



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 4631

May 30, 2017

Via E-Mail

James S. Marcelli
President and Chief Operating Officer
Lightwave Logic, Inc.
1831 Lefthand Circle, Suite C
Longmont, Colorado 80501

**Re: Lightwave Logic, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed May 19, 2017
File No. 333-217384**

Dear Mr. Marcelli:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

The Lincoln Park Transaction, page 66

1. Please revise your disclosure to discuss the amount of shares still available for resale related to the 2016 Registration Statement.
2. Please reconcile your disclosure that the Company has issued 4,435,325 shares to Lincoln Park, registered under the 2016 Registration Statement, with the disclosure on your prospectus cover page that 12,955,136 shares were registered under the 2016 Registration Statement and 8,503,945 of such shares remain available for resale. In this regard, we note that the cover page appears to show that 4,451,191 were issued to Lincoln Park under the 2016 Registration Statement.

Selling Securityholder, page 70

3. Please tell us the exercise price of the warrants owned by Lincoln Park.

James S. Marcelli
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Please contact Frank Pigott (Staff Attorney) at 202-551-3570 or me at 202-551-3397 with any questions.

Sincerely,

/s/ Jay E. Ingram

Jay E. Ingram
Legal Branch Chief
Office of Manufacturing and
Construction

cc: Clayton Parker
K&L Gates LLP