

**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): December 13, 2024

Personalis, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-38943
(Commission
File Number)

27-5411038
(IRS Employer
Identification No.)

6600 Dumbarton Circle
Fremont, California
(Address of Principal Executive Offices)

94555
(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 December 19, 2024, Personalis, Inc. (the “Company”) entered into an investment agreement (the “Investment Agreement”) with Merck Sharp & Dohme LLC (“Merck”) pursuant to which Merck has agreed to purchase from the Company 14,044,943 shares (the “Shares”) of the Company’s common stock, par value \$0.0001 per share (the “Common Stock”), at a price per share of \$3.56, representing the last reported closing price of the Common Stock on The Nasdaq Global Market on December 18, 2024, for gross proceeds to the Company of approximately \$50.0 million. The closing is expected to occur on or about December 19, 2024 (the “Closing Date”). Pursuant to the terms of the Investment Agreement, the Company agreed to reserve \$10.0 million of the proceeds to open an ISO-certified laboratory in a region outside of the United States, with such region mutually agreed upon by the Company and Merck.

Pursuant to the terms of the Investment Agreement, Merck agreed to certain customary standstill restrictions that apply from the Closing Date until the earlier of (a) the second anniversary of the Closing Date and (b) the first time that Merck and its affiliates no longer own at least 50% of the Company’s shares owned by Merck immediately following the Closing Date (this clause (b), the “Investor Rights Period,” and the earlier of clause (a) and (b), the “Standstill Period”). These standstill restrictions will lapse prior to the end of the Standstill Period if the Company publicly announces the entry into a definitive agreement providing for a change of control transaction. In addition, during the Investor Rights Period, the Company has agreed to provide Merck with certain information and strategic transaction notification rights, including to notify Merck in certain circumstances and subject to certain specified exceptions if (a) the Company receives a *bona fide* offer, indication of interest or proposal from a third party for a change of control transaction (a “Proposal”) or (b) the Company’s board of directors commences a process for solicitation of offers or indications of interest for a change of control transaction (a “Sale Process”). Subject to specific exceptions, the Company agreed to provide Merck with a reasonable opportunity to respond to a Proposal or participate in a Sale Process in a similar manner to other participants. In addition, during the Investor Rights Period the Company agreed to provide Merck with the opportunity to participate *pro rata* in future equity or equity-linked offerings of the Company, subject to specified exceptions.

Merck also agreed to certain voting commitments under the Investment Agreement that, during the Standstill Period, require Merck to vote, subject to specified exceptions, any shares of Common Stock that Merck owns in accordance with the recommendations of the Company’s board of directors. Such voting commitments generally apply to director nominations for any meeting of the Company’s stockholders, amendments to the Company’s charter to increase the authorized shares of Common Stock, various compensation-related matters, and ratification of the Company’s auditors. Merck also agreed not to transfer (a) any Shares to any third party, subject to certain specified exceptions, for 90 days following the Closing Date or (b) at any time any Shares or other securities acquired under the Investment Agreement to certain restricted parties and activist investors specified in the Investment Agreement.

Pursuant to the terms of the Investment Agreement, the Company agreed to file a registration statement with the U.S. Securities and Exchange Commission within 30 calendar days of the date of sale of the Shares to register the Shares for resale.

The Investment Agreement contains customary representations, warranties and covenants that were made solely for the benefit of the parties to the Investment Agreement. Such representations, warranties and covenants (a) are intended as a way of allocating risk between the parties to the Investment Agreement and not as statements of fact, and (b) may apply standards of materiality in a way that is different from what may be viewed as material by stockholders of, or other investors in, the Company. Accordingly, the Investment Agreement is included with this filing only to provide investors with information regarding the terms of the transaction and not to provide investors with any other factual information regarding the Company. Investors should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of the Company or any of its subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations and warranties may change after the date of the Investment Agreement, which subsequent information may or may not be fully reflected in public disclosures.

The foregoing summary of the Investment Agreement is qualified in its entirety by reference to the full text of the Investment Agreement, a copy of which is attached to this report as Exhibit 4.1, which is incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities.

The information related to the sale and issuance of the Shares contained in Item 1.01 of this report is incorporated by reference under this Item 3.02.

The sale and issuance of the Shares is exempt from registration under the Securities Act of 1933, as amended (the “Securities Act”), pursuant to Section 4(a)(2) of the Securities Act. Merck represented to the Company that it is an “accredited investor” as defined in Rule 501 of the Securities Act and that the Shares 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.

Item 8.01 Other Events.

On December 13, the Company and Tempus AI, Inc. (“Tempus”) entered into Amendment No. 3 (the “Amendment”) to the Commercialization and Reference Laboratory Agreement, dated November 25, 2023, by and

between the Company and Tempus (as amended by Amendment No. 1, dated August 16, 2024, and Amendment No. 2, dated September 20, 2024, the “Commercialization Agreement”), that authorizes Tempus to market and sell NeXT Personal[®], the Company’s ultra-sensitive tumor-informed minimal residual disease test, to Tempus’ pharmaceutical and biotechnology customers.

Effective on December 18, 2024, the Company and ModernaTX, Inc. (“Moderna”) entered into Statement of Work #30 (the “Statement of Work”) under the parties’ master services agreement (the “Moderna Agreement”). The Statement of Work extends the period for which the Company will provide the Company’s ImmunoID NeXT Platform[®] and technology (the “Services”) for the V940/mRNA-4157 clinical development program, an investigational individualized neoantigen therapy (INT), jointly developed by Merck and Moderna, to ten years following the date Moderna fulfills of its minimum volume commitments under that certain Statement of Work #14 under the Moderna Agreement (the “Initial Period”). At Moderna’s election, the Company will continue to provide the Services for up to two separate five year periods following the Initial Period. Under the Statement of Work, in the event of certain triggering events, including the Company’s insolvency, a change of control of the Company by a competitor of Moderna, or in the case of any other acquiror, where the acquiror does not assume or perform Company’s obligations under the Moderna Agreement and the Statement of Work, and certain force majeure events, Moderna has the option to obtain a non-exclusive, sublicensable, worldwide, license to certain intellectual property of the Company that is used by the Company to perform the Services under the Statement of Work or which is necessary or reasonably useful for Moderna to independently perform or have performed equivalent services, subject to certain limitations and, in the case of certain triggering events, an upfront payment in the mid-single digit millions. Additionally, under the Statement of Work, Moderna has the right to exercise an option to obtain such license on a discretionary basis following a specified date, subject to certain conditions, including in relation to total expenditure under Moderna’s agreements with the Company after the Initial Period begins. If Moderna exercises its discretionary license option, it will pay to Company an upfront payment in the very low double-digit millions, determined by the timing of exercise of such option. Subject to certain exceptions, following Moderna’s exercise of such license option until the expiration of certain Company patents covering the manufacture, use, or sale of certain assays under the Services, or until Moderna has paid the Company a specified aggregate amount, Moderna will pay to the Company specified access fees on a per-test basis for tests performed by or on behalf of Moderna.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
4.1*	Investment Agreement, dated December 19, 2024, by and between Personalis, Inc. and Merck Sharp & Dohme LLC.
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.

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: December 19, 2024

Personalis, Inc.

By: /s/ Aaron Tachibana

Aaron Tachibana

Chief Financial Officer and Chief Operating Officer

INVESTMENT AGREEMENT

THIS INVESTMENT AGREEMENT (this “*Agreement*”), dated as of December 19, 2024, by and between Personalis, Inc., a Delaware corporation (the “*Company*”), and Merck Sharp & Dohme LLC, a Delaware limited liability company (the “*Investor*”). Capitalized terms used herein but not otherwise defined shall have the meanings given to them in Section 1.5.

RECITALS

A. On the terms and subject to the conditions set forth in this Agreement and pursuant to an exemption from securities registration afforded by the provisions of Section 4(a)(2) of the Securities Act of 1933, as amended (the “*Securities Act*”), the Company desires to issue and sell to the Investor, and the Investor desires to purchase from the Company at the Closing (as hereinafter defined), shares of common stock, \$0.0001 par value, of the Company (the “*Company Common Stock*”), in an amount and at the per Share price as set forth in Section 1.1 (the “*Share Purchase*”).

B. The aggregate of 14,044,943 shares of Company Common Stock to be issued and sold in the Share Purchase to the Investor at the Closing (as defined herein) shall be referred to in this Agreement as the “*Shares*”.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual representations, warranties, covenants and agreements contained in this Agreement, the receipt and adequacy of which are hereby acknowledged, the Company and the Investor agree as follows:

ARTICLE I
PURCHASE AND SALE

1.1 **Purchase and Use of Proceeds.** Subject to the terms and conditions of this Agreement, the Investor agrees to purchase from the Company, and the Company agrees to sell to the Investor, that number of Shares as set forth opposite the Investor’s name on Schedule 1 attached hereto, at a price per Share equal to \$3.5600, resulting in an aggregate purchase price of \$49,999,997.08 (the “*Share Purchase Price*”). The Company shall use the proceeds from the issuance and sale of the Shares for general corporate purposes, capital expenditures and for the purpose set forth on Schedule 1.1 attached hereto.

1.2 **Closing.** The closing of the purchase and sale of the Shares to the Investor by the Company (the “*Closing*”) shall take place simultaneously with the signing of this Agreement, remotely by exchange of documents and signatures, or their electronic counterparts. At the Closing, the Company shall issue and sell to the Investor, and the Investor shall purchase from the Company, the Shares set forth opposite the Investor’s name on Schedule 1 attached hereto. The date on which the Closing actually occurs is referred to herein as the “*Closing Date*”.

