the "Voting Securities"), Tempus shall, and shall cause its Affiliates to, vote (in person, by proxy or by action by written consent, as applicable) with respect to all Voting Securities as to which it is entitled to vote in accordance with the recommendations of the majority of Personalis' board of directors, if any. During the Voting Agreement Duration, Tempus shall be, and shall cause each of its controlled Affiliates to be, present in person or represented by proxy at all meetings of stockholders of Personalis to the extent necessary so that all Voting Securities as to which they are entitled to vote shall be counted as present for the purpose of determining the presence of a quorum at such meeting. Solely in the event of a failure by Tempus to act in accordance with Tempus's obligations as to voting or executing a written consent pursuant to this Section 1.f, Tempus hereby irrevocably grants to and appoints Personalis' chief executive officer, in his/her capacity as an officer of Personalis, Tempus's proxy and attorney-in-fact (with full power of substitution), for and in the name, place and stead of Tempus, to represent, vote and otherwise act (by voting at any meeting of stockholders of Personalis, by written consent in lieu thereof or otherwise) with respect to the Voting Securities owned or held by Tempus during the Voting Agreement Duration, to the same extent and with the same effect as Tempus might or could do under applicable law, rules and regulations. The proxy granted pursuant to this Section 1.f is coupled with an interest and shall be irrevocable. Tempus will take such further action and will execute such other instruments as may be necessary to effectuate the intent of this proxy (including at the time that Tempus exercises the First Warrant and/or the Second Warrant).Tempus hereby revokes any and all previous proxies or powers of attorney granted with respect to any voting securities of Personalis that may have heretofore been appointed or granted with respect to the Specified Voting Matters referred to in this Section 1.f, and no subsequent proxy (whether revocable and irrevocable) or power of attorney with respect to the Specified Voting Matters shall be given by Tempus or its Affiliates. Similarly, Tempus agrees that it will not enter into any agreement, arrangement or understanding with respect to the voting of any Voting Securities and will not deposit any Voting Securities into a voting trust. Tempus agrees that any Voting Securities issued to Tempus during the Voting Agreement Duration shall contain an appropriate legend related to this Section 1.f. This proxy will survive until expiration of the Voting Agreement Duration, and shall not be subject to any other limitation of time (and for the avoidance of doubt this proxy shall remain effective beyond three years from the Effective Date to the extent the Voting Agreement Duration has not yet expired as of the three year anniversary of the Effective Date). This proxy shall not terminate by operation of law, bankruptcy, insolvency, dissolution, death or incapacity of Tempus and shall be binding on all heirs, successors and assigns of Tempus. The power of attorney granted herein is a durable power of attorney and shall survive the bankruptcy, insolvency, dissolution, death or incapacity of Tempus. Notwithstanding the foregoing, upon expiration of the Voting Agreement

Duration, this proxy shall terminate. For purposes of this Agreement, "Specified Voting Matters" means director nominations for any meeting of Personalis' stockholders occurring on or before December 31, 2025, amendments to Personalis' amended and restated certificate of incorporation to increase the number of authorized shares of Common Stock if and only if such amendments are intended to adjust Personalis' equity plans, adjustments to Personalis' equity plans, stock award repricings, executive compensation matters (including "say on pay" and "say on pay frequency" votes), and ratification of auditors.

g. *Restrictions on Transfer.*

i. During the period commencing on the Effective Date and ending on the last day of the Voting Agreement Duration (the "Restricted Period"), without providing Personalis with two (2) business days' advance written notice, Tempus will not, and will cause its Affiliates not to, Transfer any shares of capital stock of Personalis or any other Personalis securities, including the Warrants and shares of Common Stock issued upon exercise thereof (collectively, the "Personalis Securities"), owned or held by Tempus (or an Affiliate) representing more than five percent (5%) of Personalis' total shares of capital stock outstanding in any Transfer transaction.

ii. For purposes of this Agreement, "Transfer" by any person means to sell, transfer, assign, pledge, encumber, hypothecate or similarly dispose of, or to enter into any contract, option or other arrangement or understanding with respect to the sale, transfer, assignment, pledge, encumbrance, hypothecation or similar disposition of, any securities beneficially owned by such person or of any interest (including any voting interest) in any securities beneficially owned by such person. For the avoidance of doubt, a transfer of control of the direct or indirect beneficial ownership of securities is a Transfer of such securities for purposes of this Agreement; provided that nothing herein shall be deemed to prohibit a change of control of Tempus.

2. Compensation.

a. *Fees and Invoicing*. Each Party agrees to pay the other Party the fees listed in each applicable Exhibit requiring such payments. All invoices and all payments will be in US Dollars. Invoices will contain sufficient detail for the paying Party to verify that the applicable Services were provided in accordance with this Agreement. A Party may withhold payment of the portion of any invoice that contains fees or expenses that the Party believes, in good faith, were not provided or incurred in accordance with this Agreement. Any payments due will be paid within [***] following the Party's receipt of an undisputed invoice. The Parties will work together in good faith to promptly address any billing disputes. Any undisputed refunds due to a Party will be made within [***] after a request.

Invoices to Tempus should be directed to: ap@tempus.com

Invoices to Personalis should be directed to: ap@personalis.com

b. *Fair Market Value*. Tempus and Personalis agree that the payments set forth in this Agreement are consistent with the fair market value of such commitments, rights, and Services in arms-length transactions and determined without reference to, or consideration of, in any manner, the volume or value of any services reimbursed by payors or other business generated between the Parties. In the event of a change in market economics that results in the agreed upon consideration being inconsistent with fair market value (as reasonably determined by either Party in good faith), the Parties will promptly and in good faith renegotiate the terms of this Agreement to ensure it is consistent with applicable law, and any non-performance during such renegotiation will be excused to the extent it is related to compliance concerns. If the Parties are unable to reach agreement within [***] of commencing negotiations, either Party may terminate this Agreement in accordance with Section 3.c.

c. Tempus represents, warrants and covenants that neither it nor any of its Affiliates, agents or contractors will seek or accept payment for Personalis' Services from any third party, including federal or state health care programs. Tempus represents, warrants and covenants that neither it, nor any of its Affiliates, agents or contractors, will bill or collect from any third party any fee for Specimen collection, preparation or processing in connection with Personalis' Services.

3. Term and Termination.

a. *Term.* The term of this Agreement commences on the Effective Date and, unless earlier terminated in accordance with this Section 3, expires at the later of (i) five (5) years thereafter, or, (ii) at the conclusion of the final Tempus Exclusivity Period (as defined in Exhibit A) (the "Initial Term"). The Parties may mutually agree in writing to extend the Term for successive, one (1)-year terms (each a "Renewal Term" and collectively with the Initial Term, the "Term").

b. *Termination*.

i. At any time after the one-year anniversary of the Effective Date, either Party may terminate this Agreement for convenience with eighteen (18) months' prior written notice to the other Party.

ii. Either Party may terminate this Agreement immediately upon written notice to the other Party if (a) a Party is charged with any crime or found civilly liable for violating any federal, state, or local laws or regulations; (b) a Party is the subject of a debarment proceeding under 21 U.S.C. § 335a; (c) a Party is excluded from participation in Medicare, Medicaid, or any other federal or state health care program; (d) a Party is subject to any proceeding, claim, or investigation that could result in such debarment or exclusion; or (e) the other Party (1) files a petition in bankruptcy under Title 11, United States Code, as amended (the "Bankruptcy Code"), or an involuntary petition in bankruptcy is filed under the Bankruptcy Code with respect to the other Party and such petition remains undismissed for [***], (2) makes an assignment for the benefit of its creditors, or consents to the appointment of a receiver or trustee for all or substantially all of the business assets or operation of the other Party, or (3) dissolves or ceases to do business (in each case, whether or not the applicable Party has provided notice of such event) (any of (1), (2) or (3) a "Bankruptcy Event").

iii. Either Party may terminate this Agreement upon [***] prior written notice to the other Party if (a) any material change to a Party's professional or business licenses, permits, or certifications occurs and such change adversely affects such Party's ability to perform its Services and obligations hereunder; or (b) a Party or its personnel performing Services under this Agreement have any actual personal or professional conflicts of interest that materially adversely affect such Party's ability to provide the Services or perform its obligations in compliance with this Agreement (in each case, whether or not the applicable Party has provided notice of such event).

iv. Following material breach by a Party, the other Party may terminate the Agreement by providing the breaching Party with written notice that describes the breach with reasonable specificity. If the breaching Party does not cure the breach within [***] of such notice, then this Agreement will terminate at the completion of such cure period.

v. Either Party may terminate this Agreement with [***] written notice in accordance with Section 9(g) if the other Party effectuates an assignment of this Agreement that permits termination under Section 9(g).

c. *Regulatory Changes*. If either Party (the "Noticing Party") reasonably determines in good faith that a change in applicable law or regulation, or a change in how a current law or regulation is interpreted,

or under the circumstances described in Section 2.b, makes any part of this Agreement illegal or unenforceable, then the Noticing Party will provide the other Party with a proposed amendment to this Agreement to address such change or, with respect to the fair market value of payments under the Agreement, a proposal for restoring payments under the Agreement to be fair market value. The Parties will negotiate such amendment in good faith. If the Parties are unable to reach agreement within [***] of the initial notice, then either Party may terminate this Agreement immediately with written notice to the other Party. No liability will accrue to either Party for failure to perform under this Agreement during the period between notice under this Subsection and any amendment to or termination of this Agreement.

d. *Effect of Termination; Survival.* Upon any termination of this Agreement, to the extent feasible under the circumstances, the Parties will use commercially reasonable efforts to reach a mutually acceptable wind down plan for the purpose of avoiding adverse impacts to patient care. Sections 2 through 8 of the Agreement, Sections 2.b, 2.c, 3 and 4 of Exhibit A (for clarity, such survival of Exhibit A is limited to any payments or refunds due by either Party), Sections 3 and 4 of Exhibit D, and Exhibit F will survive termination or expiration of this Agreement.

