

Item 1.01. Entry into a Material Definitive Agreement.

VivoPharm Acquisition

On August 14, 2017, Cancer Genetics, Inc., a Delaware corporation (“Cancer Genetics” or the “Company”), entered into a Stock Purchase Agreement dated as of August 14, 2017 (the “Stock Purchase Agreement”), by and among the Company, the Trustee of The Brandt Family Trust, a trust organized under the laws of Australia, Sabine Brandt (the “Trust”), Royal Melbourne Institute of Technology, established under the laws of Victoria, Australia (“RMIT”), South Australian Life Science Advancement Partnership, LP, a limited partnership organized under the laws of Australia (“SALSA”), vivoPharm Pty Ltd. ACN 106 101 615, a corporation organized under the laws of Australia (“vivoPharm”), the Shareholders’ Representative party thereto, certain members of vivoPharm’s management party thereto (the “Management Parties” and, together with the Trust, RMIT, SALSA and certain other stockholders of vivoPharm named therein, the “Selling Shareholders”) and certain other stockholders of vivoPharm named therein, pursuant to which the Company acquired vivoPharm. The transactions contemplated by the Stock Purchase Agreement were consummated on August 16, 2017. Prior to the Company’s acquisition, vivoPharm was a privately-held provider of proprietary preclinical oncology and immuno-oncology services, offering integrated services in different disease areas to the biotechnology and pharmaceutical industries. Upon consummation of the transactions contemplated by the Stock Purchase Agreement, vivoPharm became a wholly-owned subsidiary of the Company.

In connection with the closing of the transactions contemplated by the Stock Purchase Agreement (the “Closing”), the Selling Shareholders received (i) cash consideration of \$1.2 million and (ii) stock consideration of 3,068,182 shares of the Company’s common stock. The Company has deposited in escrow 20% of the stock consideration until the expiration of 12 months from the date of the Closing to serve as the initial source for any indemnification claims and adjustments.

Each of the Selling Shareholders, vivoPharm and the Company has made customary representations and warranties in the Stock Purchase Agreement and has agreed to customary covenants, including covenants of the Management Parties regarding non-competition and non-solicitation. In addition, the Company entered into employment agreements with certain members of vivoPharm’s management team.

The foregoing description of the Stock Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Stock Purchase Agreement, which is filed as Exhibit 2.1 hereto and is incorporated herein by reference.

Cautionary Statements

The Stock Purchase Agreement has been included to provide investors with information regarding its terms. Except for its status as a contractual document that establishes and governs the legal relations among the parties thereto with respect to the transactions described above, the Stock Purchase Agreement is not intended to be a source of factual, business or operational information about the parties.

The Stock Purchase Agreement contains representations and warranties made by the parties to each other regarding certain matters. The assertions embodied in the representations and warranties are qualified by information in confidential disclosure schedules that the parties have exchanged in connection with signing the Stock Purchase Agreement. The disclosure schedules contain information that modifies, qualifies and creates exceptions to the representations and warranties. Moreover, certain representations and warranties may not be complete or accurate as of a particular date because they are subject to a contractual standard of materiality that is different from those generally applicable to stockholders and/or were used for the purpose of allocating risk among the parties rather than establishing certain matters as facts. Accordingly, you should not rely on the representations and warranties as

characterizations of the actual state of facts at the time they were made or otherwise.

Common Stock Purchase Agreement with Aspire Capital

On August 14, 2017, the Company entered into a Common Stock Purchase Agreement (the “Purchase Agreement”) with Aspire Capital Fund, LLC, an Illinois limited liability company (“Aspire Capital”), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$16 million of shares of the Company’s common stock (the “Purchase Shares”) from time to time over the term of the Purchase Agreement. In addition, Aspire Capital committed to make an initial purchase (the “Initial Purchase”) of 1,000,000 Purchase Shares (the “Initial Purchase Shares”) at a purchase price of \$3.00 per share, pursuant to the Purchase Agreement, on the Commencement Date (as defined below). The Commencement Date and the Initial Purchase occurred on August 16, 2017.

