

September 8, 2016

Via EDGAR

United States Securities and Exchange Commission
Division of Corporate Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: John Reynolds, Assistant Director
Joel Parker, Senior Assistant Chief Accountant
Ruairi Regan, Staff Attorney
Brigitte Lippmann, Staff Attorney
Myra Moosariaparabil, Staff Accountant

Re: Fulgent Genetics, Inc.
Registration Statement on Form S-1
Filed September 2, 2016
File No. 333-213469

Dear Mr. Reynolds:

On behalf of our client, Fulgent Genetics, Inc. (the "Registrant"), this letter is being submitted supplementally to the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to provide the Staff with certain additional information as requested in the Staff's letter to the Registrant dated July 6, 2016 (the "First Comment Letter"), with respect to the Registrant's registration statement on Form S-1 initially confidentially submitted to the Commission on June 9, 2016 and filed with the Commission on September 2, 2016 (the "Registration Statement"). In this letter, the Registrant is responding only to comment number 8 of the First Comment Letter. For convenience, the text of the Staff's comment and the related heading from the First Comment Letter appear below in bold and italicized type and the Registrant's response appears immediately after such comment in regular type.

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Critical Accounting Policies and Use of Estimates, page 66

Equity-Based Compensation, page 67

8. *We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.*

Response:

Offering Price Range

The Registrant advises the Staff that the Registrant currently estimates, based in part on advice and input recently received from its underwriters, that the offering price per share of its common stock in its currently contemplated initial public offering (“IPO”) will be between \$1.86 – \$2.43 per share (the “Price Range”), which does not reflect the effect of the Reorganization Ratio (as defined and described below), which, among other things, will have the approximate effect of a reverse split of the Registrant’s common stock. The Registrant expects to include the Price Range and the impact of the Reorganization Ratio in a pre-effective amendment to the Registration Statement prior to the distribution of any preliminary prospectus, which would shortly precede the Registrant’s road show. On a post-Reorganization basis, the spread of the Price Range will not exceed \$2.00, if the maximum price is \$10.00 per share or less, or 20%, if the maximum price is greater than \$10.00 per share. The parameters of the Price Range as reflected in the pre-effective amendment to the Registration Statement will be subject to then-current market conditions, continuing discussions with the Registrant’s underwriters and Board of Directors and any further business, market or other developments.

As described in the Registration Statement, prior to the closing of the IPO, the business and operations of the Registrant have been conducted through Fulgent Therapeutics LLC (“Fulgent LLC”). To facilitate the IPO, the Registrant has formed a wholly owned subsidiary that will merge with and into Fulgent LLC, with Fulgent LLC surviving as a wholly owned subsidiary of the Registrant (the “Reorganization”). In connection with the Reorganization, each outstanding voting and non-voting preferred and common unit of Fulgent LLC will be cancelled in exchange for shares of common stock of the Registrant at a to-be-determined and other-than one-for-one ratio (the “Reorganization Ratio”). Additionally, all outstanding options to purchase common units of Fulgent LLC will become options to purchase common stock of the Registrant, all outstanding common units of Fulgent LLC that are subject to a profits interest threshold (which are sometimes referred to in this letter as “profits interests”) will become shares of common stock of the Registrant, and all restricted share units relating to common units of Fulgent LLC will become restricted stock units relating to shares of common stock of the Registrant, each subject to the Reorganization Ratio. To facilitate this discussion, we assume the effects of the

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Reorganization as of October 16, 2015, the earliest grant date of any equity award discussed in this letter; provided, however, that: (i) we assume for purposes of this discussion that all preferred and common units of Fulgent LLC were cancelled in exchange for shares of equivalent preferred and common stock of the Registrant, rather than converting all preferred and common units of Fulgent LLC into the common stock of the Registrant; (ii) we assume for purposes of this discussion that the Reorganization was effected at a ratio of one-for-one, rather than the Reorganization Ratio; and (iii) because Fulgent LLC is managed by its Manager (the “Manager”), we assume for purposes of discussions of determinations of historical fair value that the chief decision-maker of the Registrant was the Manager.