4. Confidentiality and Intellectual Property.

a. *Confidential Information.* Any non-public information provided by a Party (the "Disclosing Party") to the other Party (the "Receiving Party") in connection with this Agreement, including specific terms and pricing, is the Disclosing Party's "Confidential Information." During the Term and the subsequent [***] period, the Receiving Party will maintain all Confidential Information in confidence and use it only as reasonably necessary to perform its obligations and exercise its rights under this Agreement. Confidential Information excludes information that (i) is publicly available through no fault of the Receiving Party or anyone to whom the Receiving Party made such information available; (ii) was lawfully obtained by the Receiving Party on a non-confidential basis from a third party; (iii) the Receiving Party can conclusively demonstrate was legally in its possession before the Disclosing Party provided it to the Receiving Party; or (iv) was independently developed by the Receiving Party or on its behalf without the use of any information provided to the Receiving Party by the Disclosing Party, as demonstrated by contemporaneous evidence. The Receiving Party will notify the Disclosing Party promptly upon learning of any non-permitted use or disclosure of the Disclosing Party's Confidential Information and use reasonable efforts to mitigate the effect of such breach.

b. *Return of Confidential Information.* Upon the expiration or termination of this Agreement, each Party will use commercially reasonable efforts to either return to the other Party or destroy all of the other Party's Confidential Information in its possession, including any copies or derivatives of Confidential Information, except for one (1) copy of the Disclosing Party's Confidential Information in the Receiving Party's possession, which the Receiving Party may retain solely to monitor the Receiving Party's surviving obligations of confidentiality and non-use. Notwithstanding the foregoing, neither Party will be obligated to return or destroy any Confidential Information stored in the ordinary course of business in its electronic backup or similar systems, or required by law to be retained, *provided* that any such retained Confidential Information will remain subject to the protections of this Agreement.

c. *Mandatory Disclosure of Confidential Information.* If a Party is legally required to disclose Confidential Information (by valid court order or otherwise), it will promptly notify the other Party and allow the other Party to oppose the disclosure. If, failing the entry of a protective order or other relief, the Party is compelled to disclose Confidential Information, it will (i) only disclose that part of the Confidential Information specifically required to be disclosed; and (ii) use reasonable efforts to obtain an order or other assurance that the disclosed information will be treated confidentially, *provided* in each case that the Party required to disclose Confidential Information shall use reasonable efforts to notify the other Party before making such disclosure.

d. *Privacy.* Tempus and Personalis agree to comply with all privacy and data security laws and regulations applicable to the activities and Services under this Agreement, including the Health Insurance Portability and Accountability Act of 1996, as amended ("HIPAA"). Tempus and Personalis acknowledge and agree that each is considered a "covered entity" ("Covered Entity") within the definitions set forth under HIPAA and, as such, agree to comply with all provisions under HIPAA applicable to Covered Entities. The Parties will adhere to the information security obligations set forth on Exhibit F. Additionally, on a periodic basis no more than [***], upon the reasonable request of either Party, the other Party shall complete a privacy and/or security assessment questionnaire. The Party completing the questionnaire represents and warrants that all information it provides in such security assessment questionnaire(s) is and will be true and accurate. The Party completing the questionnaire shall not materially reduce or modify its information security safeguards provided by such Party in the security assessment questionnaire(s).

e. *Deliverables*. For each Test performed by Personalis as part of the Services hereunder, Personalis will deliver (i) the Test report, (ii) the patient's ctDNA results generated using the Personalis Assay, consisting of ctDNA Status (Detected/Not Detected) and, if the ctDNA status is Detected, the ctDNA Fraction (represented in Parts Per Million) (collectively, "ctDNA Data"), (iii) [***], and (iv) if applicable, a discrete data rendering of the Test report and ctDNA Data (e.g., HL7, JSON, or CSV) ((i) through (iv) collectively "Deliverables"). The Parties will [***] and may use and share such Deliverables as allowed under applicable law. For clarity, Personalis will solely own all other data and information generated in connection with the Services (including any work-in-progress) performed by Personalis including any and all intellectual property rights therein and may use and share such data and information for any purpose permitted under applicable law.

f. *Background Intellectual Property.* Except to the extent expressly stated otherwise, this Agreement does not grant either Party a license to or any right in the other Party's Background Intellectual Property. "Background Intellectual Property" means all data, technology, software, formulas, utility models, techniques, and other tangible and intangible items, and the associated intellectual property rights therein, including but not limited to patents, know-how, registered designs, copyrights, or trade secrets, which are controlled by a Party and (i) in existence as of the Effective Date, or (ii) are conceived, discovered, reduced to practice or writing, generated, or developed by such Party, or otherwise coming into the control of the Party, during the Term, excluding Deliverables. Each Party will be and remains, at all times, the sole owner of the respective Party's Background Intellectual Property, including any replacements, improvements, updates, enhancements, derivative works, and other modifications to the same.

i. *Personalis and Tempus Assays.* Personalis shall own any and all replacements, improvements, updates, enhancements, derivative works, and other modifications to Personalis' NeXT Personal® Dx assay or such next generation assay that is part of this Agreement (collectively the "Personalis Assay"). Tempus shall own any and all replacements, improvements, updates, enhancements, derivative works, and other modifications to the Tempus xT and xE assays (each a "Tempus Assay").

ii. *License to Background Intellectual Property.* Tempus acknowledges that Personalis will use Personalis' Background Intellectual Property to perform Services and generate Deliverables. Without limiting Tempus' rights in the Deliverables, Tempus acknowledges that Personalis retains ownership of Personalis' Background Intellectual Property. However, to the extent Personalis' Background Intellectual Property is incorporated into any Deliverable in any manner, Personalis grants Tempus a non-exclusive, perpetual, irrevocable, unlimited, worldwide, sublicensable, and transferrable right to use such incorporated Background Intellectual Property solely for purposes of exercising its rights with respect to the applicable Deliverable (it being understood that nothing in this Section 4(f)(ii) shall convey, by implication, estoppel or otherwise, any right or license with respect to performing the Personalis Assay or any other assay covered by Personalis' Background Intellectual Property).

g. [***]

h. *Records*. Each Party will maintain all materials, data, and documentation obtained or generated by such Party in the course of preparing for and providing their respective Services ("Records") in accordance with and for the duration required by applicable law and certification requirements.

5. Representations, Warranties, and Covenants.

a. *Authority and Responsibility.* The Parties represent, warrant, and covenant that they (i) have full right and authority to enter into this Agreement under applicable law; (ii) will comply with applicable law in carrying out their respective Services and obligations under this Agreement; (iii) have and will maintain any required approvals, licenses, certifications, and permits applicable to the performance of their respective activities or Services under this Agreement; and (iv) are not under any contractual or other obligation or restriction that is inconsistent with such Party's performance of its responsibilities or obligations under this Agreement and will not enter into an agreement that would conflict with such Party's performance of its responsibilities or obligations under this Agreement. Each Party is fully responsible for all acts and omissions of the respective Party's personnel in connection with this Agreement and their compliance with its terms.

b. *Exclusion and Debarment.* Each Party represents and warrants that neither the Party nor any of its personnel performing activities or Services under this Agreement (i) have been the subject of a debarment proceeding under 21 U.S.C. § 335a; (ii) are excluded from participation in Medicare, Medicaid, or any other federal or state health care program; or (iii) are subject to any proceeding, claim, or investigation that could result in such debarment or exclusion. If any of the foregoing occur during the Term of this Agreement, the impacted Party will promptly notify the other Party and take such actions as are necessary to ensure compliance with the requirements of this Section 5.b.

c. *Compliance with Laws*. In the performance of their respective duties and responsibilities pursuant to this Agreement, the Parties will comply with the requirements of all applicable laws, including, without limitation, those respecting the licensure and regulation of clinical laboratories and physician practice. Personalis will maintain its respective laboratory licenses in good standing at all times during the Term of this Agreement. In addition, the Parties have not taken and shall not take any action, directly or indirectly, in violation of any applicable fraud and abuse laws, including, without limitation, 18 U.S.C. § 287, 42 U.S.C. § 1320a-7b et. seq. ("Federal Anti-Kickback Statute"), 42 U.S.C. § 1395nn ("Stark Law"), and the applicable regulations and reimbursement guidance published by the U.S. Department of Health and Human Services and the Centers for Medicare and Medicaid Services ("CMS") and state agencies responsible for administering the Medicaid program, as well as similar state laws that prohibit health care providers and facilities from paying or receiving remuneration in exchange for the referral of health care goods or services, restrict financial relationships between physicians and health care providers to whom they refer patients or specimens, and provide for sanctions against physicians and health care providers for engaging in acts or omissions that violate state licensure and health care laws and regulations.

d. *Anti-Corruption*. Neither Party has received or been offered any illegal or improper payment, bribe, kickback, gift, or other item of value from an employee or agent of the other Party in connection with this Agreement. The Parties intend for their relationship and interactions under this Agreement to comply with the following: (i) the Federal Anti-Kickback Statute and the associated safe harbor regulations; (ii) the Stark Law; and (iii) any state-law corollaries to the Federal Anti-Kickback Statute and the Stark Law. Accordingly, no part of any remuneration provided under this Agreement or any other agreement between the Parties is a prohibited payment in exchange for recommending or arranging for the referral of business or the ordering of items or services, or otherwise intended to induce illegal referrals of business.

e. *Non-Discrimination.* All services provided to Tempus will be provided in compliance with all applicable laws prohibiting discrimination on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, handicap, or veteran status.

f. *Provider Choice.* The existence of this Agreement will not obligate Tempus or any provider to refer any specimens or testing services to Personalis, and Tempus (except to the extent expressly set forth in this Agreement) and all providers remain free at all times to refer any and all testing to the laboratory of their choice.