1.3 **Payment.** At the Closing, (a) the Investor shall pay to the Company the Share Purchase Price in United States dollars in immediately available funds, by wire transfer to the Company’s account as set forth in instructions previously delivered to the Investor, and (b) the Company shall irrevocably instruct the transfer agent for the Company Common Stock (the “*Transfer Agent*”) to deliver to the Investor the Shares, free and clear of all Liens (other than as provided in this Agreement or restrictions imposed by applicable securities laws), in book-entry form in the name of the Investor and a book-entry statement of the Transfer Agent showing the Investor as the registered holder of such Shares on and as of the Closing Date with such Shares registered in the name of the Investor as set forth on the Stock Registration Questionnaire included as Exhibit A hereto; provided, however, that the requirement to deliver a book-entry statement may be satisfied via email confirmation by the Transfer Agent of issuance of the Shares on the date of Closing with the book-entry statement to be delivered within two (2) Business Days of the Closing Date.

1.4 Closing Deliverables.

(a) **Company.** At or prior to the Closing Date, the Company shall:

(i) deliver or cause to be delivered to the Investor the following:

(1) a copy of the irrevocable instructions to the Transfer Agent instructing the Transfer Agent to deliver the Shares, registered in the name of the Investor as set forth on the Stock Registration Questionnaire included as **Exhibit A** hereto;

(2) confirmation that the Company has submitted a Nasdaq Notification Form: Listing of Additional Shares for the listing of the Shares, and Nasdaq has raised no objection to the consummation of the transactions contemplated by this Agreement; and

(3) a certificate signed by the Secretary of the Company, in form and substance reasonably satisfactory to the Investor, certifying as to (a) the Company's amended and restated certificate of incorporation (the "**Charter**") and the Company's amended and restated bylaws (the "**Bylaws**"); (b) the resolutions of the Company's board of directors (the "**Board**") approving the Transaction Documents and the transactions contemplated thereby; and (c) a good standing certificate with respect to the Company from the Delaware Secretary of State, dated no earlier than two (2) Business Days prior to the Closing Date.

(b) **Investor.** At or prior to the Closing Date, the Investor shall deliver or cause to be delivered to the Company the following:

(i) a fully completed and duly executed Stock Registration Questionnaire in the form attached hereto as **Exhibit A**; and

(ii) the Share Purchase Price in accordance with Section 1.3.

(c) **Further Assurances.** On the Closing Date and thereafter, the parties hereto shall cooperate with each other and use commercially reasonable efforts to execute and deliver or cause to be executed and delivered such additional documents and take such additional actions as the parties reasonably may deem to be necessary in order to consummate the Closing as promptly as reasonably practicable.

1.5 Defined Terms Used in This Agreement. In addition to the terms defined elsewhere in this Agreement, the following terms have the meanings indicated:

"**Activist Investor**" means, as of any date of determination, (i) a Person that has, directly or indirectly through its Affiliates, whether individually or as a member of a "group" (as defined in Section 13(d)(3) of the Exchange Act), within the two-year period immediately preceding such date of determination, (a) publicly acted alone or in concert with others, to seek to Control or influence the Board or stockholders of the Company (provided that this clause (i) is not intended to apply to activities of any member of the Board with respect to the Company, taken in good faith solely in his or her capacity as a director of the Company), (b) been identified on the most recently available "SharkWatch 50" list (or, if "SharkWatch 50" is no longer available, then the prevailing comparable list as reasonably determined by the Company and the Investor), (ii) any Person set forth on Schedule 1.5(a) or (iii) any Person who, to the knowledge of the Investor, after reasonable inquiry, is an Affiliate of any such Person described in the foregoing clauses (i) or (ii). For the avoidance of doubt, neither the Investor, any strategic company that is not primarily a financial investor, nor their respective Affiliates shall be deemed an Activist Investor.

"**Affiliate**" means, with respect to any Person, any other Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by, or is under common Control with, such Person.

"**Attribution Parties**" means the Investor (together with (i) the Investor's Affiliates, (ii) any other Person acting as a group together with the Investor or any of the Investor's Affiliates and (iii) any other Person whose beneficial ownership of Company Common Stock would be aggregated with the Investor's for the purposes of Section 13(d) of the Exchange Act).

“**Business Day**” means any day except Saturday, Sunday and any day which shall be a legal holiday or a day on which banking institutions in the state of New York generally are authorized or required by law or other government actions to remain closed.

“**Code**” means the United States Internal Revenue Code of 1986, as amended.

“**Control**,” means, when used with respect to any Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise; and the terms “**controlling**” and “**controlled**” have meanings correlative to the foregoing.

“**Equity Interest**” means any share, capital stock, partnership, limited liability company, member or similar equity interest in any Person, and any option, warrant, right or security (including debt securities) convertible, exchangeable or exercisable into or for any such share, capital stock, partnership, limited liability company, member or similar equity interest.

“**ERISA**” means the Employee Retirement Income Security Act of 1974, as amended from time to time, and all rules, regulations, rulings and interpretations adopted by the Internal Revenue Service or the Department of Labor thereunder.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

“**GAAP**” means generally accepted accounting principles in the United States, consistently applied.

“**Governmental Authority**” means any multi-national, federal, state, local, municipal or other government authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, court or other tribunal, as well as any securities exchange or securities exchange authority, including the Nasdaq).

“**HSR Act**” means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules and regulations promulgated thereunder.

“**Investor Rights Period**” means the period commencing on the Closing Date and ending at the first time that the Investor and its Affiliates no longer own at least 50% of the shares owned by the Investor immediately following the Closing (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date of this Agreement).

“**Knowledge**” means, with respect to the Company, the actual knowledge of Christopher Hall, Aaron Tachibana, Stephen Moore or Richard Chen.

“**Law**” means any national, federal, state, local, municipal, foreign, supranational or other law, statute, constitution, treaty, principle of common law, directive, resolution, ordinance, code, edict, order, rule, guideline, settlement, regulation or requirement issued, enacted, adopted, promulgated, entered, implemented or otherwise put into effect by or under the authority of any Governmental Authority.

“**Lien**” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, mortgage, claim, easement, right-of-way, option, title retention agreement, preemptive right or other restriction, whether based in law or contract.

“**Material Adverse Effect**” means any change, event, development or effect that, individually or in the aggregate, has had or would reasonably be expected to result in a material adverse effect, in or affecting (a) the business, properties or other assets, liabilities, financial position, or results of operations of the Company and its

Subsidiaries, taken as a whole, or (b) the ability of the Company to perform its obligations under this Agreement, or the other Transaction Documents or to consummate the Transactions; provided that, with respect to clause (a) only, no change, event, development or effect to the extent resulting from, arising out of, or relating to any of the following shall be deemed to constitute a Material Adverse Effect or shall be taken into account in determining whether there has been or would reasonably be expected to be a Material Adverse Effect: (i) general United States or global economic conditions or other general business, financial or market conditions, (ii) conditions generally affecting the industry in which the Company or any of its Subsidiaries operate, (iii) regulatory, legislative or political conditions or conditions in securities, credit, financial, debt or other capital markets, in each case in the United States or any foreign jurisdiction, (iv) any adoption, implementation, promulgation, repeal, modification, amendment, authoritative interpretation, change or proposal of any Law of or by any Governmental Authority or any recommendations, statements or other pronouncements made, published or proposed by professional medical organizations, (v) any changes or prospective changes in GAAP (or authoritative interpretations thereof), (vi) geopolitical conditions, the outbreak or escalation of hostilities, civil or political unrest, any acts of war, sabotage, cyberattack or terrorism, or any escalation or worsening of the foregoing, (vii) any epidemic, pandemic (including COVID-19) or other outbreak of illness or public health event, any hurricane, earthquake, flood, calamity or other natural disasters, acts of God or any change resulting from weather conditions (or any worsening of any of the foregoing) or (viii) any failure, in and of itself, by the Company or any of its Subsidiaries to meet any internal or published projections, forecasts, estimates or predictions, revenues, earnings or other financial or operating metrics for any period (provided, that any changes, events, developments or effects giving rise to or contributing to such failure that are not otherwise excluded from the definition of Material Adverse Effect may be taken into account in determining whether there has been, or would reasonably be expected to be, a Material Adverse Effect), including the impact of any of the foregoing on the relationships, contractual or otherwise, of the Company or any of its Subsidiaries with Governmental Authorities, customers, suppliers, partners, officers, employees or other material business relations, except that the matters referred to in clauses (i) through (vii) may be taken into account (to the extent not excluded by another clause of this definition) to the extent that the impact of any such change, event, development or effect on the Company and its Subsidiaries, taken as a whole, is disproportionately adverse relative to the impact of such change, event, development or effect on companies operating in the industry in which the Company and its Subsidiaries operate, and then solely to the extent of such disproportionality.

“*Nasdaq*” means The Nasdaq Global Market.

“*Person*” means an individual or a corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or political subdivision thereof) or other entity of any kind.

“*Plan*” means (i) any employee pension benefit plan (as defined in Section 3(2)(A) of ERISA) maintained for employees of the Company or of any member of a “controlled group,” as such term is defined in Section 414 of the Code, of which the Company or any of its Subsidiaries is a part, or any such employee pension benefit plan to which the Company or any of its Subsidiaries is required to contribute on behalf of its employees, and any other employee benefit plan (as defined in Section 3(3) of ERISA), whether or not subject to ERISA; or (ii) any compensation, retirement, medical, vision, insurance, severance or other benefit plan, policy, program, agreement or arrangement, including any employment, change in control, bonus, equity-based compensation, retention or other similar plan, policy, program, agreement or arrangement, in each case, that the Company or any of its Subsidiaries maintains, sponsors, contributes to, is required to contribute to, is a party to, or as to which the Company or any of its Subsidiaries otherwise has any obligation or liability, contingent or otherwise, in respect of its current or former employees; in each case, excluding any compensation or benefit arrangement maintained by a Governmental Authority.