Summary of Equity Grants

Attached as Exhibit A hereto is a table that summarizes the date of each option, profits interest, or share grant made by the Registrant during the 12 months preceding June 30, 2016, along with the number of shares of the Registrant’s common stock subject to each such grant, the exercise price or participation threshold for each such grant and the estimated fair value of the grant and the estimated fair value of the Registrant’s common stock on the date of each such grant.

Determinations of Fair Value of Common Stock Subject to Equity Grants

The estimated fair value of the common stock subject to the option, profits interest and share grants reflected in Exhibit A was determined on each grant date by the Manager. In making these determinations, the Manager considered all objective and subjective factors believed to be relevant, including:

- the results of the most recent independent third-party valuation;
- the fact that the Registrant was a privately held company with illiquid securities;
- the Registrant’s stage of commercialization;
- the Registrant’s financial condition, including cash on hand;
- the Registrant’s need for future financing to fund research and development and the commercialization of its genetic tests;
- the rights and preferences of the Registrant’s preferred stock relative to its common stock;
- the likelihood of achieving a liquidity event for the Registrant’s equity, such as an IPO, given prevailing market conditions;
- the Registrant’s historical operating results;

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- valuations of comparable public companies; and
- the Registrant's discounted future cash flows, based upon the Registrant's projected operating results.

There are significant judgments and estimates inherent in these fair value determinations. These judgments and estimates include assumptions regarding the Registrant's future operating performance, stage of commercial growth, average selling price, continued penetration into hospital and medical institution customers, reimbursement from commercial third-party payors, the timing of a potential IPO or other liquidity event and the determination of the appropriate valuation method at each valuation date. If there had been different assumptions, the fair value determinations could have been materially different.

The Registrant's fair value determinations utilized the market approach, the income approach or a combination of both. The market approach and the income approach are both acceptable valuation methods in accordance with the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation (the "Practice Aid").

There are three general methodologies under the market approach:

- *Guideline Company Method.* This method involves the identification and analysis of publicly traded companies that are comparable to the subject company. Pricing multiples of the publicly traded companies are applied to representative financial metrics of the subject company.
- *Similar Transaction Method.* This method includes the identification of transactions in which the targets are comparable to the subject company. This method can also include identification of transactions completed by the most likely buyers in the subject company's industry. Transaction multiples from the identified transactions are applied to the representative financial metrics of the subject company.
- *Precedent Transaction Method.* By considering the sale price of equity in a recent financing, the equity value can be "backsolved" using an option-pricing model that gives consideration to a company's capitalization structure and rights of preferred and common equity holders.

Under the income approach, enterprise value can be estimated using the discounted cash flow ("DCF") method, which assumes:

- a business is worth today what it can generate in future cash to its owners;

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- cash received today is worth more than an equal amount of cash received in the future; and
- future cash flows can be reasonably estimated.

The DCF analysis is comprised of the sum of the present value of two components: discrete period projected cash flows and a residual or terminal value.

Additionally, each fair value determination reflects a marketability discount, resulting from the illiquidity of the Registrant's common stock.

As provided in the Practice Aid, there are several approaches for allocating enterprise value of a privately held company among the securities held in a complex capital structure. The possible methodologies include the probability-weighted expected return method ("PWERM"), the option-pricing method ("OPM"), the current-value method or a hybrid of the PWERM and the OPM, which is referred to as the hybrid method. Under the PWERM, equity is valued based upon the probability-weighted present value of expected future returns, considering various future outcomes available to a company, as well as the rights of each class of equity. The OPM treats common equity and preferred equity as call options on the enterprise's value. The exercise prices associated with these call options vary according to the liquidation preference of the preferred equity, the preferred equity conversion price, the exercise prices of common equity options and other features of a company's equity capital structure. The current-value method, which is generally only used for early-stage companies, is based upon first determining enterprise value using a market, income or asset-based approach, and then allocating that value to the preferred equity based upon its liquidation preference or conversion value, whichever would be greater.

October 16, 2015 Retrospective Valuation

In connection with the preparation of the financial statements for its IPO, the Registrant determined it appropriate to reassess the fair value of its common stock as of October 16, 2015. To accomplish this, the Registrant obtained a retrospective valuation for October 16, 2015 from a third-party valuator performed in accordance with the Practice Aid (the "October 2015 Valuation"). The October 2015 Valuation incorporated the income approach (Gordon Growth Analysis) and the market approach (Guideline Public Company Method) in determining enterprise value, and then applied 50% weight to each approach. The OPM was used to allocate the enterprise value to the Registrant's common and preferred stock. The third-party valuator then applied a discount for lack of marketability of 35% to its common stock. The October 2015 Valuation resulted in a valuation of \$0.36 per share of common stock.