6. Liability.

a. *Indemnification by Tempus.* Tempus will defend, indemnify, and hold Personalis, its board, officers, employees, agents, successors, and assigns harmless from and against any costs, losses, damages, liabilities, expenses, demands and judgments, including court costs and reasonable attorney fees (collectively, "Losses") that arise out of a third party claim (i) based on (1) Tempus' breach of this Agreement or (2) the negligent acts or willful misconduct of Tempus or its employees or agents arising out of performance of this Agreement; (ii) based on Tempus' violation of applicable law; or (iii) alleging that Tempus' Background Intellectual Property or other intellectual property used by Tempus in providing Tempus' Services hereunder or otherwise used, deployed, or licensed hereunder infringes any third-party rights. Tempus' obligations under this Subsection are Personalis' sole and exclusive remedy and Tempus' sole obligation for any alleged infringement of intellectual property. Tempus does not have any obligations under this Subsection for claims of infringement or misappropriation to the extent based upon or arising out of: (A) any of Tempus' Background Intellectual Property modified without Tempus' approval; (B) the use of any of Tempus' Background Intellectual Property in combination with materials not provided by Tempus (other than the use of Tempus' trademarks used in combination with Personalis trademarks, as contemplated hereunder); or (C) the use of any of Tempus' Background Intellectual Property other than as permitted under this Agreement.

b. *Indemnification by Personalis*. Personalis will defend, indemnify, and hold Tempus and its board, officers, employees, agents, successors, and assigns harmless from and against any Losses that arise out of a third party claim (i) based on (1) Personalis' breach of this Agreement or (2) the negligent acts or willful misconduct of Personalis or its employees or agents arising out of performance of this Agreement; (ii) based on Personalis' violation of applicable law; or (iii) alleging that the Personalis' Background Intellectual Property or other intellectual property used by Personalis in providing Personalis' Services hereunder or any associated Deliverable or otherwise used, deployed, or licensed hereunder infringes any third-party rights (whether by direct, contributory, or other means, including as a result of Tempus' provision of the Services contemplated herein). Except as otherwise set forth in this Agreement, Personalis' obligations under this Subsection are Tempus' sole and exclusive remedy and Personalis' sole obligation for any alleged infringement of intellectual property. Personalis does not have any obligations under this Subsection for claims of infringement or misappropriation to the extent based upon or arising out of: (A) any of Personalis' Background Intellectual Property modified without Personalis' approval; (B) the use of any of Personalis' Background Intellectual Property in combination with materials not provided by Personalis (other than the use of Personalis' trademarks used in combination with Tempus trademarks, as contemplated hereunder); or (C) the use of any of Personalis' Background Intellectual Property other than as permitted under this Agreement.

c. *Process*. The indemnification obligations in this Section are subject to the indemnified Party: (i) giving prompt notice to the indemnifying Party of the claim for which indemnification is sought; (ii) reasonably cooperating in its defense; and (iii) granting the indemnifying Party control over its defense and settlement. Any delay in notice will only excuse the indemnifying Party's obligations under this Section to the extent its defense of the claim is adversely affected. The indemnifying Party will not agree to any finding of fault, action, or forbearance by the indemnified Party without its advance written consent.

d. *Disclaimer.* UNDER NO CIRCUMSTANCES WILL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, EXEMPLARY, CONSEQUENTIAL, PUNITIVE, OR OTHER INDIRECT DAMAGES SUFFERED BY THE OTHER OR ANY OTHER PERSON ARISING FROM OR RELATED TO THIS AGREEMENT OR ANY SERVICES OR ACTIVITIES

HEREUNDER, REGARDLESS OF WHETHER THE PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY WERE OTHERWISE FORESEEABLE. EACH PARTY DISCLAIMS ALL WARRANTIES AND REPRESENTATIONS NOT EXPRESSLY SET FORTH IN THIS AGREEMENT. NEITHER PARTY WILL HAVE ANY LIABILITY FOR MEDICAL OR OTHER DECISIONS MADE BY THE OTHER PARTY, THE OTHER PARTY'S AFFILIATES, OR OTHER THIRD PARTIES, INCLUDING BUT NOT LIMITED TO ORDERING PROVIDERS, ON THE BASIS OF THE TEST RESULTS OR REPORTS OR OTHER DELIVERABLES PROVIDED BY PERSONALIS AND NEITHER PARTY WILL HAVE ANY LIABILITY TO THE OTHER PARTY OR THE OTHER PARTY'S AFFILIATES ARISING IN ANY WAY FROM THE OTHER PARTY'S USE OR EXPLOITATION OF ITS OWN BACKGROUND INTELLECTUAL PROPERTY. EACH PARTY'S TOTAL AND CUMULATIVE LIABILITY ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, WILL IN NO EVENT EXCEED [***]. THE LIMITATIONS SET FORTH IN THIS SECTION APPLY EVEN IF A PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. HOWEVER, THE LIMITATIONS SET FORTH IN THIS SECTION DO NOT APPLY TO EITHER PARTY'S PAYMENT OR INDEMNIFICATION OBLIGATIONS, OR BREACH OF SECTION 4 UNDER THIS AGREEMENT OR BREACH OF INTELLECTUAL PROPERTY RIGHTS SET FORTH ELSEWHERE IN THE AGREEMENT INCLUDING IN ANY EXHIBIT, OR INTENTIONAL MISCONDUCT. MOREOVER, ANY CLAIM, LIABILITY, DAMAGE, BREACH, OR VIOLATION THAT IS DIRECTLY RELATED TO THE MARKET DEVELOPMENT FEES (AS DEFINED ON EXHIBIT A) SHALL NOT EXCEED [***].

e. *Insurance.* During the Term, each Party will maintain the following insurance at its own expense: (i) commercial general liability insurance with limits not less than [***] per occurrence and [***] annual aggregate; (ii) professional liability/errors and omissions insurance with limits not less than [***]per occurrence and [***] annual aggregate; (iii) cyber liability insurance with limits not less than $5 million per occurrence and [***] annual aggregate; and (iv) workers' compensation insurance at statutory limits (minimum [***]). The insurance required above may be maintained through umbrella and/or self-insurance.

7. Notices.

a. *Required Notice*.

i. Each Party will promptly notify the other Party if: (1) any material change to the Party's professional or business licenses, permits, or certifications occurs and such change adversely affects their ability to perform their Services and obligations hereunder; (2) the notifying Party or its laboratory director(s) is/are the subject of any action or proceeding that could reasonably lead to disciplinary action relating to licensure, permit, or certifications (e.g., related to the Party's standing with a professional organization); (3) it receives an inquiry, action, or inspection by a regulatory authority relating to the Tempus Assay(s) or Personalis Assay, as applicable; (4) the notifying Party is charged with any crime or found civilly liable for violating any federal, state, or local laws or regulations; or (5) the notifying Party or its personnel performing Services under this Agreement have any actual personal or professional conflicts of interest that adversely affect the notifying Party's ability to provide the Services or perform its obligations in compliance with this Agreement.

ii. Personalis will immediately notify Tempus if (1) Personalis receives a going concern opinion from its independent auditor; (2) Personalis commences a voluntary case or other proceeding or files any petition seeking liquidation or other relief under any federal or state bankruptcy, insolvency, or other similar law; or (3) an involuntary proceeding is

commenced or an involuntary petition is filed against Personalis seeking liquidation or other relief under any federal or state bankruptcy, insolvency, or other similar law.

b. *Notice Process*. Any notices required in this Agreement will be in writing and delivered: (i) personally; (ii) by a nationally recognized overnight courier; or (iii) by U.S. certified mail, postage prepaid, return receipt requested. Notices will be sent to the address for each Party listed at the beginning of this Agreement. Notice to Tempus will be clearly identifiable as legal notices and will be addressed to the attention of the Tempus CEO, with a copy to Tempus' General Counsel. Notices to Personalis will be clearly identifiable as legal notices and will be addressed to the attention of the Personalis CEO, with a copy to Personalis' General Counsel. Either Party may change its notice address by notifying the other Party of its new address in accordance with this Subsection.

8. Dispute Resolution.

a. The Parties agree that all issues or disputes between the Parties arising out of or in connection with this Agreement (each a "Dispute"), including any issue or dispute regarding the interpretation, performance, enforcement, or termination of this Agreement, shall be resolved by the Parties in accordance with this Section 8.

b. Intentionally omitted.

c. Any Dispute shall be submitted for resolution by binding arbitration, which shall be conducted in the manner described in this Section 8.c:

i. *Conduct of the Arbitration*. Any arbitration pursuant to this Section 8.c shall be administered by the American Arbitration Association ("AAA") pursuant to the AAA's Commercial Arbitration Rules for Large, Complex disputes then in effect, except as modified below. The arbitration shall be conducted by three (3) qualified arbitrators (such arbitrators to be at least reasonably experienced in resolving comparable commercial disputes in the life sciences sector, and be neutral and completely independent of both Parties and their respective Affiliates) selected as follows: each Party shall appoint one (1) arbitrator by written notice to the other Party and the two Party-appointed arbitrators shall select the third arbitrator to serve as the Chairperson of the arbitration panel within thirty (30) days of their appointment, with all such arbitrators subject to the foregoing qualification requirements; if the Party-appointed arbitrators are unable to agree upon the third arbitrator, the third arbitrator shall be appointed by the AAA in accordance with the procedures set forth in the applicable Rules.