“*Representatives*” means the directors, officers, employees, investment professionals, agents, affiliates, partners, advisors, or representatives (including attorneys, accountants, consultants and financial advisors) of a party; *provided* that in the case of the Investor, financing sources (other than Investor’s Affiliates) shall not constitute Representatives of the Investor without the Company’s prior written consent.

“*Restricted Party*” means any Person listed on Schedule 1.5(b) attached hereto, as may be updated from time to time by the Company acting in good faith upon prior written consent of the Investor (such consent not to be unreasonably withheld, conditioned or delayed); provided, however, any new Restricted Party added to Schedule 1.5(b) by the Company must be a Person that, following the date of this Agreement, begins engaging, or has one or more Affiliates that begins engaging, 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 as of the time of such update.

“**Shareholder Meeting**” means each annual or special meeting of shareholders of the Company and any adjournment, postponement, rescheduling or continuation thereof.

“**Specified Voting Matters**” means director nominations for any Shareholder Meeting, amendments to the Company’s amended and restated certificate of incorporation to increase the number of authorized shares of Company Common Stock, amendments to the Company’s equity incentive and employee stock purchase plans to increase the number of authorized shares of Company Common Stock issuable thereunder, executive compensation matters (including “say on pay” and “say on pay frequency” votes), and ratification of auditors.

“**Subsidiary**”, when used with respect to any Person, means any corporation, limited liability company, partnership, association, trust or other entity of which (x) securities or other ownership interests representing more than 50% of the ordinary voting power (or, in the case of a partnership, more than 50% of the general partnership interests) or (y) sufficient voting rights to elect at least a majority of the board of directors or other governing body are, as of such date, owned by such Person or one or more Subsidiaries of such Person or by such Person and one or more Subsidiaries of such Person.

“**Trading Day**” means any day on which the Company Common Stock is traded on Nasdaq.

“**Transaction Documents**” means this Agreement and the schedules, annexes and exhibits attached hereto and thereto.

“**Transactions**” means the transactions contemplated by the Transaction Documents.

ARTICLE II REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in any 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 Sections 13(a) or 15(d) thereof (collectively, the “**SEC Filings**”) filed or furnished by the Company with the U.S. Securities and Exchange Commission (the “**SEC**”) and publicly available prior to the date of this Agreement (including any exhibits and any other information incorporated by reference therein, but excluding any predictive, cautionary or forward looking disclosures contained under the captions “risk factors,” “forward looking statements” or any similar precautionary sections and other disclosures contained therein that are predictive, cautionary or forward looking in nature), the Company hereby represents and warrants to the Investor the following as of the date hereof and the Closing Date as follows:

2.1 Organization, Good Standing and Power; Capitalization.

(a) The Company and each of its Subsidiaries have been duly organized and are validly existing and in good standing under the laws of their respective jurisdiction of organization, with power and authority (corporate and other) to own and/or lease its properties and conduct its business as described in the reports filed by the Company with the United States Securities and Exchange Commission (the “**Commission**”) pursuant to the reporting requirements of the Exchange Act. True and accurate copies of the Charter and Bylaws (as amended or modified from time to time prior to the date hereof), each as in effect, have been made available to the Investor prior to the date hereof.

(b) The authorized capital stock of the Company consists of (i) 200,000,000 shares of Company Common Stock, and (ii) 10,000,000 shares of undesignated preferred stock, par value \$0.0001 per share (“**Company Preferred Stock**”). As of the close of business on December 17, 2024, 71,019,877 shares of Company Common Stock were issued and outstanding and, as of December 17, 2024, (i) no shares of Company Common Stock

were held in the treasury of the Company or held by any of the Company's Subsidiary, (ii) 14,165,047 shares of Company Common Stock were reserved for issuance under a Plan, (iii) 8,904,562 shares of Company Common Stock were subject to outstanding options to purchase Company Common Stock, (iv) no shares of Company Common Stock were available for issuance upon the vesting of the Company's outstanding performance stock unit awards, (v) 433,484 shares of Company Common Stock were available for issuance upon the vesting of the Company's outstanding restricted stock units and (vi) no shares of Company Preferred Stock were designated, issued or outstanding.

(c) All outstanding shares of Company Common Stock are duly authorized, validly issued, fully paid and nonassessable, and are not subject to and were not issued in violation of any preemptive or similar right, purchase option, call or right of first refusal or similar right. Except as set forth in Section 2.1(b), the Company has not issued any securities or right to purchase securities of the Company (including any options, warrants or other rights, agreements, arrangements or commitments of any character or any securities convertible into or exchangeable for any capital stock or other Equity Interests of the Company). Except as provided in the Transaction Documents or the Charter, there are no outstanding contractual obligations or other commitments of the Company or any of its Subsidiaries (i) restricting the transfer of, (ii) affecting the voting rights of, (iii) requiring the sale, issuance, repurchase, redemption or disposition of, or containing any right of first refusal with respect to or requiring the payment of any dividend or other distribution in respect of, (iv) requiring the registration for sale of, or (v) granting any preemptive or antidilutive right, with respect to any shares of capital stock of, or other Equity Interests in, the Company or any of its Subsidiaries. The Company is not party to a stockholder rights agreement, "poison pill" or similar anti-takeover agreement or plan.

(d) None of the Company or any of its Subsidiaries holds an Equity Interest in any Person other than Equity Interests in Company's Subsidiaries. Each outstanding share of capital stock of or other Equity Interest in each of the Company's Subsidiary is duly authorized, validly issued, fully paid, nonassessable and free of preemptive rights, purchase options, call or right of first refusal or similar rights and is owned, beneficially and of record, by the Company or one or more of its wholly owned Subsidiaries free and clear of all Liens. There are no options, warrants or other rights, agreements, arrangements or commitments of any character to which any of the Company's Subsidiary is bound relating to the issued or unissued capital stock or other Equity Interests of such Subsidiary, or securities convertible into or exchangeable for such capital stock or other Equity Interests, or obligating any of the Company's Subsidiary to issue or sell any shares of its capital stock or other Equity Interests, or securities convertible into or exchangeable for such capital stock of, or other Equity Interests in, such Subsidiary. Except as provided in the Transaction Documents, none of the Company or any of its Subsidiaries is party to any stockholders' agreement or other similar agreement or understanding relating to any shares of the Company's or such Subsidiary's capital stock or other Equity Interests or any other agreement relating to the disposition, voting or dividends with respect to any Equity Interest of the Company or such Subsidiary. No bonds, debentures, notes or other indebtedness having the right to vote (or convertible into or exchangeable for, securities having the right to vote) on any matters on which the stockholders of the Company or any of its Subsidiaries may vote are issued.

2.2 Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and perform the Transaction Documents and to issue and sell the Shares at the Closing. The execution, delivery and performance of this Agreement by the Company and the consummation by it of the Transactions have been duly and validly authorized by all necessary corporate action, and no further consent or authorization of the Board or stockholders is required. When executed and delivered by the Company, this Agreement shall constitute a valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor's rights and remedies or by other equitable principles of general application. The Board adopted resolutions approving the Transactions at a duly called and held meeting or via unanimous written consent. The Company has taken all appropriate actions so that the restrictions on business combinations contained in Section 203 of the General Corporation Law of the State of Delaware (as amended from time to time) will not apply with respect to or as a result of the issuance of the Shares to the Investor without any further action on the part of the stockholders or the Board of Directors being required.

2.3 Issuance of Shares. The Shares to be issued and sold by the Company to the Investor at the Closing will have been duly and validly authorized and, when issued and delivered against payment therefor as provided in this Agreement, will (i) be duly and validly issued and fully paid and nonassessable; and (ii) be free and clear of any

Lien or restriction on transfer, other than restrictions on transfer under any Transaction Document or applicable state or federal securities laws; and the issuance of the Shares is not subject to any preemptive or similar rights, except as have been validly waived or complied with in connection with the offering of the Shares. The Shares, when issued, will have the terms and conditions and entitle the holders thereof to the rights applicable to Company Common Stock set forth in the Charter. Assuming the accuracy of Investor's representations in Article III, the offer and sale of the Shares to the Investor is exempt from the registration and prospectus delivery requirements of the Securities Act and the rules and regulations promulgated thereunder.

2.4 No Conflicts; Governmental Approvals. The issuance and sale of the Shares and the compliance by the Company with this Agreement and the consummation of the Transactions will not (i) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Company or any of its Subsidiaries is a party or by which such Person's properties or assets are bound; (ii) result in any violation of the provisions of the Charter or Bylaws or the charter or organizational documents of any of the Company's Subsidiaries; or (iii) result in any violation of any federal, state, local or foreign statute or any judgment, order, rule or regulation of any court or Governmental Authority, domestic or foreign, having jurisdiction over the Company or any of its Subsidiaries or any of their respective properties or assets, except, in the case of clauses (i) and (iii) for such defaults, breaches, or violations that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Other than (i) the securities or blue sky laws of the various states of the United States, (ii) the filing of one or more Current Reports on Form 8-K, and (iii) the filing of a notice of change with Nasdaq, no notice to, registration, declaration or filing with, exemption or review by, or authorization, order, consent or approval of any Governmental Authority or stock exchange, nor expiration or termination of any statutory waiting period, is necessary for the execution, delivery or performance by the Company of or under this Agreement or the other Transaction Documents or the consummation by the Company of the transactions contemplated by this Agreement or the other Transaction Documents, except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

2.5 Nasdaq. The Company Common Stock is registered pursuant to Section 12(b) of the Exchange Act and listed on Nasdaq. The Company is in compliance in all material respects with applicable Nasdaq continued listing requirements and the Company has taken no action designed to and has no Knowledge of any facts that would have the effect of or reasonably be expected to lead to delisting of the Company Common Stock from Nasdaq or the termination of the registration of the Company Common Stock under the Exchange Act, and has not received any notification that the Commission or Nasdaq is contemplating such delisting or termination.