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May 1, 2016 Valuation

In accordance with the Practice Aid, a May 1, 2016 valuation was obtained from a third-party valuator (the "May 2016 Valuation") and, together with the October 2015 Valuation, the "Valuations"). The May 2016 Valuation used the hybrid method (both the PWERM and the OPM) as the primary methodology, due primarily to the increase in probability of an IPO or other potential liquidity event and the issuance and sale of Class D-2 preferred stock to an independent investor, Xi Long USA, Inc. ("Xi Long"), which was the Registrant's only sale of its capital stock to an independent third-party investor. The May 2016 Valuation considered the precedent transaction of the issuance and sale of Class D-2 preferred stock to Xi Long, which was funded in May 2016, to calculate the value for the private company scenario by applying the Precedent Transaction Method in OPM as outlined in the PWERM scenarios.

The PWERM included an IPO, merger or acquisition, downside and stay-private scenarios. The Manager identified three IPO scenarios, one merger or acquisition scenario, one downside scenario and one stay-private scenario. The probability weightings for PWERM exit scenarios were established based upon discussions with the Registrant's management. A combined probability of 55% was assigned to the IPO scenarios, a probability of 20% was assigned to the merger or acquisition scenario, and a probability of 25% was assigned to the downside and stay-private scenarios, collectively. The discount for lack of marketability was reduced to 20% to reflect the reduction of the estimated time to a liquidity event. The May 2016 Valuation resulted in a valuation of \$1.54 per share of common stock.

Application of Valuations to Equity Grants

October through December 2015 Grants

From October 2015 through December 2015, the Manager approved grants of 2,080,000 options and 26,000,000 awards of shares subject to a profits interest threshold. At the date of grant, the Manager determined the fair value of common stock underlying these awards was \$0.05 per share. In preparation for its IPO, and solely for financial reporting purposes, the Registrant determined to reassess the fair value of its common stock and engaged in a retrospective valuation of the equity grants made in October through December of 2015. The Registrant determined that the reassessed fair value of the Company's common stock as of each of those grant dates was \$0.36 per share in connection with the grants of options and shares subject to a profits interest threshold. In reaching this determination, the Registrant considered the results of the October 2015 Valuation and the other objective and subjective factors described above and in the Registration Statement. In evaluating the fair value at each of the grant dates during this period, the Registrant determined that no significant internal or external value-generating events had taken place between the October 2015 Valuation through December 2015.

January through March 2016 Grants

From January 2016 through March 2016, the Manager approved grants of 1,565,000 options and awards of 2,500,000 shares of common stock. At the date of grant, the Manager determined the fair value of common stock underlying these awards was \$0.05 per share. In preparation for its IPO, and solely for financial reporting purposes, the Registrant determined to reassess the fair value of its common stock and engaged in a retrospective valuation of the equity grants made in January through March of 2016. The Registrant determined that the reassessed fair value of the Company's common stock as of each of those grant dates was \$0.65 per share.

The \$0.65 per share fair value was estimated by the Manager by updating certain of the assumptions and inputs to the October 2015 Valuation, primarily to reduce the discount for lack of marketability from 35% to 30% and to reduce the estimated weighted-average cost of capital from 30% to 27.5%. The reduction of the discount for lack of marketability was primarily due to the reduction of the estimated time to a liquidity event, and the reduction of the estimated weighted-average cost of capital primarily reflected the change in the stage of the Registrant's growth, both of which were primarily the result of the following developments in the Registrant's business occurring primarily in the period of January 2016 to March 2016:

- rapid increases in the Registrant's content and availability of genes, from 4,600 to over 10,000;
- increases in the Registrant's number of pre-established panels to over 200;
- held ongoing discussions with Xi Long to acquire an interest in the Registrant;
- the hiring of a Chief Financial Officer on January 26, 2016;
- commencing discussions with investment bankers for an IPO or other potential liquidity events; and
- the Registrant's introduction of its cancer panels to the oncology market.