ii. *Arbitration Proceedings*. The Parties and the arbitrators shall use all reasonable efforts to complete any arbitration under this Section 8.c within six (6) months after the appointment of the arbitrators. It is the intent of the Parties that the arbitration be conducted in as expeditious and cost effective a manner as possible. In that regard, the Parties agree that discovery in any arbitration be limited as follows: (1) discovery shall be limited to the Parties or their respective Affiliates and, with respect to a Party's Affiliates, discovery shall be limited to that which is reasonably necessary to establish such Party's and its Affiliates' compliance with this Agreement; and (2) allowable document requests and exchanges shall be limited to documents that are directly relevant to the issues in dispute. The arbitration proceedings and all pleadings, responses and evidence shall be in the English language.

iii. *Decision of the Arbitrator(s)*. The arbitrators shall issue a reasoned decision or award, limited to the issues presented in the arbitration, and *provided* that no damages may be awarded that are inconsistent with the terms and conditions of this Agreement. The Parties agree that the decision or award rendered by the arbitrators shall be the sole, exclusive and binding remedy regarding any Dispute presented to the arbitrators and that the arbitrators may award reasonable costs (including reasonable attorney's fees) to the prevailing Party. Any decision or award of the arbitrators may be entered in any court of competent

jurisdiction for judicial recognition of the decision and an order of enforcement. Except and to the extent one or both Parties have a legal obligation under applicable law to do so, neither the existence or proceedings of the arbitration nor the decision of the arbitrators shall be made public without the joint consent of the Parties and each Party shall maintain the confidentiality of such proceedings and decision unless each Party otherwise agrees in writing; *provided* that either Party may make such disclosures as are permitted for Confidential Information of the other Party under Section 4.c above.

iv. *Arbitration on the Consideration of the Continuity License*. Notwithstanding subsections (i) through (iii) above, if a Dispute has been submitted by either Party pursuant to Section 5.b of Exhibit A requesting determination of the consideration for a Continuity License, then the following arbitration procedures shall apply:

The arbitration shall be conducted by one (1) qualified arbitrator (such arbitrator to be at least reasonably experienced in resolving comparable commercial disputes in the life sciences licensing and IP valuation sector, and be neutral and completely independent of both Parties and their respective Affiliates). If the Parties are unable to agree upon such arbitrator within ten (10) business days after delivery of the arbitration notice, the Parties shall request the AAA to appoint the arbitrator. The Parties agree that the arbitration shall be a "baseball arbitration"—each Party shall submit to the arbitrator and exchange with each other in advance of the hearing a license fee proposal for the Continuity License and the arbitrator shall be limited to awarding only one of the two proposals submitted. Each Party shall submit its proposal within fifteen (15) business days after the arbitrator is appointed. The arbitrator shall make the arbitration decision within thirty (30) days after both Parties submit their respective proposals and shall be permitted to conduct whatever hearing, or request such additional information, that the arbitrator deems necessary during such thirty (30)-day period.

v. *Location; Costs*. The arbitration proceeding shall be conducted in [***] or such other neutral location agreed to by the Parties. The Parties agree that they shall share the costs of arbitration according to the Commercial Arbitration Rules of the AAA, subject to a ruling of the arbitrator(s) on costs and reasonable attorneys' fees, which shall be awarded to the prevailing Party.

9. Miscellaneous.

a. *Governing Law.* This Agreement will be governed by and construed in accordance with the laws of the State of Delaware, without regard to its choice of law principles. The Parties consent to exclusive jurisdiction and venue of the federal and state courts in Delaware. The Parties will use good faith efforts to work together to resolve any disputes related to this Agreement, using mutually escalating discussions as needed.

b. *Force Majeure.* Neither Party will be liable for any failure or delay of performance to the extent resulting from a cause outside of its reasonable control, such as natural disaster, strike, fire, pandemic, governmental action, terrorism, or war.

c. *Relationship of Parties*. The Parties are independent contractors. This Agreement does not create any partnership, franchise, joint venture, agency, fiduciary, or employment relationship between the Parties.

d. *Entire Agreement; Amendments and Waivers*. This Agreement, which includes all Exhibits, Attachments, and amendments, is the entire understanding between the Parties on its subject matter and supersedes all prior or contemporaneous discussions, representations, and agreements, oral or written, between the Parties. There are no third-party beneficiaries to this Agreement. If any provision in this Agreement is held to be invalid or unenforceable, the remainder of the Agreement will remain enforceable to the fullest extent permitted by law, so long as such change does not

materially change the cost or benefit of the Agreement to a Party. Any term or provision of this Agreement may be amended, and the observance of any term of this Agreement may be waived, only by a writing signed by the Parties. The failure of any Party to enforce any term of this Agreement is not a waiver. The terms of any Exhibit will supersede the body of this Agreement to the extent necessary to address a direct conflict.

e. *Subcontracting.* This Agreement requires that each Party or its employees perform all of such Party's respective Services, except to the extent the other Party provides advance written consent to use of a subcontractor. Any subcontractor is subject to the terms of this Agreement that would otherwise apply to the subcontracting Party, and the subcontracting Party is responsible for the acts and omissions of its subcontractor to the same extent as it is responsible for its own acts and omissions.

f. *Binding Effect.* This Agreement is binding upon, and will inure to the benefit of, the successors and permitted assigns of the Parties.

g. *Assignment.* The assignment of this Agreement or any interest hereunder by either Party shall require written notice to and the written consent of the other Party; *provided, however,* that either Party may, without such consent, assign its rights and obligations under this Agreement to any Affiliate or to its successor in interest in connection with a merger, consolidation or sale of all or substantially all of its business assets and, in such event, such Affiliate or successor in assuming such assigning Party's rights and obligations under this Agreement covenants not to treat the other Party materially less favorably under this Agreement than it does under any similar arrangements with any other similarly-situated third parties. As used in this Section, "assignment" shall include a change of control of a Party by merger, consolidation, transfer, or the sale of more than fifty percent (50%) of stock or other ownership interest. If a Party effectuates an assignment of this Agreement or any interest hereunder without complying with the terms of this Section, or, if the assignee is a Competitor of the non-assigning Party, the non-assigning Party may elect to terminate this Agreement upon thirty (30) days' written notice, *provided* such termination notice is delivered within ten (10) business days after delivery of the required assignment notice. A "Competitor" means a third party engaged in the research, development, manufacture or sale of molecular diagnostic products or services, or licensing of de-identified molecular and/or clinical data, in the oncological field.

h. *Counterparts.* This Agreement may be executed in any number of counterparts, each of which is deemed an original and all of which taken together constitute the Agreement.

i. *Use of Name and Marks*. Except as otherwise set forth herein, neither Party may use the other Party's name or marks for any purpose without the other Party's advance written consent.

j. *Affiliate*. "Affiliate" means a legal entity that controls, is controlled by or is under common control with the Party, where "control" means (i) direct or indirect ownership of more than percent (50%) of the stock or shares having the right to vote for the election of directors (or such lesser percentage that is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) of the applicable entity; or (ii) actual possession, directly or indirectly, of the power to direct the Party's management or policies, whether by contract or otherwise.

k. *Electronic and Facsimile Signatures.* Both Parties expressly stipulate that, to the extent permitted by law, any documents contemplated pursuant to this Agreement may be executed and become effective by affixing either an electronic or handwritten signature in the appropriate location and transmitting such document to the other Party using traditional, electronic, or facsimile methods of transmission. Any such electronic or facsimile transmitted signature will be deemed and carry the legal significance of an original signature.

[signature page follows]

This Agreement is effective as of the later date of signature below (the "Effective Date").

Tempus Labs, Inc.	**Personalis, Inc.**
By: /s/ Jim Rogers	By: /s/ Chris Hall
Name: Jim Rogers	Name: Chris Hall
Title: Treasurer and Chief Financial Officer	Title: CEO and President
Date: 25-Nov-2023	Date: 25-Nov-2023

Exhibit A
Market Development Services

Background

In order to accelerate Personalis' analytical and clinical validation, and reimbursement activities for the Personalis Assay, the Parties will engage in the market development Services set forth in this Exhibit.

Agreement

1. Validation & Reimbursement Activities.

a. Personalis will use commercially reasonable efforts to analytically validate the Personalis Assay, [***] for use in breast, lung, and immuno-oncology monitoring (each an "Indication") pursuant to the Validation Timeline and Schedule set forth herein.

b. [***]

c. As part of the clinical and analytical validation of the Personalis Assay described herein, Personalis will use commercially reasonable efforts to generate all evidence needed to seek and obtain reimbursement from Third Party Payors for performance of the Personalis Assay for each Indication.

d. [***]

e. The "Validation Timeline and Schedule" shall be as follows: Personalis will use commercially reasonable efforts to [***] (the "Commercial Launch Deadline"), such that the Personalis Assay for use in each Indication is available for commercial distribution by Tempus on or before the Commercial Launch Deadline. [***]

f. As required by New York State Public Health Law and associated regulations, Personalis will (i) hold a New York State clinical laboratory permit to perform laboratory procedures for Specimens obtained within New York State to be tested by Personalis under this Agreement and (ii) use commercially reasonable efforts to obtain the necessary New York State approval(s) for use of the Personalis Assay in an Indication to perform a Test on Specimens originating from New York State within [***] after (a) for the Lung Indication, the Lung Launch Date and (b) for each of the Breast and Immuno-Oncology Indications, the Commercial Launch Date for such Indication.