2.6 Brokers and Finders. The Company has not employed any broker or finder in connection with the Transactions.

2.7 SEC Documents; Financial Statements.

(a) Since January 1, 2023, the Company has timely filed all 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 SEC thereunder.

(b) The Company (i) has implemented, maintains, and at all times since January 1, 2023 has maintained, disclosure controls and procedures and a system of internal controls over financial reporting (as defined in Rule 13a-15(e) and (f), respectively, under the Exchange Act) as required by Rule 13a-15 under the Exchange Act relating to the Company and its consolidated Subsidiaries and (ii) has disclosed, based on its most recent evaluation prior to the date of this Agreement, to the Company's outside auditors and the audit committee of the Board of Directors (A) any "significant deficiencies" or "material weaknesses" (as defined by the Public Company Accounting Oversight Board) in the design or operation of internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information and (B) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting. There are no "significant deficiencies" or "material weaknesses" (as defined by the Public Company Accounting Oversight Board) in the design or operation of the Company's internal controls over, and procedures relating to, financial reporting

which would reasonably be expected to adversely affect in any material respect the Company's ability to record, process, summarize and report financial data, in each case which has not been subsequently remediated. Since January 1, 2023, to the Knowledge of the Company, there has not been any fraud, whether or not material, committed by management or other employees of the Company or any of its Subsidiaries who have a significant role in the Company's internal controls over financial reporting.

(c) There is no transaction, arrangement or other relationship between the Company and/or any of its Subsidiaries and an unconsolidated or other off-balance sheet entity that is required to be disclosed by the Company in its SEC Filings and is not so disclosed.

(d) The financial statements of the Company and its consolidated Subsidiaries included in the SEC Filings (i) complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto, in each case as of the date such SEC Filings was filed, and (ii) have been prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in such financial statements or the notes thereto) and fairly present in all material respects the consolidated financial position of the Company and its consolidated Subsidiaries as of the dates thereof and the consolidated results of their operations and cash flows of the Company and its consolidated Subsidiaries for the periods then ended (subject, in the case of unaudited quarterly statements, to the absence of footnote disclosures and normal year-end audit adjustments).

(e) The Company and its Subsidiaries do not have any liabilities or obligations of any nature that would be required under GAAP, as in effect on the date of this Agreement, to be reflected on a consolidated balance sheet of the Company (accrued, absolute, contingent or otherwise), other than liabilities or obligations (i) reflected on, reserved against, or disclosed in the notes to, the Company's consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023 (the "**Balance Sheet Date**"), (ii) incurred after the Balance Sheet Date in the ordinary course of business and that do not arise from any material breach of a contract, (iii) as expressly contemplated by this Agreement or otherwise incurred in connection with the transactions contemplated hereby, (iv) that have been discharged or paid prior to the date of this Agreement or (v) as would not, individually or in the aggregate, have had or reasonably be expected to have, a Material Adverse Effect.

(f) Since December 31, 2023, there has not been any Material Adverse Effect or any event, change or occurrence that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

2.8 Shell Company Status; Investment Company Act. The Company is not, and has never been, an issuer identified in Rule 144(i)(1) of the Securities Act ("**Rule 144**"). The Company is not, and immediately after giving effect to the sale of the Shares in accordance with this Agreement and the application of the proceeds thereof will not be required to be registered as, an "investment company" or a company "controlled" by an "investment company," within the meaning of the Investment Company Act of 1940, as amended.

2.9 No General Solicitations; No Integrated Offering. Neither the Company nor, to the Knowledge of the Company, any other Person authorized by the Company to act on its behalf, has engaged in a general solicitation or general advertising (within the meaning of Regulation D of the Securities Act) of investors with respect to offers or sales of the Shares. The Company has not and shall not, directly or indirectly, nor to the Knowledge of the Company has or shall any Person acting on its behalf, sold, sell, offered or offer for sale or solicited or solicit offers to buy or otherwise negotiated or negotiate (and has not done any of the foregoing) in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Shares in a manner that would require the registration under the Securities Act of the sale of the Shares or that would be integrated with the offer or sale of the Shares for purposes of the rules and regulations of Nasdaq 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.

2.10 Compliance with Laws and Permits; No Litigation or Orders. The Company and its Subsidiaries are in compliance with all applicable Laws, except as has not had, and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. The Company and its Subsidiaries possess all permits and

licenses issued by a Governmental Authority that are required to conduct their business, except as has not had, and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. Except as set forth on Schedule 2.10 hereof, there is no action, suit, proceeding or investigation pending or, to the Knowledge of the Company, threatened (including “cease and desist” letters or invitations to take patent license) against, nor any outstanding judgment, order, writ or decree against, the Company or any of its Subsidiaries or, to the Knowledge of the Company, affecting any of their respective assets, operations or business before or by any Governmental Authority, which individually or in the aggregate has had, or, would reasonably be expected to have (including for this purpose, assuming an adverse determination of any such matter), a Material Adverse Effect. Except as has not had and would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, neither the Company nor any of its Subsidiaries, nor any of their respective assets, is subject to any judgment, order, injunction, ruling, decision or decree of any Governmental Authority.

2.11 Disclaimer of Other Representations and Warranties. Except as expressly set forth in **Article III** or in any other Transaction Document, the Company acknowledges that neither the Investor nor any of its Affiliates have made or are making any representation or warranty of any kind, express or implied, at law or in equity, including with respect to it or any of its Subsidiaries or any of their respective businesses, assets, liabilities, condition (financial or otherwise), prospects or operations, or otherwise, and any such other representations and warranties are hereby expressly disclaimed by the Investor

ARTICLE III REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE INVESTOR

The Investor hereby represents and warrants to the Company the following as of the date hereof and the Closing Date as follows:

3.1 Authorization and Power. The Investor has the requisite power and authority to enter into and perform the Transaction Documents and to purchase the Shares being sold to it hereunder. The execution, delivery and performance of this Agreement by the Investor and the consummation by it of the Transactions have been duly authorized by all necessary corporate action, and no further consent or authorization of the Investor or its board of directors, stockholders or other governing body is required. When executed and delivered by the Investor, this Agreement shall constitute a valid and binding obligation of the Investor, enforceable against the Investor in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation, conservatorship, receivership or similar laws relating to, or affecting generally the enforcement of, creditor’s rights and remedies or by other equitable principles of general application.

3.2 No Conflict. The execution, delivery and performance of the Transaction Documents by the Investor and the consummation by the Investor of the Transactions do not and will not (i) violate any provision of the Investor’s charter or organizational documents, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, mortgage, deed of trust, indenture, note, bond, license, lease agreement, instrument or obligation to which the Investor is a party or by which the Investor’s properties or assets are bound, or (iii) result in a violation of any federal, state, local or foreign statute, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to the Investor or by which any property or asset of the Investor are bound or affected, except, in the case of clauses (ii) and (iii) for such conflicts, defaults or violations that would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of the Investor to perform its obligations under this Agreement and the other Transaction Documents, including the purchase of the Shares, or to consummate the Transactions.

3.3 Investor Sophistication; Accredited Investor. The Investor (i) is an “*accredited investor*” pursuant to Rule 501 of Regulation D under the Securities Act; (ii) is acquiring the Shares for its own account for investment only and with no present intention of distributing any of the Shares or any arrangement or understanding with any other Persons regarding the distribution of the Shares; (iii) has not been organized, reorganized or recapitalized specifically for the purpose of investing in the Shares; (iv) will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire to take a pledge of) any of the Shares except in compliance with the Securities Act and applicable state securities laws; (v) understands that the Shares are being offered and sold to it in reliance upon specific exemptions from the registration requirements

of the Securities Act and state securities laws, and that the Company is relying upon the truth and accuracy of, and the Investor's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Investor set forth herein in order to determine the availability of such exemptions and the eligibility of the Investor to acquire the Shares; (vi) understands that its investment in the Shares involves a significant degree of risk, including a risk of total loss of the Investor's investment (provided that such acknowledgment in no way diminishes the representations, warranties and covenants made by the Company hereunder); and (vii) understands that no Governmental Authority has passed upon or made any recommendation or endorsement of the Shares.

3.4 Private Placement. The Investor acknowledges that the Shares are being offered in a transaction not involving a public offering within the meaning of the Securities Act and that the Shares have not been registered under the Securities Act. The Investor acknowledges that the Shares may not be offered, resold, transferred, pledged or otherwise disposed of by the Investor in a transaction subject to the registration requirements of the Securities Act absent an effective registration statement under the Securities Act or an applicable exemption from the registration requirements of the Securities Act, including Rule 144 promulgated thereunder.

3.5 Stock Legends. The Investor acknowledges that certificates or book-entry credits evidencing the Shares shall bear a restrictive legend in substantially the following form (and including related stock transfer instructions and record notations), in addition to any other legend required by Law or by the "blue sky" laws of any state:

"THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (TOGETHER WITH THE RULES AND REGULATIONS THEREUNDER, THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, TRANSFERRED OR HYPOTHECATED EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT WITH RESPECT TO THE SECURITIES OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS."

