Free Writing Prospectus Filed Pursuant to Rule 433 Related to the Preliminary Prospectus dated September 26, 2016 included in Amendment No. 2 to the Registration Statement on Form S-1 (File No. 333-213469)

September 26, 2016

4,600,000 Shares FULGENT GENETICS, INC. Common Stock Free Writing Prospectus

On September 26, 2016, Fulgent Genetics, Inc. filed Amendment No. 2 to its Registration Statement on Form S-1 (File No. 333-213469) (the "Registration Statement"), including the preliminary prospectus included therein (the "Preliminary Prospectus"), in connection with the offering of 4,600,000 shares of its common stock. The Preliminary Prospectus was filed to supplement certain information that was provided in the preliminary prospectus dated September 19, 2016 related to the offering (the "Initial Preliminary Prospectus"). This free writing prospectus summarizes the material supplements to the Initial Preliminary Prospectus that appear in the Preliminary Prospectus. Amendment No. 2 to the Registration Statement, including the Preliminary Prospectus included therein, may be accessed through the following link to the web site of the Securities and Exchange Commission (the "SEC"): http://www.sec.gov/Archives/edgar/data/1674930/000119312516719970/d360404ds1a.htm.

Immediately prior to closing its initial public offering, Fulgent Genetics, Inc. will complete a reorganization (the "Reorganization") in which Fulgent Therapeutics LLC will become a wholly owned subsidiary of Fulgent Genetics, Inc., as is described in more detail in the Registration Statement. For purposes of this free writing prospectus: "Fulgent LLC" refers to Fulgent Therapeutics LLC; "Fulgent Inc." refers to Fulgent Genetics, Inc.; and "Fulgent," the "company," "we," "us" and "our" refer, for periods prior to completion of the Reorganization, to Fulgent LLC and, for periods after completion of the Reorganization, to Fulgent Inc. and its consolidated subsidiary after giving effect to the Reorganization.

Disclosure has been added under the heading "Certain Relationships and Related Party Transactions—Tax Distributions," which appears on page 115 of the Preliminary Prospectus, to disclose the amounts we expect to pay to the former members of Fulgent LLC after completion of this offering, consistent with the terms of Fulgent LLC's operating agreement. The added disclosure is otherwise consistent with disclosure that appears in other sections of the Initial Preliminary Prospectus.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC web site at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send to you the prospectus if you request it by calling Credit Suisse Securities (USA) LLC at 1-800-221-1037 or by email at newyork.prospectus@credit-suisse.com; or by calling Piper Jaffray & Co. at 1-800-747-3924, or by email at prospectus@pic.com.