April through June 2016 Grants

From April 2016 through June 2016, the Manager approved grants of 853,000 options. At the date of the April grants, the Manager determined the fair value of common stock underlying these awards was \$0.05 per share. At the time of the June grants, the Manager determined the fair value of the common stock underlying those awards was \$1.62 per share. In preparation for its IPO, and solely for financial reporting purposes, the Registrant determined to reassess the fair value of its common stock and engaged in a retrospective valuation of the equity grants made in April and June 2016. The Registrant determined that the reassessed fair value of the Company's common stock on each of these grant dates was \$1.54 per share. In reaching this determination,

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the Registrant considered the results of the May 2016 Valuation and the other objective and subjective factors including those described above and in the Registration Statement. As part of this determination, the Manager concluded that no significant internal or external value-generating events had taken place between April 2016 and the May 2016 Valuation that were not reflected in the May 2016 Valuation and no significant internal or external value-generating events had taken place from May 2016 through June 2016.

The increase in fair value from \$0.65 per share for grants made from January through March 2016 to \$1.54 for grants made from April through June 2016 was primarily attributable to the reduction of the estimated time to, and the increase in the probability of completing, an IPO or other liquidity event, which was primarily the result of the following developments in the Registrant's business since the end of the first quarter of 2016, all of which resulted in a change in the model, assumptions (including a reduction of the discount for lack of marketability from 30% to 20%) and inputs incorporated in the May 2016 Valuation:

- the progress of discussions held with the Registrant's investment bankers, including the Registrant's progress in pursuing an IPO;
- validation of a technology platform designed to address the market for microarray-based genomic tests;
- began receiving orders for tests from research institutions in advance of forecasts that projected receiving such orders in 2017;
- increased its capabilities by hiring employees and increasing capacity and throughput to deliver a larger number of billable tests, resulting in higher revenue, income and revenue projections;
- the hiring of dedicated sales person focused on the insurance market, which resulted in the sales force more than doubling from three to seven people from late 2015 until spring 2016; and
- ongoing discussions with various potential customers that represent a significant market opportunity, including a customer that serves as sole genetic testing vendor for the U.S. Department of Defense.

Analysis of Price Range

The Registrant notes that, as is typical in IPOs, the Price Range was not derived using a formal determination of fair value, but was determined based upon discussions between the Registrant and the underwriters. Among the factors that were considered in setting this range were:

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- an analysis of the typical valuation ranges seen in recent IPOs for companies in the Registrant's industry;
- the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies;
- an assumption that there would be a receptive public trading market for genetic testing companies such as the Registrant; and
- an assumption about the demand for the Registrant's common stock to support an offering of the size contemplated by the Registrant.

The Registrant respectfully advises the Staff that it believes the increase in the per share fair value of the Registrant's common stock from \$1.54 per share in the May 2016 Valuation to the proposed Price Range, is primarily the result of the following key factors:

- The Registrant and the third-party valuator utilized quantitative methodologies to determine the historical fair values of the Registrant's common stock, which may differ from the more qualitative and subjective methodologies that may be used by some public market investors to determine the price they are willing to pay in an IPO.
- The methodology used to determine the historical fair values of the Registrant's common stock incorporated multiple probability-weighted liquidity scenarios, not all of which allocate value to the Registrant's common stock and inherently decrease the estimated fair value due to (i) the mix of other expected business equity valuations discounted to a present value and (ii) the application of a discount to a liquidity event, which accounts for lack of marketability. In contrast, the Price Range assumes with 100% probability that the Registrant completes an IPO and its preferred stock converts to common stock. As a result, the Price Range does not take into account the probability of alternative outcomes that could yield lower valuations.
- The Price Range assumes that an active trading market for the common stock will exist following the IPO and therefore it does not include a discount for lack of marketability. In contrast, the historical fair values of the Registrant's common stock took into account that the Registrant's common stock was then illiquid, may have never become liquid and, even if an IPO was successfully completed, would remain illiquid at least until the expiration of the typical 180-day lock-up period following the IPO.
- The valuation methodologies used to determine the historical fair values of the Registrant's common stock reflect the fact that the holders of the Registrant's preferred stock enjoy substantial economic rights and preferences over the holders of its common stock, including the right to receive dividends prior to any dividends declared or paid on any shares of the Registrant's common stock and liquidation payments in preference to

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holders of the Registrant's common stock. In contrast, the Price Range assumes the conversion of all of the Registrant's preferred stock upon the completion of the IPO and the elimination of the preferred stock's preferences, which results in a higher value being attributable to the Registrant's common stock.