"THE SALE, PLEDGE, HYPOTHECATION, OR TRANSFER OF THE SECURITIES REPRESENTED HEREBY IS SUBJECT TO, AND IN CERTAIN CASES PROHIBITED BY, THE TERMS AND CONDITIONS OF THAT CERTAIN INVESTMENT AGREEMENT, BY AND BETWEEN THE COMPANY AND MERCK SHARP & DOHME LLC, DATED AS OF DECEMBER 19, 2024, AS MAY BE AMENDED, AMENDED AND RESTATED AND/OR OTHERWISE MODIFIED FROM TIME TO TIME."

3.6 No General Solicitation; Pre-Existing Relationship. The Investor is not purchasing the Shares as a result of any advertisement, article, notice or other communication regarding the Shares published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement (as defined in Regulation D under the Securities Act). The Investor also represents that (i) the Investor initiated discussions with the Company regarding the purchase of the Shares and (ii) the Company did not initiate or solicit the Investor as to the purchase of the Shares. The Shares were offered to the Investor solely by direct contact between the Investor and the Company (or an authorized representative of the Company). The Investor did not become aware of this offering of Shares, nor were the Shares offered to the Investor, by any other means.

3.7 Purchase Entirely for Own Account. The Shares to be received by the Investor hereunder will be acquired for the Investor's own account, not as nominee or agent, and not with a view to the resale or distribution of any part thereof in violation of the Securities Act, and the Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, however, to the Investor's right at all times to sell or otherwise dispose of all or any part of such Shares in compliance with applicable federal and state securities laws. Nothing contained herein shall be deemed a representation or warranty by the Investor to hold the Shares for any period of time.

3.8 Experience of the Investor. The Investor, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Shares, and has so evaluated the merits and risks of such investment. The Investor is able to bear the economic risk of an investment in the Shares and, at the present time, is able to afford a complete loss of such investment.

3.9 No Rule 506 Disqualifying Activities. Neither the Investor nor any Person or entity with whom the Investor will share beneficial ownership of the Shares is subject to any of the “*Bad Actor*” disqualifications described in Rule 506(d)(1)(i)-(viii) under the Securities Act.

3.10 Brokers and Finders. The Investor has not employed any broker or finder in connection with the Transactions.

3.11 Ownership of Capital Stock. Prior to the execution and delivery of this Agreement the Investor and its Affiliates do not beneficially own or otherwise have economic exposure to, or any rights or options to acquire beneficial ownership of or economic exposure to, any voting securities of the Company.

3.12 Disclaimer of Other Representations and Warranties. Except as expressly set forth in **Article II** or in any other Transaction Document, the Investor acknowledges that neither the Company nor any of its Affiliates has made or is making any representation or warranty of any kind, express or implied, at law or in equity, including with respect to it or any of its Subsidiaries or any of their respective businesses, assets, liabilities, condition (financial or otherwise), prospects or operations, or otherwise, and any such other representations and warranties are hereby expressly disclaimed by the Company.

ARTICLE IV COVENANTS OF THE PARTIES

4.1 Public Disclosure; Confidentiality.

(a) The Investor and the Company shall consult with each other before issuing, and give each other the opportunity to review and comment upon, any press release or other public statements with respect to the Transactions, and shall not issue any such press release or make any such public statement prior to such consultation, except (i) either party may, without the other party’s prior written consent but with prior notice, make any filings with or furnish to the SEC as may be required by applicable securities Laws; *provided* that, the Company shall provide the Investor with a reasonable opportunity to review its required filings in connection with the Transaction prior to the filing of any such required filings with the SEC and shall consider in good faith any comments of the Investor; and (ii) as may be otherwise reasonably required by applicable Law, court process or the rules and regulations of any national securities exchange or national securities quotation system, as advised by counsel. The Investor and the Company agree that the initial press release to be issued with respect to the Transactions following execution of this Agreement shall be in the form agreed to by the parties hereto on or prior to the date hereof (the “*Announcement*”). Notwithstanding the forgoing, this Section 4.1(a) shall not apply to any press release or other public statement made by the Company or the Investor which (a) is consistent with the Announcement and does not contain any information relating to the Transactions that has not been previously announced or made public in accordance with the terms of this Agreement, (b) is made in the ordinary course of business and does not relate specifically to the Transactions, or (c) is consistent with the terms and conditions of the Transaction Documents that are publicly disclosed by the Company or the Investor (without any violation of this Agreement). Notwithstanding the foregoing, (i) this Section 4.1(a) shall not prohibit any disclosure of information concerning this Agreement or the other Transaction Documents in connection with any dispute between the parties hereto regarding this Agreement or the other Transaction Documents and (ii) either party hereto may, without consulting the other party hereto, provide ordinary course communications regarding this Agreement and the Transactions to its existing or prospective direct or indirect general and limited partners, equityholders, financing sources, members, managers and investors of any Affiliates of such Person, in the ordinary course of business (in the case of information that is not otherwise publicly disclosed, on a confidential basis).

(b) The Investor will, and will cause its Affiliates and Representatives who actually receive Confidential Information to, keep confidential any information (including oral, written and electronic information)

concerning the Company, its Subsidiaries or its Affiliates that may be furnished to the Investor, its Affiliates or its or their respective Representatives by or on behalf of the Company or any of its Representatives pursuant to this Agreement (“**Confidential Information**”) and to use the Confidential Information solely for the purposes of monitoring, administering or managing the Investor’s investment in the Company made pursuant to this Agreement or as otherwise agreed by the parties; provided that Confidential Information will not include information that (a) was or becomes available to the public other than as a result of a breach of any confidentiality obligation in this Agreement by the Investor or its Affiliates or their respective Representatives, (b) was or becomes available to the Investor or its Affiliates or their respective Representatives from a source other than the Company or its Representatives; provided that such source is reasonably believed by the Investor or such Affiliates not to be subject to an obligation of confidentiality (whether by agreement or otherwise) to the Company, (c) at the time of disclosure is already in the possession of the Investor or its Affiliates or their respective Representatives from a source other than the Company or any of its Subsidiaries or any of their respective Representatives or (d) was independently developed by the Investor or its Affiliates or their respective Representatives without reference to, incorporation of, or other use of any Confidential Information. The Investor will notify the Company reasonably promptly upon learning of any non-permitted use or disclosure of the Confidential Information and use commercially reasonable efforts to mitigate the effect of such breach. Notwithstanding the foregoing, the Investor may disclose Confidential Information to its Representatives to the extent necessary to obtain their services in connection with its investment in the Company; *provided* that any breach of the confidentiality and use terms herein by any Person to whom the Investor may disclose Confidential Information shall be attributable to the Investor for purposes of determining the Investor’s compliance with this Section 4.1(b), except those who have entered into a separate confidentiality or nondisclosure agreement or obligation with the Company. The Investor may also disclose Confidential Information as may otherwise be required or requested by law or legal, judicial or regulatory process; *provided*, that to the extent reasonably practicable, the Investor will promptly provide the Company with written notice (email being sufficient) of the required disclosure and the applicable law or legal, judicial or regulatory process so that the Company (at its sole discretion and sole expense) may seek a protective order or other appropriate remedy prior to any such required disclosure. The Investor will use commercially reasonable efforts to cooperate with the Company and its Representatives in any attempt by the Company to obtain any such protective order or other remedy. If the Company elects not to seek, or is unsuccessful in obtaining, any such protective order or other remedy in connection with any requirement that the Investor disclose Confidential Information, and if the Investor obtains advice of legal counsel (including in-house counsel) confirming that disclosure of such Confidential Information is required, then the Investor may disclose such Confidential Information to the extent required or requested by law or legal, judicial or regulatory process, without liability hereunder; provided, however, that the Investor takes commercially reasonable steps to minimize the extent of any required disclosure.

4.2 Information Rights. During the Investor Rights Period, relevant members of the Company’s senior leadership team shall meet with the Investor at least once per fiscal quarter of the Company at mutually agreed upon times and places (which may be virtual) to provide an update on the Company’s commercial and financial matters in a manner not materially less favorable to the Investor than updates provided to the Company’s other similarly situated strategic stockholders (excluding any institutional investors of the Company) that own at least 5% of the outstanding Company Common Stock, but in all cases such information shall include the information set forth on Schedule 4.2(c), and prior to (but not following) the Specified Information Termination Date (as defined in Schedule 4.2(a)) the information listed on Schedule 4.2(a); provided that the Investor may share such information with its relevant commercial partners listed on Schedule 4.2(b) (who shall constitute Representatives of the Investor), as Schedule 4.2(b) may be updated from time to time with the Company’s consent (not to be unreasonably withheld, delayed or conditioned) to add additional relevant commercial partners of the Investor; *provided further* that the Company shall not be required pursuant to this Section 4.2 to provide access or share any information (a) the disclosure of which is reasonably necessary to preserve the attorney-client privilege between the Company and its counsel; (b) if the Company determines, in its reasonable judgment, that doing so would reasonably be expected to result in the disclosure of trade secrets or competitively sensitive information; (c) that would reasonably be expected to violate any obligation of confidentiality, order or applicable Law to which the Company or its Subsidiaries is subject; (d) relating to any dispute, claim or proceeding between the parties; or (e) subject to the rights of the Investor in Section 4.4 of this Agreement, relating to the Company’s assessment of strategic alternatives, including mergers, acquisitions, licensing transactions or other business combinations; provided that, in the case of each of the foregoing clauses (a) through (c) and (e), the Company will use its commercially reasonable efforts to make appropriate substitute arrangements to permit reasonable inspection or disclosure in a manner that would not implicate the limitations in the foregoing clauses (a) through (c) and (e). Nothing in this Section 4.2 shall require the Company to prepare or cause to be prepared any

financial statements, projections, reports, analyses, appraisals or opinions that are not readily available. All information provided by or on behalf of the Company pursuant to this Section 4.2 shall constitute Confidential Information of the Company.