Summary of Terms of Purchase Agreement

After the Commencement Date, on any business day over the 24-month term of the Purchase Agreement, the Company has the right, in its sole discretion, to present Aspire Capital with a purchase notice (each, a “Purchase Notice”) directing Aspire Capital to purchase up to 33,333 Purchase Shares per business day, provided that Aspire Capital will not be required to buy Purchase Shares pursuant to a Purchase Notice that was received by Aspire Capital on any business day on which the last closing trade price of the Company’s common stock on the NASDAQ Capital Market (or alternative national exchange in accordance with the Purchase Agreement) is below \$3.00 (the “Floor Price”). The Company and Aspire Capital also may mutually agree to increase the number of shares that may be sold to as much as an additional 2,000,000 Purchase Shares per business day. The Purchase Agreement provides for a purchase price per Purchase Share (the “Purchase Price”) of \$3.00. As consideration for entering into the Purchase Agreement, the Company agreed to issue 320,000 shares of our common stock to Aspire Capital (the “Commitment Shares”).

The number of Purchase Shares covered by and timing of each Purchase Notice are determined by the Company, at its sole discretion. The Company may deliver Purchase Notices to Aspire Capital from time to time during the term of the Purchase Agreement, so long as the most recent purchase has been completed. The aggregate number of shares that the Company can sell to Aspire Capital under the Purchase Agreement may in no case exceed 3,938,213 shares of its common stock (which is equal to approximately 19.9% of the common stock outstanding on the date of the Purchase Agreement), including the 320,000 Commitment Shares and the 1,000,000 Initial Purchase Shares (the “Exchange Cap”), unless shareholder approval is obtained to issue more, in which case the Exchange Cap will not apply; provided that at no time shall Aspire Capital (together with its affiliates) beneficially own more than 19.9% of the Company’s common stock. Except for the Initial Purchase, Aspire Capital has no right to require any sales by the Company, but is obligated to make purchases from the Company as it directs in accordance with the Purchase Agreement.

The Purchase Agreement contains customary representations, warranties, covenants, closing conditions and indemnification and termination provisions. Sales under the Purchase Agreement may commence only after certain conditions have been satisfied (the date on which all requisite conditions have been satisfied being referred to as the “Commencement Date”), which conditions include the delivery to Aspire Capital of a prospectus supplement covering the Commitment Shares and the Purchase Shares, approval for listing on NASDAQ of the Purchase Shares and the Commitment Shares, the issuance of the Commitment Shares to Aspire Capital, and the receipt by Aspire Capital of a customary opinion of counsel and other certificates and closing documents. Such conditions were satisfied on August 16, 2017. The Purchase Agreement may be terminated by the Company at any time, at its discretion, without any cost or penalty. Aspire Capital has covenanted not to cause or engage in any manner whatsoever, any direct or indirect short selling or hedging of Cancer Genetics common stock. The Company did not pay any additional amounts to reimburse or otherwise compensate Aspire Capital in connection with the transaction. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement.

The Company’s gross proceeds, other than the \$3.0 million received in the Initial Purchase, will depend on several factors, including the frequency of its sales of Purchase Shares to Aspire Capital and the frequency at which the last closing trade price of its common stock is below the Floor Price, subject to a maximum of \$16.0 million in gross proceeds, including the Initial Purchase. The Company’s delivery of Purchase Notices will be made subject to market conditions, in light of its capital needs from time to time and under the limitations contained in the Purchase Agreement. The Company currently intends to use the net proceeds from sales of Purchase Shares for general corporate purposes and working capital requirements.