2. Market Development Fees.

a. For purposes of this Section, the "Commercial Launch Date" (i) shall mean [***] for the Lung Indication, and (ii) for each of the Breast and Immuno-Oncology Indications shall mean [***]. The date on which the Commercial Launch Date has been satisfied for all three Indications shall be the "Commercial Launch Completion Date."

b. In exchange for Personalis' Services described in Section 1 to accelerate analytical and clinical validation of the Personalis Assay in each Indication, Tempus will pay Personalis a "Market Development Fee" as follows:

i. $3,000,000 within [***] of the Effective Date (the "Activation Fee")

ii. $3,000,000 for the Commercial Launch Date of the Personalis Assay in the first Indication (Lung) ("Milestone Payment 1") (for clarity, Milestone Payment 1 will be made within [***] of the Effective Date, as the Commercial Launch Date of the Lung Indication occurred prior to the Effective Date on [***]); and

iii. $6,000,000 payable in six (6) equal consecutive quarterly installments ("Milestone Payment 2") commencing on [***].

Milestone Payment 1 and Milestone Payment 2 may each be referred to as a "Milestone Payment."

c. Notwithstanding the foregoing, Tempus may elect to withhold any of the Milestone Payment 2 installment(s) coming due after a failure by Personalis to satisfy the Commercial Launch Deadline for any Indication through no fault of Tempus; in such event, all such withheld Milestone Payment 2 installments shall come due upon Personalis' subsequent achievement of the Commercial Launch Completion Date. In the event Personalis has not achieved the Commercial Launch Completion Date by [***] through no fault of Tempus, then Tempus may elect to convert the Agreement to be non-exclusive in all Indications or terminate the Agreement in its entirety. If Tempus so elects to terminate the Agreement or convert to the Agreement to be non-exclusive for all Indications, Personalis will refund any Market Development Fees received from Tempus as of the effective date of termination or the date on which the Agreement converts to be non-exclusive (as applicable), less the Activation Fee and also less the Repayment Reduction Amount (as defined below) and Tempus will have no obligation to make any further Milestone Payment 2 installment payments.

d. Personalis shall [***] to perform the Tests (as defined in Exhibit B) ordered under this Agreement, including both the baseline and follow-up Test, for at least the following number of patients under this Agreement:

i. [***] new patients in the [***] period following the Lung Launch Date;

ii. [***] new patients in the [***] period following the Lung Launch Date; and

iii. [***] new patients in the [***] period following Lung Launch Date.

References to "new patients" in this Exhibit and Exhibit C refer to the first Test for which the Personalis Assay is performed (i.e., the baseline Test for a new patient). [***]

3. Exclusivity.

a. Except as otherwise set forth herein, in exchange for the Market Development Fee, and subject to Tempus' compliance with the terms hereof, beginning on the Effective Date and ending three (3) years from (i) for the Lung Indication, the date on which the first Test is ordered under this Agreement, or three (3) months after the Effective Date, whichever is earlier (the "Lung Launch Date", and (ii) for each of the Breast and Immuno-Oncology Indications, the Commercial Launch Date for such Indication (for each Indication, the "Tempus Exclusivity Period"), Personalis will not allow any third party (other than an acquiror of Personalis in accordance with Section 9.g, or such acquiror's Affiliates) to market the Personalis Assay for use in such Indication. Except as otherwise permitted under the Agreement, and subject to Personalis' compliance with the terms hereof and the provisions of Exhibit B, starting on Effective Date and ending upon expiration of the Tempus Exclusivity Period for an Indication, Tempus will not market or sell another tumor-informed MRD assay indicated for use in such Indication (whether its own or that of a third party). Notwithstanding the foregoing, if Personalis fails to meet the Commercial Launch Deadline for any one of the three Indications contemplated by this Agreement, then Tempus may elect to convert the Agreement to be non-exclusive in all Indications. In addition, all exclusivity obligations set forth in this Section 3 shall terminate in their entirety on December 31, 2027 to the extent such periods have not expired before that date.

b. For avoidance of doubt, Tempus will not market or sell another tumor-informed MRD assay indicated for clinical use in an Indication before commencement of the Tempus Exclusivity Period for the applicable Indication; however, the foregoing will not restrict Tempus' ability to market or sell a tumor naïve MRD assay in good faith, or from using its solid tumor clinical assays to augment

or enhance the results generated by its tumor-naïve MRD assay (for clarity, such tumor-naïve assay shall not be customized based on the results of any solid tumor assay for an individual patient), or Tempus' ability to market or sell to life sciences companies a tumor-informed MRD assay (other than any Personalis Assay) solely for non-clinical, research use only purposes, in each case without the use of any of Personalis' Background Intellectual Property.

c. After [***] of the applicable Tempus Exclusivity Period for an Indication, Personalis may, by written notice, elect to contract with a third party to market the Personalis Assay for use in the applicable Indication; *provided, however,* Personalis shall (i) refund to Tempus any and all Market Development Fees paid, less the Activation Fee and also less the Repayment Reduction Amount (defined below), measured as of such date (for clarity, such refund shall only be due once, regardless of the number of Indications for which Personalis so elects (whether contemporaneously or subsequently) to convert the Agreement to be non-exclusive), and (ii) notwithstanding anything to the contrary, continue to [***] perform Tests distributed, referred, and ordered under this Agreement in accordance with Section 2.d above.

d. Notwithstanding the foregoing, if a Tempus Trigger Event (as defined on Exhibit C) occurs, then Personalis will be permitted to convert the Agreement to be non-exclusive for the commercialization of the Personalis Assay solely with respect to the applicable Indication for which a Tempus Trigger Event has occurred without incurring any repayment obligation.

e. To the extent (i) Personalis fails to achieve the Commercial Launch Deadline for any of the three targeted Indications according to the Validation Timeline and Schedule set forth herein through no fault of Tempus, or (ii) Tempus is unable to offer the Personalis Assay for use with one or more Indications according to the Validation Timeline and Schedule through no fault of Tempus (e.g., because of timeline delays caused by Personalis, an injunction due to alleged or actual intellectual property infringement, or a FDA warning letter) (each of (i) and (ii) a "Personalis Validation Event"), then (x) Tempus may elect to convert the Agreement to be non-exclusive in all Indications, and (y) Personalis will refund any Market Development Fees received from Tempus as of the date of the Personalis Validation Event less the Activation Fee and also less the Repayment Reduction Amount (as defined below).

4. Cessation or Refund of Market Development Fees.

a. If Personalis is obligated to refund to Tempus any Market Development Fees pursuant to Section 2.c or 3 above, such refund will be calculated as follows:

i. The Activation Fee shall not be subject to repayment even if Personalis converts an Indication to a non-exclusive arrangement under Section 3 above.

ii. Each individual Milestone Payment will be subject to its own amortization schedule to calculate the cumulative Repayment Reduction Amount based on the methodology set forth in this Section.

iii. Beginning on the [***] (the "Due Date") (for clarity, with respect to the Milestone 1 Payment, the Due Date shall be the Effective Date), and continuing for the [***] following such date, the balance for such Milestone Payment will be reduced at the end of [***] based on the schedule listed below (each a "Repayment Reduction Amount"):

Calculation Date	Repayment Reduction Amount
[***]	[***]% of the Milestone Payment
[***]	[***]% of the Milestone Payment
[***]	[***]% of the Milestone Payment

Notwithstanding the foregoing, to extent the number of new patients in any given quarter exceeds Personalis' applicable [***] divided by four (the "Excess Quarterly Capacity"), then the applicable Repayment Reduction Amount for such quarter will be increased according the following formula:

[***]

b. If Personalis terminates the Agreement for convenience, or converts the Agreement to be non-exclusive, before expiration of any Tempus Exclusivity Period, and *provided* no Tempus Trigger Event has occurred, then Personalis will refund the Market Development Fees paid by Tempus less the Activation Fee and also less any accrued Repayment Reduction Amounts. For example, if Personalis elects to convert the Agreement into a non-exclusive arrangement on [***] after Commercial Launch of the first Indication (Lung) (but before Commercial Launch in any other Indication) *and* Tempus has paid to Personalis the Activation Fee *and* there has been no Excess Quarterly Capacity, *and* if the Milestone Payment 1 Due Date was [***], and two Milestone Payment 2 installments were paid on [***] and [***] respectively (with Tempus having elected to withhold any subsequent Milestone Payment 2 installments coming due in accordance with Section 2.c above), then Personalis would be required to repay Tempus ***] ([***] in Market Development Fees paid less the Activation Fee and also less ***] for the Repayment Reduction Amount).

5. Continuity License Provision.

a. Personalis hereby grants Tempus a non-exclusive, non-sublicensable (except to Affiliates), limited license under the Background Intellectual Property of Personalis that Personalis uses to perform the applicable Services solely as necessary for Tempus to perform such Services itself under this Agreement (the "Continuity License"), *provided* that the Continuity License shall terminate automatically upon the earliest of (A) Tempus' material breach of the Agreement during the Initial Term or (B) eighteen (18) months after the termination or expiration of all Tempus Exclusivity Periods or (C) Tempus' termination of the Agreement, and *provided further* that Tempus may exercise such license only if (1) the Continuity License Trigger is not otherwise attributable to any impermissible action or impermissible inaction of Tempus or any of its Affiliates, agents or contractors and (2) Tempus provides written notice of its election to exercise such license promptly after the occurrence of the following event (the "Continuity License Trigger") and the requirements of Section 5.b below have been satisfied:

i. The occurrence of an event that prevents Personalis from providing Tests under the Agreement [***] (and which requires Tempus to assume that responsibility).

b. If a Continuity License Trigger occurs, then before the Continuity License may be exercised, the Parties shall promptly negotiate in good faith and agree on commercially reasonable consideration to be paid by Tempus to Personalis for the exercise of the Continuity License (the "License Fee"), which consideration shall take into account the value of the Continuity License and the facts and circumstances giving rise to the Continuity License Trigger. The total License Fee shall be reduced by the amount equal to (i) the Market Development Fees paid to Personalis less (ii) the Activation Fee and the Repayment Reduction Amounts accrued as of the date of the Continuity License Trigger. Either Party has the right to commence arbitration in accordance with Section 8.c.iv of the Agreement within [***] following the occurrence of a Continuity License Trigger for the sole purpose of determining the License Fee for the Continuity License.