4.3 Opportunity to Participate in Future Financings.

(a) In the event that, at any time during the Investor Rights Period, the Company or its Subsidiaries make any public or non-public offering of any capital stock of, other equity or voting interests in, or equity-linked securities of, the Company or its Subsidiaries or any securities that are convertible or exchangeable into (or exercisable for) capital stock of, other equity or voting interests in, or equity-linked securities of, the Company (collectively, "**New Securities**") (other than (1) issuances of any securities pursuant to an employee stock option plan, equity incentive plan, management incentive plan, restricted stock plan, stock purchase plan or stock ownership plan or similar benefit plan, program or agreement, issued as compensation for the Company's employees, directors, consultants or service providers, as approved by the Board or a duly authorized committee thereof, (2) issuances of securities upon the exercise, conversion, exchange or settlement of options, warrants or other equity linked securities of the Company (x) outstanding as of the Closing, (y) otherwise issued as compensation for the Company's employees, directors, consultants or service providers or (z) to the extent the Company offered such options, warrants or equity linked securities to Investor pursuant to this Section 4.3, (3) issuances of any securities issued as a result of a pro rata stock split, stock dividend, spin-off, reclassification or reorganization or similar pro rata event, (4) issuances of any securities pursuant to any stockholder rights plan adopted by the Board (so long as the Investor or its applicable Affiliates receive the initial distribution of the rights pursuant to such stockholder rights plan in respect of their shares of Company Common Stock as of the initial record date for such stockholder rights plan), (5) shares of a Subsidiary of the Company issued to the Company or a wholly owned (other than with respect to a de minimis number of shares if required by applicable Law or regulations of the country of domicile of such Subsidiary) Subsidiary of the Company, (6) issuances made as consideration for any bona fide acquisition (by sale, merger in which the Company is the surviving corporation, or otherwise) by the Company of equity in, or non-cash assets of, another Person, business unit, division or business, (7) issuances of any shares of Company Common Stock pursuant to at the market programs, including pursuant to that certain At-the-Market Sales Agreement, dated December 30, 2021, by and between the Company and BTIG, LLC, as amended by Amendment No. 1 to the At-the-Market Sales Agreement, dated December 21, 2023, and as may be further amended from time to time, and (8) public or private offerings in which the Investor participates in an amount necessary to maintain its Pro Rata Portion (as defined below)), then the Investor shall be afforded the opportunity to acquire from the Company up to its Pro Rata Portion (or, if the Investor so requests and the Company consents, more than its Pro Rata Portion) of such New Securities for the same price and on the same terms as that offered to the other investors of such New Securities; provided, that the Investor shall not be entitled to acquire the portion of New Securities pursuant to this Section 4.3 to the extent the issuance of such portion of New Securities to the Investor would require approval of the stockholders of the Company as a result of the Investor status, if applicable, as an Affiliate of the Company or pursuant to the rules and listing standards of Nasdaq until the Company obtains such approval, and the Company shall use reasonable best efforts to obtain such approval as promptly as practicable.

(b) The maximum amount of New Securities that Investor shall be entitled (but not obligated) to purchase in the aggregate (absent the Company's consent) shall be determined by multiplying (1) the total number of such offered shares of New Securities by (2) a fraction, the numerator of which is the number of outstanding shares of Company Common Stock held by the Investor and its Affiliates as of the date the Company's delivery of notice to the Investor of the proposed sale and issuance of New Securities and the denominator of which is the aggregate number of shares of Company Common Stock outstanding as of such date (the "**Pro Rata Portion**"); *provided* that, the Investor shall be entitled to purchase an amount greater than its Pro Rata Portion, subject to the consent of the Company, in its sole discretion. Notwithstanding anything to the contrary in this Agreement or any of the other Transaction Documents and for the avoidance of doubt, no shares of Company Common Stock or other securities will be issued by the Company to the Investor or its Attribution Parties to the extent that such issuance pursuant to this Section 4.3 or this Agreement would result in the Investor and its Attribution Parties beneficially owning in excess of 19.99% of the then-outstanding shares of Company Common Stock on a post-transaction basis or would otherwise reasonably be expected to require stockholder approval under Nasdaq rules on the basis that such issuance would result in a change of control, unless mutually agreed upon by the parties, in which case such issuance shall be subject to stockholder approval if required by Nasdaq.

(c) If the Company proposes to offer New Securities, it shall give the Investor prior written notice (or with respect to registered offerings, prior oral notice) of its intention, describing the anticipated price (or range of anticipated prices), anticipated amount of New Securities and other material terms and timing upon which the Company proposes to offer the same as soon as reasonably practicable (but in any event not later than the earlier of (i) at the same time the Company contacts one or more other investors about the proposed offer of New Securities and (ii) five Business Days prior to such issuance or, in the case of a registered offering, at least one Business Day prior to the public commencement of such registered offering, *provided*, that to the extent the terms of such offering cannot reasonably be provided within the applicable timeframe set forth above, notice of such terms may be given as promptly as reasonably practicable but in any event two Business Day prior to such issuance or in the case of a registered offering, immediately following the public commencement of such offering). The Company may provide such written notice to the Investor on a confidential basis prior to public disclosure of such offering. Other than in the case of a registered offering, the Investor may notify the Company in writing at any time on or prior to the second Business Day immediately preceding the date of such issuance (or, if notice of all such terms has not been given prior to the second Business Day immediately preceding the date of such issuance, at any time prior to such issuance or, in the case of a registered offering, by the deadline communicated by the Company to the Investor, which will be a reasonable time (as determined by the Company in good faith) prior to the Company's entry into a binding agreement with the underwriter, placement agent or investor(s) to sell the securities in such registered offering) whether the Investor will exercise such participation rights and as to the amount of New Securities the Investor desires to purchase, up to the maximum amount calculated pursuant to Section 4.3(b), unless the Investor requests and the Company consents to more. Subject to receipt of the requisite notice of such issuance by the Company, the failure of the Investor to respond prior to the time a response is required pursuant to this Section 4.3(c) shall be deemed to be a waiver of the Investor's purchase rights under this Section 4.3 only with respect to the offering described in the applicable notice. With respect to any proposed offering of New Securities subject to this Section 4.3(c), if the Investor waives its rights pursuant to this Section 4.3 with respect to any portion of such New Securities (either affirmatively or pursuant to the immediately preceding sentence), that the Company shall have 90 days (and in the case of a registered offering, five Business Days) following the end of the applicable election period to sell or enter into an agreement (pursuant to which the sale of New Securities covered thereby shall be closed, if at all, within 90 days from the date of said agreement) to sell that portion of the New Securities with respect to which the Investor's participation right set forth in this Section 4.3 was not exercised, at a price and upon terms no more favorable to the purchasers thereof than specified in the Company's notice to the Investor delivered pursuant to this Section 4.3(c) (provided, however, that if the price of the New Securities is based on a recent market price, the reduction in market price shall not constitute terms that are more favorable to the purchasers than specified in the Company's notice to the Investor delivered pursuant to Section 4.3(c) unless such reduction is a material change in price); provided, however, that in the event the Company has not consummated any such sale during the foregoing applicable period, the Company shall not thereafter issue or sell any New Securities without first again offering such securities to the Investor in the manner provided in this Section 4.3(c). With respect to any offering of New Securities in a registered offering, any notice required to be given by the Company pursuant to this Section 4.3(c) may be given on the Company's behalf by an underwriter or placement agent for such registered offering.

(d) Other than in the case of a registered offering in which the Investor participates in the same manner as the other purchasers in such offering (in which case, for the avoidance of doubt (but without limitation of the notice requirements of Section 4.3(c)), the participation rights in this Section 4.3 shall not apply), the Investor shall purchase the New Securities that it has elected to purchase under this Section 4.3 concurrently with the related issuance of such New Securities by the Company (subject to the receipt of any required approvals); *provided*, that if such related issuance is prior to the 20th Business Day following the date on which the Investor has notified the Company that it has elected to purchase New Securities pursuant to this Section 4.3, then the Investor shall purchase such New Securities within 20 Business Days following the date of the related issuance. If the proposed issuance by the Company of securities which gave rise to the exercise by the Investor of its participation rights pursuant to this Section 4.3 shall be terminated or abandoned by the Company without the issuance of any New Securities, then the purchase rights of the Investor pursuant to this Section 4.3 shall also terminate as to such proposed issuance by the Company (but not any subsequent or future issuance), and any funds in respect thereof paid to the Company by the Investor in respect thereof shall be promptly refunded in full. Other than in the case of a registered offering in which the Investor participates in the same manner as the other purchasers in such offering, any offer or sale made pursuant to this Section 4.3 shall be made without registration under the Securities Act pursuant to the exemption provided by Section 4(a)(2) of the Securities Act as a transaction not involving a public offering. Notwithstanding anything to the contrary in this Agreement or the other Transaction Documents, to the extent that any issuance of New Securities to

the Investor under this Section 4.3 would require any filing, consent or clearance or the expiration of any waiting period under applicable Law (including under the HSR Act), the definitive agreements for such issuance shall provide, and such issuance shall be subject to making or obtaining, such filing, consent, clearance or expiration.