Registration Rights

In connection with the Purchase Agreement, the Company also entered into a Registration Rights Agreement (the “Registration Rights Agreement”) with Aspire Capital, dated August 14, 2017. The Registration Rights Agreement provides, among other things, that the Company will register the sale of the Commitment Shares, Initial Purchase Shares and the Purchase Shares to Aspire Capital pursuant to the Company’s existing shelf registration statement or a new registration statement (the “Registration Statement”). The Company further agreed to keep the Registration Statement effective and to indemnify Aspire Capital for certain liabilities in connection with the sale of the Securities under the terms of the Registration Rights Agreement.

The foregoing description of the Purchase Agreement and the Registration Rights Agreement is not a complete description of all the terms of those agreements. For a complete description of all the terms, please refer to the full text of the Purchase Agreement and Registration Rights Agreement, copies of which are filed herewith as Exhibits 10.1 and 4.1, respectively, to this Current Report on Form 8-K and are incorporated herein by reference. This Current Report on Form 8-K also incorporates by reference the Purchase Agreement and Registration Rights Agreement into the Registration Statement. The representations and warranties contained in the Purchase Agreement are solely for the purpose of allocating contractual risk between the parties and not as a means of establishing facts. The assertions embodied in those representations and warranties are qualified by information in the disclosure schedules to the Purchase Agreement, which schedules modify, qualify and create exceptions to the representations and warranties set forth in the Purchase Agreement. The provisions of the Purchase Agreement, including the representations and

warranties contained therein and the disclosure schedules attached thereto, are not for the benefit of any party other than the parties to such agreements and are not intended as documents for investors and the public to obtain factual information about the current state of affairs of the parties thereto. Rather, investors and the public should look to other disclosures contained in the Company's filings with the SEC.

Item 2.01 Completion of Acquisition or Disposition of Assets

The transactions contemplated by the Stock Purchase Agreement were consummated on August 16, 2017. The information set forth in Item 1.01 above with respect to the Stock Purchase Agreement is hereby incorporated by reference into this Item 2.01.

Item 3.02 Unregistered Sales of Equity Securities.

The shares of the Company's common stock issuable pursuant to the Stock Purchase Agreement will be issued in reliance on an exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, or Regulation D thereunder, as a transaction by an issuer not involving a public offering.

The information contained in Item 1.01 of this Report with respect to the Stock Purchase Agreement is incorporated into this Item 3.02 by reference.

Item 8.01 Other Events.

The risks described below supplement the risks set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 (the "Form 10-K"). The risk factors set forth below should be read in conjunction with the risk factors set forth in our most recent Form 10-K under the caption "Item 1A. Risk Factors," as may be updated from time to time by subsequent filings under the Securities Exchange Act of 1934, as amended.

Any of these risks could have a material adverse effect on the Company's business, prospects, financial condition and results of operations. Additional risks not presently known to us or that we currently deem immaterial may also adversely affect our business operations. These risks also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements.

Risks Related to the vivoPharm Acquisition

Any acquisition exposes a company to additional risks.

Acquisitions may entail numerous risks for Cancer Genetics, including:

- competing claims for capital resources;
- uncertainty regarding our ability to retain and grow relationships with vivoPharm's key customers;
- difficulties in assimilating acquired operations, technologies or products; and
- diversion of management's attention from our core business.

Our failure to successfully complete the integration of vivoPharm could have a material adverse effect on our business, financial condition and operating results.

Failure of the vivoPharm acquisition to achieve potential benefits could harm the business and operating results of the combined company.

We expect that the acquisition of the vivoPharm businesses will result in potential benefits for the combined company, the expansion of the number and geographic coverage of our sales and marketing team, stronger penetration into new biotechnology customers, an extended portfolio of capabilities which will differentiate us in the markets we serve, advancing our strategy of bench-to-bedside services, and bolstering our growth with a global customer base of biopharma partners. No assurance can be given that we will achieve any or all of these potential benefits. Even if we are able to achieve any of these potential benefits, we cannot predict with certainty when the benefits will occur, or to the extent to which they actually will be achieved. For example, the benefits from the acquisition may be offset by costs incurred in integrating the businesses. The

failure to achieve anticipated benefits could harm the business, financial condition and operating results of the combined company.