c. Promptly after Tempus begins exercising the Continuity License, the JSC shall establish a process for Personalis itself to resume performance of such Services in accordance with the terms of this Agreement as soon as practical and to the extent possible given the nature of the event constituting the Continuity License Trigger.

d. Tempus covenants that it will not exercise the Continuity License, unless and until a Continuity License Trigger occurs, and Tempus provides timely written notice of its election to exercise the Continuity License and the requirements of Section 5.b above have been satisfied. Further, Tempus covenants that if a Continuity License Trigger occurs, it then shall exercise the Continuity License only in good faith and solely with respect to the applicable Personalis Services to which the Continuity License Trigger relates, and, only during the period after the Continuity License Trigger prior to the termination of the Continuity License pursuant to Section 5(a) or Personalis' resumption of performance of such Services pursuant to the JSC-approved process.

e. All rights and licenses granted under or pursuant to this Agreement by either Party are and shall otherwise be deemed to be, for purposes of Section 365(n) of the Bankruptcy Code or any analogous provisions in any other country or jurisdiction, licenses of right to "intellectual property" as defined under Section 101 of the Bankruptcy Code. The Parties agree that the Parties, as licensees of such rights under this Agreement, shall retain and may fully exercise all of their rights and elections under the Bankruptcy Code. Upon the occurrence of a Continuity License Trigger and Tempus' timely written notice of its exercise of the Continuity License, and after the requirements of Section 5.b above have been satisfied, Tempus shall be entitled to a complete duplicate of (or reasonable access to, as appropriate) the applicable Background Intellectual Property of Personalis and any needed embodiments of such Background Intellectual Property, solely as necessary for Tempus to exercise the Continuity License hereunder, and such Background Intellectual Property and embodiments (or reasonable access thereto), if not already in Tempus' possession, shall be promptly delivered to Tempus.

6. [***]

Exhibit B
Reference Laboratory Services

Background

The Parties wish to make the Personalis Assay widely available to Ordering Providers (defined below) in the United States for use in the Indications.

Agreement

1. Reference Laboratory Services.

a. *General*.

i. Purpose. The Parties will make the Personalis Assay available for use in the Indications to Ordering Providers in the United States. Ordering Providers will be able to order both the Tempus Assay(s) and a corresponding Personalis Assay(s). Tempus does not commit to providing Personalis with a specific volume of Test (defined below) orders.

ii. Testing Services. Personalis agrees to perform the Personalis Assay for use in one or more of the Indications (each such performance under this Exhibit, a "Test") as reasonable and medically necessary upon receipt of necessary Specimen(s) and a valid requisition form by an ordering provider authorized by applicable law to order such testing ("Ordering Provider").

iii. Representations, Warranties, and Covenants. Personalis represents, warrants, and covenants that:

(a) The Tests will be performed in facilities that are accredited by the College of American Pathologists ("CAP") and compliant with the licensing and certification requirements of the United States Clinical Laboratory Improvement Amendments ("CLIA") of 1988.

(b) The Personalis Assay will be analytically validated in accordance with all applicable laws before Personalis performs any Tests.

(c) Upon Personalis having obtained the necessary approval(s) from the New York State Department of Health, the Personalis Assay will be eligible for use in the Indications to perform a Test on Specimens (defined below) originating from New York State in accordance with New York State laws and regulations.

(d) Personalis maintains appropriate processes for notifying Tempus of Test progress as set forth herein and for reporting Deliverables to Tempus.

(e) All Tests performed by Personalis under this Exhibit will be performed at Personalis' facilities in Fremont, California unless otherwise agreed by the JSC.

(f) For each Personalis lab director at the location(s) at which Tests are performed, no adverse action has been taken against such lab director's license. If any such lab director(s) become subject to an adverse action, Personalis will promptly notify Tempus.

(g) Personalis represents that it has sufficient staff and equipment to perform the Tests consistent with Personalis' [***] set forth in Section 2.d of Exhibit A.

(h) Personalis represents and covenants that all staff who will assist in the performance of the Services are duly licensed and expressly trained and qualified to perform the Services and, as applicable, to render interpretive reports, as required under this Agreement and will remain so licensed and qualified for the duration of the Term. Personalis agrees that all staff who hold or require a board certification or other third-party accreditation shall remain so certified or accredited for the duration of the Term. Personalis agrees to use commercially reasonable efforts to replace any staff member promptly who becomes unlicensed, unaccredited, or unqualified during the Term, and prohibit such staff member from any involvement in the Services. Upon request, Personalis agrees to provide the qualifications and credentialing information for any staff member assisting in the performance of the Services in a form reasonably satisfactory to Tempus.

(i) Personalis will maintain validated performance criteria for the Personalis Assay and the Deliverables will adhere to such validated criteria and any applicable performance criteria published by Personalis. Personalis will provide copies of its CAP performance testing results and other quality materials as reasonably requested by Tempus.

iv. HIPAA. With respect to the Services under this Exhibit, each Party is currently a Covered Entity under HIPAA, and is otherwise required to comply with the applicable security and privacy requirements of HIPAA.

b. *Order Requisition Form.* Prior to the Lung Launch Date, Tempus will modify the Tempus requisition form to enable Ordering Providers to order the Test for use in one or more Indications. Tempus will treat Personalis not materially less favorably than any other similarly-situated third party laboratory, including with regard to the placement of any Tests on such requisition forms.

c. *Order Requisition & Result Delivery Services.* For each Test order placed by an Ordering Provider, Tempus will provide logistical and administrative support for Specimen collection kit distribution, Test ordering, Specimen procurement and delivery processes ("Order Requisition Services"). Following Personalis' performance of a Test, Tempus will also provide results delivery services from Test completion to report delivery to the Ordering Provider ("Results Delivery Services") as set forth in this Section:

i. Supplies. Tempus will coordinate for distribution to Ordering Providers certain items, devices, or supplies ("Supplies") that are necessary to collect, transport, process, or store the specimens ("Specimen(s)") for Personalis to perform a Test. Personalis' current specimen requirements are attached hereto as Attachment 1 ("Specimen Requirements"). If Personalis intends to change its Specimen Requirements, Personalis will provide Tempus with [***] written notice prior to implementing any changes and the Parties will amend Attachment 1. Tempus' services with respect to Supplies specifically will include:

(a) Procuring Supplies needed to collect and transport Specimens;

(b) Coordinating with one or more third-party fulfillment vendors for Specimen collection kit delivery to Ordering Providers and associated pathology laboratories;

(c) Managing and monitoring inventory; and

(d) Assessment of Specimen collection kits for compliance with Personalis' specifications.

ii. Test Requisition. Tempus will (a) modify, in its sole discretion, the Tempus requisition form to enable ordering of the Personalis Assay by Ordering Providers, and (b) use commercially reasonable efforts (and not materially less favorable to Personalis than any other similarly-situated third party laboratory) to propose that healthcare institutions that use data integrations to place orders directly via electronic health records change their ordering schema to permit the inclusion of the Personalis Assay (*provided, however,* that the Parties acknowledge that the healthcare providers are solely responsible for deciding whether to make any such changes and on what timeline). If Tempus intends to change its requisition form with regard to how the Personalis Assay is described, Tempus will provide Personalis with written notice prior to implementing any changes. Ordering Providers will submit a Tempus requisition form to order a Test. If Personalis determines that it has received insufficient information for a particular Test order, Personalis will immediately notify Tempus, but in no event later than [***] after making such determination, and Tempus will use good faith efforts to provide such information to the extent in Tempus' possession. Tempus' services with respect to requisition forms specifically will include:

(a) Review of test requisition forms for appropriate completion;

(b) Troubleshooting test requisition form or order issues with Ordering Providers and/or their care team; and

(c) Overseeing and tracking Specimen delivery, including through a laboratory inventory management system.

iii. Consents. Tempus will require an attestation from the Ordering Provider or ordering institution that the appropriate consents and authorizations have been obtained from the patient for Personalis to use the Specimen and conduct the Test, and for the Parties to perform their respective obligations and exercise their respective rights under this Agreement, as required by applicable law. Tempus will provide a copy of the attestation to Personalis upon request.

iv. Specimens. Tempus will coordinate the logistics of Specimen collection and transfer to Personalis, including providing Ordering Providers with a shipping label for submission of Specimens. Personalis will use Specimens under its direction to perform the Test and will not otherwise use the Specimens. Specimens are not provided for any further use.

(a) *Rejected Specimens*. If Personalis determines that a Specimen does not meet its Specimen Requirements and/or that the Specimen is inadequate to perform the requested Test, Personalis will immediately notify Tempus, but in no event later than [***] after making such determination. Tempus will be responsible for communicating with the Ordering Provider regarding the Specimens and promptly advising Personalis whether the rejected Specimen should be returned to Tempus or the Ordering Provider or destroyed or discarded.

(b) *Specimen without a Requisition Form*. In the event Specimens are received by Personalis prior to Personalis receiving a Test order or the applicable requisition form information related to such Specimen, Personalis will immediately notify Tempus, but in no event later than [***] after identifying that Personalis lacks an applicable Test order or requisition form information, and provide an inventory of such Specimens. Tempus will be responsible for coordinating with the Ordering Provider. Personalis will retain the Specimen(s) for no less than [***] after notifying Tempus; *provided, however,* if Personalis does not receive Test order or requisition form information within such [***] period, Personalis will request direction from Tempus regarding handling of the Specimen (e.g., retain, destroy, or return the Specimen).