(e) In the case of the offering of securities for consideration in whole or in part other than cash, including securities acquired in exchange therefor (other than securities by their terms so exchangeable), the consideration other than cash shall be deemed to be the fair value thereof as reasonably determined by the Board in good faith; *provided, however*, that such fair value as determined by the Board shall not exceed the aggregate market price of the securities being offered as of the date the Board authorizes the offering of such securities.

(f) The election by the Investor to not exercise its participation rights under this Section 4.3 in any one instance shall not affect its rights as to any subsequent proposed issuance. The Company and the Investor shall cooperate in good faith to facilitate the exercise of the Investor's rights pursuant to this Section 4.3, including securing any required approvals or consents. The covenants set forth in this Section 4.3 shall apply from and after the Closing Date and shall terminate and be of no further force or effect after the end of the Investor Rights Period.

4.4 Strategic Transaction Notification Rights. During the Investor Rights Period, in the event that (a) the Company receives a *bona fide* offer, indication of interest or proposal (a "**Proposal**") from a third party for a single transaction or a series of related transactions with respect to a merger, consolidation, reorganization, plan of exchange, sale of assets or transfer or sale of securities (including a tender offer or exchange offer) or other transaction, which, if consummated, would result in such third party succeeding to or acquiring, directly or indirectly, or obtaining the right to acquire, directly or indirectly, (i) fifty percent (50%) or more of the outstanding equity securities or voting securities of the Company or (ii) control of a majority of the consolidated assets or intellectual property of the Company (including, without limitation, through an exclusive license) (a "**Change of Control Transaction**") (other than with respect to a Proposal that the Board has determined not to pursue (including a determination to not make any counteroffers, engage in other negotiations with respect thereto or enter into any non-disclosure or similar agreement with the counterparty thereof)) or (b) the Board commences a process for solicitations of offers or indications of interest for a Change of Control Transaction from third parties (a "**Sale Process**"), then, in the case of each of clause (a) and (b), the Company shall (i) promptly provide written notice (the "**Notice**") to the Investor thereof (email being sufficient) within two (2) Business Days of receipt of such a Proposal for a Change of Control Transaction or commencement of a Sale Process, as applicable (it being understood that the Company shall not be required to disclose the counterparty or terms of any other indication of interest or proposal; *provided, however*, that the Notice shall state that a written bona fide offer or proposal has been received or a process has been commenced, as applicable, and the type of transaction (if an asset sale, the type of assets proposed to be transferred and the liabilities proposed to be assumed), and proposed timeline; *provided further*, that in the event that any of the information set forth in the Notice materially changes, the Company shall supplement the Notice with such information within three Business Days of the date the Company became aware of such changes), and (ii) provide the Investor with a reasonable opportunity to respond to any Proposal received and/or participate in such Sale Process (if the Investor wishes to participate) in substantially the same manner as other participants in such Sale Process; *provided* that in no event shall the Company be required to provide the Investor with any Notice under this Section 4.4 if the Board determines in good faith, after consultation with the Company's outside legal counsel, that doing so would be inconsistent with the fiduciary duties of the Board under applicable Law. In connection with the Investor's right to respond to any Proposal or participate in any Sale Process, the Company shall promptly respond to all of the Investor's reasonable questions and provide the Investor with all reasonably requested due diligence information and materials and access to Company management and information on reasonable and customary terms and conditions appropriate for discussions regarding a Change of Control Transaction or a Sale Process and appropriate to formulate a proposal for a Change of Control Transaction between the Company and the Investor.

4.5 Standstill. The Investor agrees that, during the period commencing on the Closing Date and ending on the earlier of (a) two years from the date of this Agreement and (b) the end of the Investor Rights Period (the "**Standstill Period**"), without the Company's prior written consent, neither Investor nor its Representatives shall in any manner, directly or indirectly (1) effect, seek, offer or propose (whether publicly or otherwise) (i) any merger, consolidation, reorganization, plan of exchange, sale of assets or transfer or sale of securities (including a tender offer or exchange offer) or other business combination transaction involving the Company or any of its assets or any recapitalization, restructuring, liquidation, dissolution or other extraordinary transaction with respect to the Company, or (ii) any "solicitation" of "proxies" (as such terms are used in the Exchange Act and Rule 14a-1 promulgated

thereunder) or consents to vote any securities of the Company, including soliciting consents or taking any other action with respect to the calling of a special meeting of the Company's shareholders to obtain representation on the Board; (2) form, join or in any way participate in a "group" (as defined under the Exchange Act) with respect to the Company in order to undertake an activity described in clause (1); or (3) otherwise act, alone or in concert with others, to seek representation on or to control or influence the management, Board or policies of the Company; *provided* that, nothing in the foregoing shall restrict the Investor from (x) confidentially communicating to the Board, the Company's chief executive officer or the Company's chief financial officer any non-public proposals regarding a possible negotiated transaction between the Company and the Investor or any other proposal in such a manner as would not reasonably be expected to require public disclosure thereof under any Law applicable to the Company or to the Investor or (y) acquiring shares of Company Common Stock pursuant to this Agreement or in open market purchases so long as the Investor and its Affiliates do not beneficially own more than 19.99% of the Company Common Stock outstanding as a result of such acquisition. Despite the foregoing, each of the restrictions contained in the immediately preceding sentence shall lapse at such time as the Company publicly announces the entry into a definitive agreement with any third party with respect to a Change of Control Transaction.

4.6 Voting of Shares. During the Standstill Period, the Investor shall, or shall cause its Representatives to, (a) appear in person or by proxy at each Shareholder Meeting and (b) vote, or deliver consents or consent revocations with respect to, all Company Common Stock beneficially owned by the Investor in accordance with the Board's recommendations with respect to the Specified Voting Matters submitted to shareholders at such Shareholder Meeting, in each case as the Board's recommendation is set forth in the definitive proxy statement, consent solicitation statement, or revocation solicitation statement filed by the Company in respect of such Shareholder Meeting; *provided* that the terms of this Section 4.6 shall not apply if the Investor determines in good faith that doing so would be inconsistent with the fiduciary duties of the Investor's ultimate parent company's board of directors under applicable Law. Notwithstanding the foregoing, (i) in the event that Institutional Shareholder Services Inc. ("**ISS**") or Glass Lewis & Co., LLC ("**Glass Lewis**") issue voting recommendations that differ from the Board's recommendation with respect to any proposals, the Investor shall be permitted to vote, or deliver consents or consent revocations with respect to any shares beneficially owned by the Investor in accordance with such ISS or Glass Lewis recommendation for such proposal (and not any other proposal), and (ii) the Investor shall be permitted to vote in its sole discretion with respect to any Change of Control Transaction that requires a vote of the Company's shareholders. The Investor shall take all actions necessary (including by calling back loaned out shares) to ensure that the Investor has voting power for each share beneficially owned by it on the record date for each Shareholder Meeting.

4.7 Lockup and Transfer Restrictions.

(a) The Investor hereby agrees that it will not, without the prior written consent of the Company, during the period commencing on the Closing Date and ending on the date that is 90 days after the Closing Date (the "**Lock-Up Period**") (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of the Shares; or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Company Common Stock or other securities, in cash or otherwise (collectively, "**Transfer**"). Notwithstanding the foregoing, the Investor or its permitted transferees may Transfer any Shares during the Lock-Up Period (i) to the Investor's Affiliates (ii) to the Company; or (iii) in connection with a liquidation, merger, stock exchange, reorganization, tender offer or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of Company Common Stock for cash, securities or other property subsequent to the Closing Date; *provided*, however, that in the case of clauses (i), it shall be a condition to the transfer that the transferee executes an agreement stating that such transferee is receiving and holding such capital stock subject to Section 4.7 and there shall be no further transfer of such capital stock except in accordance with Section 4.7, and, *provided* further, that any such transfer shall not involve a disposition for value.

(b) Notwithstanding anything to contrary herein, at no time shall the Investor (including any of its Affiliates) directly Transfer any Shares or other securities acquired by the Investor pursuant to Investor's rights under this Agreement to any Restricted Party or any Activist Investor; *provided that*, the foregoing shall not apply to the Transfer of any Shares in the open market through a broker and not intentionally targeted at such Restricted Parties or Activist Investors.

(c) In order to enforce this Section 4.7, the Company may impose stop-transfer instructions with respect to the Shares (and transferees and assignees thereof).

4.8 Registration Rights.

(a) The Company agrees (i) 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 the Investor of the Shares within 30 calendar days after the Closing Date, (ii) 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 (iii) and to keep such Registration Statement effective at all times until all Shares registered thereunder have been sold or may be sold without restriction or volume limitation under Rule 144. In no event shall the Investor 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 the Investor, suspend the use of any Registration Statement, including any prospectus that forms a part of a Registration Statement, if the Company (i) 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, (ii) 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 (iii) 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 the Investor be suspended from selling 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 the Investor, 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 Shares as contemplated hereby.

