August 27, 2020

Frederic Guerard, Pharm.D. President and Chief Executive Officer Graybug Vision, Inc. 275 Shoreline Drive, Suite 450 Redwood City, CA 94065

Re: Graybug Vision,

Draft Registration

Statement on Form S-1

2020

Inc.

Submitted July 31, CIK No. 0001534133

Dear Dr. Guerard:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments. Draft Registration Statement on Form S-1 submitted July 31, 2020 Our Pipeline, page 3 Please shorten the 1. arrows in your pipeline table to more precisely indicate the development status of each product candidate. As one example, we note that you are currently conducting IND-enabling activities for GB-401 and expect to begin a Phase 1/2a trial in the second half of 2021, yet the arrow indicates that you are already in Phase 1 development. Our Lead Program GB-102, page 4 2. We note your statements on page 4 that GB-102 met its primary endpoint of safety and tolerability in the ADAGIO trial and based on the data from ADAGIO you initiated a Frederic Guerard, Pharm.D. FirstName LastNameFrederic Guerard, Pharm.D. Graybug Vision, Inc. Comapany August 27, NameGraybug 2020 Vision, Inc. August Page 2 27, 2020 Page 2 FirstName LastName Phase 2b ALTISSIMO trial. Balance your disclosure here by disclosing that you terminated the development of the GB-102 2 mg dose in all of your clinical trials based on your safety analysis of your Phase 2a clinical trial of GB-102 in 21 patients with ME secondary to DME and RVO. Differentiation of our product candidates, page 5

3. We note your statements throughout your filing that you believe GB-102 and GB-103 may potentially be a "first-in-class" intravitreal injection. Given the early stage of development, and your statements that your results in your preclinical studies may not be indicative of results obtained in later trials, these statements are overly speculative and inappropriate. Please remove these statements from the descriptions of your product candidates. Implications of Being an Emerging Growth Company and a Smaller Reporting Company, page 7 Please supplementally provide us with copies of all written 4. communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Risk Factors, page 13 5. We note your references on page 21 and elsewhere that GB-102 demonstrated a "favorable safety and tolerability." Please revise your disclosure here and throughout your prospectus to remove your characterization of GB-102 as safe, as a determination of whether a product candidate is safe is solely within the authority of the U.S. Food and Drug Administration and comparable regulatory bodies. We will not object to statements that GB-102 was well tolerated or information about the number of treatment related serious adverse events, but you should not state or imply that your product candidate is safe. Use of Proceeds, page 65 Please expand your first bullet to disclose the estimated proceeds to 6. be allocated to each of your target indications and product candidates and clarify the stage of development you expect to be able to complete for each indication using the estimated proceeds. Management's Discussion and Analysis of Financial Condition and Results of **Operations** Results of Operations for years ended December 31, 2019 and 2018, page 78 Reference your disclosure that personnel and professional service 7. costs increased in the year ended December 31, 2019 as compared to 2018 as a result of changes in and additions to executive management in 2019. Please revise to disclose the specific changes in and additions to executive management and quantify the impact of each change on personnel and professional service costs. Explain how additions to executive Frederic Guerard, Pharm.D. FirstName LastNameFrederic Guerard, Pharm.D. Graybug Vision, Inc. Comapany August 27, NameGraybug 2020 Vision, Inc. August Page 3 27, 2020 Page 3 FirstName LastName management affected professional service costs. Determination of Fair Value of Common Stock on Grant Dates, page 83 8. We see that you issued 11.3 million stock options during the year ended December 31, 2019. Please revise to disclose the fair value of common stock that was used during the the fiscal year and any subsequent interim period provided in the financial statements to determine the fair value of the stock options. In that regard, provide us the estimated

offering price or range when it is available and explain to us the reasons for significant differences between recent valuations of your common stock and the estimated offering price. Our Product Candidates GB-102, page 95 The illustrations provided on the bottom of page 97 and the top of 9. page 98 appear to contain text that is illegible. In addition, certain symbols appear in the graphics without a legend such that it is unclear what they are depicting. Please revise these figures accordingly. 10. Your duration of response graph on the bottom of page 98 does not include a legend and it is unclear what the horizontal lines and the green and yellow dots represent. Please revise your disclosure accordingly. Phase 2b trial of GB-102 in patients with wet AMD, page 102 Please revise to clarify whether the trial design changes of the 11. ALTISSIMO trial, including the primary endpoint of median time to first additional anti-VEFG supportive therapy, were related to the termination of the 2mg dose in your clinical trial programs. If the modifications were made for other reasons, please disclose the reasons. GB-401 Unmet Need, page 106 12. We note your disclosure that 15% of glaucoma patients progress to blindness within 20 years of diagnosis. Please disclose the source for this information. Our Future Development Plans, page 109 We note your planned reliance on the 505(b)(2) approval pathway. 13. Please identify and describe the studies and results you intend to rely on to pursue this pathway. Description of Capital Stock, page 154 You disclose here and on pages 148 and F-31, that certain purchasers 14. of Series C preferred stock have the option to purchase additional shares upon the achievement of certain development milestones. Please revise to describe such milestones in greater Frederic Guerard, Pharm.D. Graybug Vision, Inc. August 27, 2020 Page 4 detail, and if applicable, how they will be calculated. In addition, please provide the term and expiration period of the option to purchase. You may contact Kristin Lochhead at 202-551-3664 or Lisa Vanjoske at 202-551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Jason L. Drory at 202-551-8342 or Mary Beth Breslin at 202-551-3625 with any other questions.

FirstName LastNameFrederic Guerard, Pharm.D. Corporation Finance Comapany NameGraybug Vision, Inc. Sciences August 27, 2020 Page 4 and India Forbase

cc: Julia Forbess FirstName LastName