(c) *General* Services. Tempus' services with respect to Specimens specifically will include:

(1) Troubleshooting with Ordering Providers, their pathology laboratory, and/or care team any issues with Specimens; and

(2) Coordinating with the Ordering Provider, their care team and/or their pathology laboratory concerning Specimens.

v. Result Delivery. Upon completion of the Test, Personalis will deliver Test results and written report to Tempus via the methodology set forth in the technical integration plan. Tempus will be responsible for delivering the Test results and report to the Ordering Provider. Personalis may disclose Test results to the patient, and nothing in this Agreement shall restrict Personalis from providing a copy of the Test results to the patient or their treating healthcare provider, as permitted by applicable law.

d. *Technical Integration*. The Parties acknowledge that certain aspects of the Services described in this Exhibit will initially be manually performed; however, the Parties desire to establish a technical integration for Test report and result delivery. As set forth in Section 1(b)(iii) of the Agreement, the Parties will reach an agreement on a operational plan that addresses the technical issues needed to provide the Services outlined in this Exhibit, including transfer of Test order information to Personalis, transfer of order status information to Tempus (including Specimen received, Specimen rejected and reason for rejection, quantity or quality not sufficient of testing (e.g., QNS) and reason for insufficiency, testing in progress, report signed out, missing requisition form items/information, test on hold for clinical review, patient consent, or other related reasons, order is on hold, or order is cancelled), and electronic delivery of Test results and Deliverables to Tempus. Each Party agrees to be responsible for its own costs and expenses associated with activities under the agreed upon integration activities. The Parties will work to in good faith to establish the agreed upon integration within [***] after the Effective Date.

e. *Test Reports & Genomic Data.*

i. Test Report Issuance. For each Test performed, Personalis will be responsible for signing out and issuing a clinical Test report PDF in a format mutually agreed upon by the Parties.

ii. Reports & Genomic Data. For each Test, Personalis will transmit to Tempus, via a mutually agreed upon method and in accordance with applicable laws and regulations, the Deliverables. Each of the foregoing must include (1) applicable unique patient identifiers; (2) Personalis identifier; and (3) Tempus order identifier.

iii. Turnaround Time. For the [***] after the Lung Launch Date, for [***] of Specimens accepted and processed by Personalis under this Agreement, to the extent the volume remains consistent with Personalis' [***] set forth in Section 2.d of Exhibit A, Test reports and ctDNA Data will be delivered within [***] from receipt of Specimens for the baseline Test (the "Start-Up Baseline TAT") and within [***] from receipt of Specimen for all follow-up Tests (the "Start-Up Follow-up TAT"), in each case for successfully completed (i.e., non-QNS) Tests. Beginning on the [***] after the Lung Launch Date, [***] of Specimens accepted and processed by Personalis under this Agreement, to the extent the volume remains consistent with Personalis' [***] set forth in Section 2.d of Exhibit A, Test reports and ctDNA Data will be delivered within [***] from receipt of Specimens for the baseline Test (the "Standard Baseline TAT") and within [***] from receipt of Specimen for all follow-up Tests (the "Standard Follow-up TAT"), in each case for successfully completed (i.e., non-QNS) Tests. All other Deliverables will be delivered real time as they become available. Start-Up Baseline TAT and Standard Baseline TAT may each be referred to as a "Baseline TAT." Start-Up Follow-up TAT and Standard Follow-up TAT may each be referred to as the "Follow-up TAT."

f. *Residual Material*. In accordance with applicable law (including New York state requirements), when an ordering provider makes a specific request of Tempus, or when an existing contractual requirement between Tempus and an ordering institution so requires, Personalis will, after completion of the Test and any required holding period, return or destroy any unused or remaining tumor block Specimen (excluding slides and also excluding any extracted material as a result of preparing the Specimen for or running the Test) (such unused or remaining tumor block Specimen is referred to as "Residual Material"); Residual Materials that Personalis is directed to return may, at Personalis' discretion, be returned in monthly batches to Tempus, at Personalis' expense. Personalis shall be solely responsible for ensuring that it retains, returns or destroys any unused or remaining Specimen in compliance with applicable law. Any Residual Material that Personalis is not directed to return or destroy may be retained by Personalis and used in accordance with applicable law. Tempus will identify such accounts through the JSC.

2. Support Services.

a. *Test Notifications*. Personalis will promptly notify Tempus (in no event later than [***] after occurrence) of the following: Specimen received, Specimen rejected and reason for rejection, quantity or quality of Specimen is not sufficient for testing (e.g., QNS) and the reason for the insufficiency, testing in progress, report signed out, missing requisition form information, test on hold for clinical review, patient consent, or other related reason, order on hold, and order canceled.

b. *Medical Affairs Support*. If there is a need for medical support related to the Test results, Tempus will be responsible for providing first-line support, and Personalis will provide contact information for a member of its medical affairs team within [***] of Tempus' request and that individual will consult with the Ordering Provider and a member of Tempus' medical affairs team to resolve any outstanding issues. Tempus will ensure that the members of its medical affairs team allocated to provide medical support related to the Test results are properly trained with respect to the Personalis Assay, including with respect to any training required by Personalis of its own medical affairs team members regarding the Personalis Assay.

c. *Customer Support*. Tempus may periodically receive inquiries from Ordering Providers, patients, or others related to Personalis, a Test, or its Services. Personalis will provide daily operational support during normal business hours, with a response time for acknowledgement of the inquiry with either a resolution or a timeline for resolution within [***] of Personalis' receipt of Tempus' inquiry. Personalis will also maintain a direct email and phone number for Tempus outreaches.

d. *Test Order Communications*. All communications regarding a Test order must include (i) applicable unique patient identifiers; (ii) Personalis identifier; and (iii) Tempus order identifier.

3. Reimbursement of Tests.

a. Personalis will bill or seek reimbursement for Tests performed under this Exhibit from any private insurers, federal or state health care payment programs (including Medicare and Medicaid), or other third-party payors (collectively "Third Party Payors"), and, as applicable, patients. Personalis will be solely responsible for billing and collecting payment from all Third Party Payors and patients and will comply with all applicable laws, rules, and regulations, as well as Third Party Payor requirements, rules, policies, and guidelines, pertaining to the billing and collecting for Tests performed. Personalis will be responsible for making any required disclosures on billing claims forms.

b. Tempus will provide Personalis with information reasonably requested to support Personalis' billing of Third Party Payors and patients with respect to the Tests performed hereunder.

c. Personalis represents, warrants, and covenants that the Personalis Assay for use with each Indication is or will be listed on the clinical lab fee schedule or otherwise is a type of test that permits billing

to government health programs and other Third Party Payors, including Medicare, in accordance with applicable Third Party Payor requirements, including Chapter 16 of the Medicare Claims Processing Manual. Personalis will perform the Tests and associated Services under this Agreement in accordance with applicable Third Party Payor requirements.

4. **Compensation for Tempus Services.** Personalis will compensate Tempus for the fair market value of the Services that Tempus provides under this Exhibit as follows:

Services	Fees
Order Requisition Services	[***] / completed requisition
Results Delivery Services	[***] / result delivery

5. **Personalis Trigger Event**.

a. *Turnaround Time*. If more than [***] of successful Tests exceed the Baseline TAT or the Follow-up TAT (each measured as a separate and distinct category, and excluding delays caused by a third party supplier that are wholly outside of Personalis' control ("Excusable Delays")) during any [***] rolling period, then (i) Personalis will remedy the TAT delays on a go-forward basis within [***] and (ii) Tempus may withhold all subsequent Milestone Payment 2 installment(s) coming due until such TAT delays are remedied. If more than ***] of successful Tests exceed the Baseline TAT or the Follow-up TAT (each measured as a separate and distinct category, and excluding any Excusable Delays) during any [***] rolling period, then Tempus may (a) elect, in its sole discretion, to immediately convert all exclusivity provisions to non-exclusive, and (b) withhold all subsequent Milestone Payment 2 installment(s) coming due until such TAT delays are remedied. If such TAT delays remain unremedied for any [***] rolling period, then Tempus may terminate the Agreement in its entirety.

b. *QNS Rates*. For the first [***] after the Lung Launch Date, QNS rates for tissue Specimens that satisfy Specimen Requirements will be no more than [***] for baseline Tests, and QNS rates for blood Specimens that satisfy Specimen Requirements will be no more than [***]. Beginning in the third quarter after the Lung Launch Date, QNS rates for tissue Speciments that satisfy Specimen requirements will be no more than [***] for baseline Tests, *provided* that the JSC shall review the QNS rates and may adjust such rates higher or lower as necessary based on actual QNS failures, market demands, and other factors determined by the JSC. If QNS rates do not meet the criteria set forth in this paragraph or determined by the JSC, as applicable, during any [***] rolling period, then (i) Personalis will remedy the QNS rates on a go-forward basis within [***] and (ii) Tempus may withhold all Milestone Payment 2 installment(s) coming due until such QNS rates are remedied. If QNS rates do not meet the criteria set forth in this paragraph during any [***] rolling period, then Tempus may (x) elect, in its sole discretion, to immediately convert all exclusivity provisions to non-exclusive, and (y) withhold all Milestone Payment 2 installment(s) until such QNS rates are remedied. If QNS rates remain unremedied for any [***] rolling period, then Tempus may terminate the Agreement in its entirety.

Exhibit C
Promotional & Commercialization Activities

Background

The Parties desire to collaborate to make the Personalis Assay more widely available to ordering clinicians for use in the Indications to improve patient outcomes.