(c) The Company shall: (i) advise the Investor by email to [●] (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 (2) 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 (2) Trading Days after the receipt by the Company of any notification with respect to the suspension of the qualification of the shares of Company Common Stock included therein for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and (5) within four (4) 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 Investor pursuant to this clause (c)(i)(5) to the extent that the information is filed with the SEC within such four (4) Business Days; and provided further that the Company shall not, when so advising the Investor of such events pursuant to this clause (c)(i)(5), be required to provide the Investor with any material, non-public information regarding the Company other than to the extent that providing notice to the Investor of the occurrence of the events listed in this clause (c)(i)(5) may constitute material, nonpublic information regarding the Company, and (ii) with a view to making available to the Investor the benefits of Rule 144 that may, at such times as Rule 144 is available to the Investor, permit the Investor to sell securities of the Company to the public without registration, the Company agrees to, for so long as the Investor owns any Shares, use commercially reasonable efforts to: (A) make and keep public information available, as those terms are understood and defined in Rule 144, if necessary

to permit the Investor to sell Shares pursuant to Rule 144 and (B) 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, the Investor, its directors, officers, employees, advisors and agents, and each person who controls the Investor (within the meaning of the Securities Act or the Exchange Act) and each affiliate of the Investor (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 (i) 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 (ii) subject to the accuracy of the representations and warranties of the Investor in **Article III** above and compliance by the Investor with applicable federal and state securities laws with respect to the 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 the Shares thereunder, except to the extent, but only to the extent, such Losses are based solely upon information regarding the Investor furnished in writing to the Company by or on behalf of the Investor expressly for use therein or was reviewed and approved in writing by the Investor expressly for use in the Registration Statement.

(e) The Investor 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 (i) any breach or violation of any representations and warranties of the Investor in **Article III** above, or any failure by the Investor to comply with applicable federal and state securities laws with respect to the issuance or transfer of any Shares, (ii) 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 the Investor furnished in writing to the Company by or on behalf of the Investor expressly for use therein, and (iii) the use by the Investor of a prospectus during an allowed suspension after the Company has notified the Investor in writing of such suspension. In no event shall the aggregate liability of the Investor under this Section 4.8(e) be greater in amount than the dollar amount of the net proceeds received by the Investor upon the sale of the Shares issued pursuant to this Agreement giving rise to such indemnification obligation.

ARTICLE V MISCELLANEOUS

5.1 Survival; Limitations on Losses. Unless otherwise set forth in this Agreement, the representations, warranties, covenants and agreements of the Company and the Investor contained in or made pursuant to this Agreement shall survive the execution and the delivery of this Agreement and the Closing. Notwithstanding anything to the contrary herein, in no event shall the aggregate liability of the Company and its Affiliates and its and their respective Representatives arising out of or relating to this Agreement or the other Transaction Documents exceed the Share Purchase Price, and the Investor agrees it shall not institute any action or proceeding or bring any claim for Losses against the Company or any of its Affiliates or Representatives in excess of the Share Purchase Price.

5.2 Fees and Expenses. Each party shall pay the fees and expenses of its advisors, counsel, accountants and other experts, if any, and all other expenses, incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement.

5.3 Entire Agreement. The Transaction Documents, together with the schedules, annexes and exhibits thereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all prior

agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, annexes, exhibits and schedules; *provided, however*, that any agreements previously entered into between the Company and the Investor shall remain in full force and effect in accordance with their terms.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section (if any) prior to 5:00 p.m. (New York City time) on a Business Day (so long as no message of non-delivery is received from the Company or Investor recipient thereof), (b) the next Business Day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section (if any) on a day that is not a Business Day or later than 5:00 p.m. (New York City time) on any Business Day (so long as no message of non-delivery is received from the Company or Investor recipient thereof), (c) the Business Day following the date of deposit with a nationally recognized overnight courier service, or (d) upon actual confirmation of receipt by the party to whom such notice is required to be given. The addresses and email addresses for such notices and communications are those set forth below, or such other address or email as may be designated in writing hereafter, in the same manner, by any such Person:

If to the Company: Personalis, Inc.
6600 Dumbarton Circle
Fremont, California

Attention: Stephen Moore
Email: [●]

with copies (which copies shall not constitute notice to the Company) to: Cooley LLP
1700 Seventh Avenue
Seattle, WA 98101-1355
Attention: Laura Berezin
Email: lberezin@cooley.com

Cooley LLP
55 Hudson Yards
New York, New York 10001
Attention: Bill Roegge
Email: broegge@cooley.com

If to the Investor: Merck Sharp & Dohme LLC
126 East Lincoln Ave.
P.O Box 2000
Mailstop RY60-238
Rahway, New Jersey 07065
Attention: Senior Vice President, Business Development
Email: [●]

with copies (which copies shall not constitute notice to the Investor) to: Gibson, Dunn & Crutcher LLP
200 Park Avenue
New York, NY 10166
Attention: Saeed Muzumdar
Email: smuzumdar@gibsondunn.com

5.5 Amendments; Waivers. This Agreement and any term hereof may be amended, terminated or waived only with the written consent of the Company and the Investor. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a

waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

5.6 Construction. When a reference is made in this Agreement to an Article, a Section, Exhibit or Schedule, such reference shall be to an Article of, a Section of, or an Exhibit or Schedule to, this Agreement unless otherwise indicated. Whenever the words “include”, “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation”. Whenever the words “ordinary course of business” are used in this Agreement, they shall be deemed to be followed by the words “consistent with past practice”. The words “hereof”, “herein” and “hereunder” and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement unless the context requires otherwise. The words “date hereof” when used in this Agreement shall refer to the date of this Agreement. The terms “or”, “any” and “either” are not exclusive. The word “extent” in the phrase “to the extent” shall mean the degree to which a subject or other thing extends, and such phrase shall not mean simply “if”. The word “will” shall be constructed to have the same meaning and affect as the word “shall”. All accounting terms used and not defined herein shall have the respective meanings given to them under GAAP. All terms defined in this Agreement shall have the defined meanings when used in any document made or delivered pursuant hereto unless otherwise defined therein. The definitions contained in this Agreement are applicable to the singular as well as the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such term. In the event that the Company Common Stock is listed on a national securities exchange other than the Nasdaq, all references herein to the Nasdaq shall be deemed to be references to such other national securities exchange. Any agreement, instrument or statute defined or referred to herein or in any agreement or instrument that is referred to herein means such agreement, instrument or statute as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. Unless otherwise specifically indicated, all references to “dollars” or “\$” shall refer to the lawful money of the United States. References to a Person are also to its permitted assigns and successors. When calculating the period of time between which, within which or following which any act is to be done or step taken pursuant to this Agreement, the date that is the reference date in calculating such period shall be excluded (unless, otherwise required by Law, if the last day of such period is not a Business Day, the period in question shall end on the next succeeding Business Day). The parties hereto have participated jointly in the negotiation and drafting of this Agreement and, in the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party hereto by virtue of the authorship of any provision of this Agreement.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. Neither the Company nor the Investor may assign (whether by operation of law or otherwise) this Agreement or any rights or obligations hereunder without the prior written consent of the other party hereto; *provided* that the Company shall be permitted to directly or indirectly assign this Agreement in connection with a change of control transaction involving the Company to the counterparty of such transaction.

5.8 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in this Section 5.8. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

5.9 Specific Enforcement. The parties hereto agree that irreparable damage for which monetary relief, even if available, would not be an adequate remedy, may occur in the event that any provision of this Agreement is not performed in accordance with its specific terms or is otherwise breached. The parties acknowledge and agree that (a) the parties shall be entitled to an injunction or injunctions, specific performance or other equitable relief to prevent breaches or threatened breaches of this Agreement and to enforce specifically the terms and provisions hereof in the courts described in Section 5.10 without bond or proof of damages or otherwise (in each case, subject to the terms and conditions of this Section 5.9), this being in addition to any other remedy to which they are entitled under this Agreement and (b) the right of specific enforcement is an integral part of the Transactions and without that right, neither the Company nor the Investor would have entered into this Agreement. The parties hereto agree not to assert that a remedy of specific enforcement is unenforceable, invalid, contrary to Law or inequitable for any reason, and agree not to assert that a remedy of monetary damages would provide an adequate remedy or that the parties otherwise

have an adequate remedy at law. The parties hereto acknowledge and agree that any party seeking an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement in accordance with this Section 5.9 shall not be required to provide any bond or other security in connection with any such order or injunction.

5.10 Governing Law; Jurisdiction. This Agreement (and all claims, controversies and causes of action arising under, in connection with or otherwise relating to, this Agreement) shall be governed by, and construed in accordance with, the internal laws of the State of Delaware without regard to the choice of law principles thereof. Each of the parties hereto irrevocably submits to the exclusive jurisdiction of the Delaware Chancery Court (or, if the Delaware Chancery Court shall be unavailable, then any federal court of the United States of America sitting in the State of Delaware) for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the Transactions. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement. Each of the parties hereto irrevocably consents to the jurisdiction of any such court in any such suit, action or proceeding and to the laying of venue in such court. Each party hereto irrevocably waives any objection to the laying of venue of any such suit, action or proceeding brought in such courts and irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

5.11 WAIVER OF JURY TRIAL. EACH PARTY HERETO ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE IT HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT AND ANY OF THE AGREEMENTS DELIVERED IN CONNECTION HERewith OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER, (B) IT UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF SUCH WAIVER, (C) IT MAKES SUCH WAIVER VOLUNTARILY AND (D) IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVER AND CERTIFICATIONS IN THIS SECTION 5.11.

5.12 Counterparts; Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

5.13 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any respect, then, to the fullest extent permitted by law, (a) all other provisions hereof shall remain in full force and effect and shall be liberally construed in order to carry out the intentions of the parties as nearly as may be possible and (b) the parties shall use their best efforts to replace the invalid, illegal or unenforceable provision(s) with valid, legal and enforceable provision(s) which, insofar as practical, implement the purposes of such provision(s) in this Agreement.

[SIGNATURE PAGES FOLLOW]

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

COMPANY:

PERSONALIS, INC.

By: /s/Aaron Tachibana

Aaron Tachibana

Chief Financial Officer and Chief Operating Officer

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

INVESTOR:

MERCK SHARP & DOHME LLC

By: /s/ Sunil Patel

Name: Sunil Patel

Title: Senior Vice President, Corporate Development