If the market for the combined company's tests and services does not experience significant growth or if the combined company's tests and services do not achieve broad acceptance, the combined company's operations will suffer.

Cancer Genetics cannot accurately predict the future growth rate or the size of the market for the combined company's tests and services. The expansion of this market depends on a number of factors, such as:

- the results of clinical trials;
- the cost, performance and reliability of the combined company's tests and services, and the tests and services offered by competitors;
- customers' perceptions regarding the benefits of the combined company's tests and services;
- customers' satisfaction with our tests and services; and
- marketing efforts and publicity regarding our tests and services.

If the combined company is unable to manage growth in its business, its prospects may be limited and its future results of operations may be adversely affected.

Any significant expansion such as the acquisition of vivoPharm may strain the combined company's managerial, financial and other resources. If the combined company is unable to manage its growth, its business, operating results and financial condition could be adversely affected. The combined company will need to improve continually its operations, financial and other internal systems to manage its growth effectively, and any failure to do so may lead to inefficiencies and redundancies, and result in reduced growth prospects and diminished operational results.

Operating in multiple countries requires us to comply with different legal and regulatory requirements.

Other laws applicable to our international business include local clinical, employment, tax, privacy, data security, environmental and intellectual property protection laws and regulations. These requirements may differ significantly from the requirements applicable to our business in the U.S. and may require resources to accommodate, and may result in decreased operational efficiencies and performance. As these laws continue to evolve and if we expand to more jurisdictions or acquire new businesses, compliance will become more complex and expensive, and the risk of non-compliance will increase.

Compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business abroad, and violation of these laws or regulations may interfere with our ability to offer our tests and services competitively in one or more countries, expose us or our employees to fines and penalties, and result in the limitation or prohibition of our conduct of business.

Item 9.01 Financial Statements and Exhibits.

(a) Financial Statements of Business Acquired.

The financial statements required by this item will be filed by amendment to this Current Report on Form 8-K no later than 71 days after the date on which this Current Report on Form 8-K is required to be filed.

(b) Pro Forma Financial Information.

The pro forma financial information required by this item will be filed by amendment to this Current Report on Form 8-K no later than 71 days after the date on which this Current Report on Form 8-K is required to be filed.

(d) Exhibits

Exhibit Number	Description
2.1*	Stock Purchase Agreement , dated as of August 14, 2017, by and among the Company, the Trustee of The Brandt Family Trust, a trust organized under the laws of Australia, Sabine Brandt, Royal Melbourne Institute of Technology, South Australian Life Science Advancement Partnership, LP, vivoPharm Pty Ltd., Dr. Ralf Brandt, as Shareholders' Representative and the Management Parties party thereto.
4.1	Registration Rights Agreement, dated as of August 14, 2017, by and between the Company and Aspire Capital Fund, LLC.
5.1	Opinion of Lowenstein Sandler LLP.
10.1	Common Stock Purchase Agreement, dated as of August 14, 2017, by and between the Company and Aspire Capital Fund, LLC.
23.1	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1).

* The schedules and exhibits to the Stock Purchase Agreement have been omitted from this filing pursuant to Item 601(b)(2) of Regulation S-K under the Securities Act of 1933, as amended. Cancer Genetics agrees to furnish as a supplement a copy of any omitted schedules or exhibits to the Stock Purchase Agreement to the Securities and Exchange Commission upon request, provided that Cancer Genetics may request confidential treatment for any schedule or exhibit so furnished.

SIGNATURES

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

CANCER GENETICS,
INC.

By: /s/ John A. Roberts
Name: John A. Roberts
Title: Chief Operating
Officer and Executive
Vice President, Finance
(Principal Financial
Officer)

Dated: August 16, 2017