Agreement

1. **Co-Promotional Activities.**

a. During the Term, Tempus and Personalis will use commercially reasonable efforts to market and promote the Personalis' reference laboratory Services in accordance with applicable law. In furtherance of the co-promotional activities, the Parties will collaborate and mutually agree upon a market strategy and sales force training related to the Personalis Assay under this Agreement.

b. Co-promotion of the reference laboratory Services may include press releases regarding the results of studies utilizing the Personalis Assay for use in one or more Indications. Tempus' marketing and promotional activities will include, but are not limited to, modifying the Tempus requisition form to enable Ordering Providers to order the Personalis Assay for use in one or more Indications. Tempus will market and promote the Services to its network of ordering providers in the United States in the same or substantially similar manner that it markets and promotes its own Tempus Assays.

c. Personalis will provide sufficient information to Tempus regarding the Personalis Assay to support the appropriate marketing and branding of the assay and Services. Personalis will further provide commercially reasonably marketing and technical support to Tempus to ensure that all Tempus-created promotional materials accurately describe the Personalis Assay and the approved Indications, and to ensure compliance with all applicable laws and regulations. All co-promotional and marketing material must be approved in writing by both Parties.

2. **Press Release.** Within [***] of the Effective Date, the Parties will mutually agree on a communications strategy for the timing and nature of an initial joint press release or other public announcement regarding this Agreement. Such announcement will be reviewed and mutually agreed upon by both Parties in writing before it is issued.

3. **Co-Branding.**

a. Subject to and to the extent permitted by applicable law, Personalis' reference laboratory Services provided under this Agreement ("Reference Lab Services") will be co-branded as mutually agreed by the Parties (e.g., Supplies, requisition forms, Test results or reports, or promotional information related to the Services shall bear the Personalis and Tempus branding, name, and/or logo (collectively, and with respect to each Party, the "Brand")). Any modifications to the co-branding must be mutually agreed upon in writing; *provided* that Tempus will have sole discretion about the design and format of all Tempus requisition forms (whether electronic or hard copy format) and *provided further* that Tempus will treat Personalis not materially less favorably than any other similarly-situated third party, including with regard to the placement of any Tests on such requisition forms, Test results or reports or promotional information.

b. During the Term of the Agreement, each Party hereby grants to the other Party a non-exclusive, fully paid, royalty-free, non-transferable, non-sublicensable, limited license to use its Brand solely for the purposes of co-branding described in Section 3.a of this Exhibit C (the "Licensed Activities," and the licenses granted herein, each a "License"). Any Licensed Activities shall be undertaken in compliance with any branding requirements, guidelines, and restrictions that each Party may provide to the other Party and update from time to time. Neither Party may modify or alter the other Party's licensed Brand. Neither Party may use the other Party's Brand in any way that is likely to dilute the Brand or tarnish or bring into disrepute the reputation of or goodwill associated with the Brand. All usage of a Party's Brand and goodwill therein shall inure to the benefit of such Party. The term of the Licenses granted hereby shall commence on the Effective Date and shall continue in full force and effect until termination or expiration of the Agreement; *provided, however,* either Party may terminate the License to its respective Brand by providing notice to the other Party and the other Party will promptly cease all use of the Brand and exercising of the Licensed Activities.

4. **Commercialization Plan.**

a. *Tempus FTE Allocation*. In support of Tempus' marketing and promotional activities for the Reference Lab Services, Tempus will allocate the equivalent of [***] during the [***] period

following the Effective Date, the equivalent of [***] during the [***] period following the Effective Date, and the equivalent of [***] during the [***] period following the Effective Date.

b. *Measuring Criteria*. Upon the Effective Date, Tempus will use commercially reasonable efforts, and devote sufficient personnel and resources, to meet the following quarterly commercialization targets ("Measuring Criteria"):

Quarter after Effective Date	# of physicians ordering NeXT Personal Dx
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

c. At the end of each quarter, Tempus will provide a report to Personalis outlining its compliance with the Measuring Criteria. If Tempus achieves the Measuring Criteria for the applicable quarter, Personalis will pay Tempus the full, applicable quarterly Sales, Marketing, and Promotional Services fee.

d. If Tempus achieves less than [***] of the Measuring Criteria for any applicable quarter, then the applicable quarterly Sales, Marketing, and Promotional Services fee will be adjusted proportionally.

e. If Tempus achieves less than [***] of the Measuring Criteria for [***] (a "Tempus Trigger Event"), Personalis may convert the Parties' relationship to a non-exclusive agreement. Notwithstanding the foregoing, a Tempus Trigger Event will not be deemed to have occurred if Tempus achieves less than [***] of the Measuring Criteria but the number of new patients for whom a Test is performed in such quarter meets or exceeds Personalis' applicable [***] divided by four.

f. The JSC shall determine the Measuring Criteria for any subsequent quarters during which Tempus retains exclusivity for at least one Indication.

5. **Compliance Policies and Training.** Tempus shall take efforts to ensure that all Tempus personnel who perform services under this Exhibit C comply and act in accordance with Tempus policies, including by ensuring that all Tempus personnel who are assigned to perform services under this Exhibit C complete Tempus compliance training, and distributing to all Tempus personnel who perform services under this Exhibit C Tempus' Code of Conduct, copies of relevant Tempus policies and procedures relating to the services they will perform under this Exhibit C, and information about Tempus' disclosure program (including Tempus' compliance hotline number) concerning methods for reporting potential compliance violations.

6. **Compensation for Tempus Services.** Personalis will compensate Tempus for the fair market value of the Services that Tempus provides under this Exhibit as follows (subject to fair market value adjustments pursuant to Section 2.b of the Agreement):

Services	Fees
Sales, Marketing, and Promotional Services	[***] payment as follow:
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

Exhibit D
Data Activities

Background

The Parties intend to work together on a data sharing arrangement for purposes of promoting discovery and innovation in healthcare.

Agreement

1. **De-Identified Results Data.** For each Test performed, Tempus will use commercially reasonable efforts to evaluate whether to abstract, structure, and de-identify the patient's initial and longitudinal (including landmark) ctDNA Data and [***] derived from each Test and delivered to Tempus by Personalis (for purposes of this Exhibit, "Data"), it being understood that Tempus will prioritize such efforts in good faith consistent with actual third party demand; *provided* that Tempus will not make any such evaluation, or any determination of whether or not to de-identify Data, in a manner materially less favorable to Personalis than any other similarly-situated third party. To the extent Tempus de-identifies an individual patient record, the resulting de-identified record of initial and longitudinal (including landmark) ctDNA Data and [***] is referred to as "De-Identified Results Data".

2. **De-Identification and Structuring Activities.** When Tempus de-identifies Data, Tempus will perform the abstraction, structuring, and de-identification activities in accordance with its normal business practices in order to structure and prepare De-Identified Results Data. Tempus will de-identify Data in accordance with applicable laws, including the HIPAA's standards for de-identification set forth in 45 C.F.R. 164.514. For purposes of this Agreement, [***] and ctDNA data without other patient identifiers is not considered identifiable. Tempus performs the abstraction, structuring, and de-identification activities in its covered entity role under HIPAA.

3. **Ownership.** Tempus will provide Personalis with a copy of the De-Identified Results Data. Each Party owns its copy of the De-Identified Results Data and may use and share it for any purpose permitted under applicable law, including commercializing such De-Identified Results Data to third parties, including but not limited to life sciences companies and academic researchers. Tempus will provide attribution for Personalis' contributions on any Tempus publication utilizing De-Identified Results Data that is not a joint publication by Tempus and Personalis.

4. **Royalty Payments.** If Tempus or its Affiliate licenses De-Identified Results Data to a third party in exchange for a payment that results in Tempus or its Affiliate recognizing revenue in accordance with Generally Accepted Accounting Principles, applied on a consistent basis, Tempus will pay Personalis on a quarterly basis, during the Term and for a period of ten (10) years thereafter, the following "Royalty": [***] of the Gross Revenue (defined below) received by Tempus or its Affiliate that is directly attributable to the De-Identified Results Data included in such third party license, all as determined by Tempus in the exercise of reasonable discretion. Tempus will not make any such determination in a manner materially less favorable to Personalis than any other similarly-situated third party. The Parties agree that the Royalty provided herein has been determined in an arm's length bargaining transaction and is consistent with fair market value for the De-Identified Results Data.

Tempus will report to Personalis on a quarterly basis any Gross Revenue and Royalty amounts due pursuant to this Section and will provide sufficient detail to Personalis to confirm the calculations of amounts due hereunder. Tempus will keep complete and accurate records of its and its Affiliates' activities under this Exhibit, including, without limitation, records of any licenses of De-Identified Results Data to third parties as necessary for the calculation of the Royalty to be paid to Personalis hereunder. Subject to Tempus' record retention policy, Tempus shall maintain such records for a period of [***] after the later of (a) expiration or termination of the Agreement and (b) the last Gross Revenue received Tempus for which the Royalty is due to Personalis. Upon reasonable prior notice, Tempus will permit Personalis or its designated representative to have access to Tempus' records during Tempus' normal business hours for the purpose of verifying Tempus' compliance with this Exhibit, including, without limitation, the timely payment of all Royalties

payable under this Agreement. Personalis shall provide to Tempus a copy of the audit report. If the audit report shows that payments made by Tempus are deficient and Tempus does not reasonably dispute such findings within such time period, Tempus shall pay Personalis the deficient amount within [***] after Tempus' receipt of the audit report. If payments made by Tempus are found to be deficient by more than [***], Tempus shall pay for the cost of the audit. If the audit report shows payments made by Tempus exceeded the amount owed, and Personalis does not reasonably dispute such findings within such time period, Personalis shall refund the excess amount to Tempus within [***] after Tempus' receipt of the audit report.

"Gross Revenue" means the total amount of compensation received by Tempus or its Affiliate in a transaction or series of transactions with a third party in which Tempus or its Affiliate licenses De-Identified Results Data to the third party, excluding any sales and use taxes incurred, with respect to the applicable license.

Exhibit G
Form of Warrant to Purchase Common Stock of Personalis (First and Second Warrant)

[Filed as Exhibits 4.1 and 4.2 to Personalis's Current Report on Form 8-K, filed with the SEC on or about November 28, 2023]