- The successful completion of the IPO would strengthen the Registrant's balance sheet, provide access to public equity and provide enhanced operational flexibility, increasing the value of the Registrant's common stock compared to that of a private company.
- The Registrant's business continued to develop after the May 2016 Valuation, including adding new tests and panels, acquiring additional equipment to increase capacity and throughput to deliver a larger number of billable tests, developing relationships with new customers and contracting with a national health insurance company to become an in-network provider.

In conclusion, the Registrant respectfully submits to the Staff that the differences between the estimated grant date fair values and the Price Range are reasonable in light of the considerations outlined above.

* * * * *

We appreciate your time and attention to the response to the Staff's comment set forth in this letter. We would be happy to answer any questions you may have in connection with the same and/or provide you with any additional information. Please direct any such questions or requests to me at (858) 720-5141 (telephone) or sstanton@mofo.com (electronic mail). Please also direct any further comments via electronic mail to me, Sara Terheggen (sterheggen@mofo.com), Lisa H. Abbot (labbot@mofo.com) and Paul Kim (paulkim@fulgentdiagnostics.com).

Very truly yours,

/s/ Scott M. Stanton

Scott M. Stanton

cc: Sara L. Terheggen, Esq., Morrison & Foerster LLP
Lisa H. Abbot, Esq., Morrison & Foerster LLP
Ming Hsieh, President and Chief Executive Officer, Fulgent Genetics, Inc.
Paul Kim, Chief Financial Officer, Fulgent Genetics, Inc.

EXHIBIT A

| Grant Date | Number of Shares of Common Stock Subject to: | | | Per Share: | | | |
|------------|--|-------------------------|--------------|------------------------------------|---|--|-------------------------------|
| | Option Grants | Profits Interest Grants | Share Grants | Exercise Price (For Option Grants) | Threshold (For Profits Interest Grants) | Fair Value of Common Stock on Grant Date | Estimated Fair Value of Grant |
| 10/16/15 | — | 26,000,000 | — | — | \$ 0.048 | \$ 0.36 | \$ 0.31 |
| 10/16/15 | 1,840,000 | — | — | \$ 0.05 | — | \$ 0.36 | \$ 0.33 |
| 11/16/15 | 100,000 | — | — | \$ 0.05 | — | \$ 0.36 | \$ 0.33 |
| 11/24/15 | 120,000 | — | — | \$ 0.05 | — | \$ 0.36 | \$ 0.33 |
| 12/8/2015 | 20,000 | — | — | \$ 0.05 | — | \$ 0.36 | \$ 0.34 |
| 1/26/2016 | — | — | 2,500,000 | — | — | \$ 0.65 | \$ 0.65 |
| 2/4/2016 | 150,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.62 |
| 2/18/2016 | 585,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.62 |
| 2/22/2016 | 240,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.62 |
| 2/23/2016 | 20,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.62 |
| 3/1/2016 | 240,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.62 |
| 3/29/2016 | 330,000 | — | — | \$ 0.05 | — | \$ 0.65 | \$ 0.63 |
| 4/4/2016 | 38,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 4/13/2016 | 80,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 4/20/2016 | 10,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 4/25/2016 | 20,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 4/27/2016 | 480,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 4/30/2016 | 105,000 | — | — | \$ 0.05 | — | \$ 1.54 | \$ 1.51 |
| 6/6/2016 | 10,000 | — | — | \$ 1.62 | — | \$ 1.54 | \$ 1.18 |
| 6/20/2016 | 80,000 | — | — | \$ 1.62 | — | \$ 1.54 | \$ 1.18 |
| 6/22/2016 | 20,000 | — | — | \$ 1.62 | — | \$ 1.54 | \$ 1.18 |
| 6/27/2016 | 10,000 | — | — | \$ 1.62 | — | \$ 1.54 | \$ 1.18 |