June 10, 2021

Doug Doerfler Chief Executive Officer MaxCyte, Inc. 22 Firstfield Road, Suite 110 Gaithersburg, MD 20878

> Re: MaxCyte, Inc. Draft Registration Submitted May 14, CIK No. 0001287098

Dear Mr. Doerfler:

Statement on Form S-1

2021

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 General Please add the 1. disclosure required by Item 201 of Regulation S-K for the trading of your shares of common stock on the AIM. **Prospectus Summary** Overview, page 1 We note your disclosure 2. on page 2 that as of December 31, 2020, you have placed more than 400 electroporation instruments worldwide. Please disclose here how many electroporation instruments you sold outright for the fiscal year ended December 31, 2020 and the number you leased for the fiscal year ended December 31, 2020. Doug Doerfler FirstName LastNameDoug Doerfler MaxCyte, Inc. Comapany NameMaxCyte, Inc. June 10, 2021 June 10, Page 2 2021 Page 2 FirstName LastName Please clarify the difference between your SPLs, research program 3. licenses and clinical program licenses here. In addition, please disclose the term of your SPL agreements and, if true, please disclose that your SPLs are typically terminable at will. Our Growth Strategies, page 5 4. Your disclosure on page 5 that you currently market the VLX

Large-Scale Transfection System appears to be inconsistent with your disclosure on page 13 that your growth strategy is to develop and commercialize the VLX and that, in order to do so, you will be required to invest significant time, resources and capital in the development, production and launch of the VLX platform. Please revise for clarity and consistency. In addition, please disclose in your business section an estimate of the cost of completing the development of the VLX platform, a description of the the steps you have taken and will have to take in order to sell this product and a timeline of each of the remaining steps. Implications of Being an Emerging Growth Company, page 7 Please provide us with copies of all written 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. Please contact the staff member associated with the review of this filing to discuss how to submit such copies. Risk Factors Risks Related to Our Business and Growth Strategy Our international operations may raise additional risks, page 18 6. Please disclose here the percentage of your revenue earned from international customers and identify your most significant international markets. If we fail to offer high-quality customer service, our business and reputation could suffer, page 19 7. To the extent material to understanding the risks, please disclose the percentage of your revenue that is earned from sales or services by distributors so that investors understand the degree to which you rely on your third-party distributors. In addition, in your business section, please disclose the material terms of your agreements with third-party distributors. In recent periods, we have depended on a limited number of partners for our revenue, page 23 Please disclose the name of the cell therapy company that accounted 8. for 15% of your total revenue or explain why you do not believe that is material in the context of your current business and operations. In addition, please disclose in your prospectus summary that, for the year ended December 31, 2020, one cell therapy company accounted for 15% of your Doug Doerfler FirstName LastNameDoug Doerfler MaxCyte, Inc. Comapany June NameMaxCyte, Inc. 10, 2021 June 10, Page 3 2021 Page 3 FirstName LastName total revenue and that your six largest customers accounted for 40% of your total revenue. In your business section, please disclose the material terms of your agreement or agreements with the company, and file the agreement or agreements as an exhibit or exhibits to your registration statement. Alternatively, tell us why you believe this is not necessary. Risks Related to the Supply and Manufacturing of Our Products We depend on continued supply of components, page 25 Please revise to disclose here and in your business section that, for

the year ended

December 31, 2020, you purchased approximately 47% of your inventory from a single supplier. In addition, in your business section, please disclose the material terms of your agreement with the supplier and file the agreement as an exhibit to your registration statement or tell us why you believe this is not necessary. Use of Proceeds, page 55 10. Please disclose the approximate amount intended to be used for each purpose identified on page 55. In addition, if any material amounts of other funds are necessary to accomplish the specified purposes for which the proceeds are to be obtained, please state the amounts of such other funds needed for each specified purpose and the sources thereof. Business, page 80 11. Please revise to disclose the material terms of your agreements for the sale of your instruments, the material terms of your agreements for the lease of your instruments and the material terms of your SPLs, including the terms of the associated licenses. Overview, page 82 For each of the 11 indications identified on page 82, please disclose 12. the phase of FDA approval process for each product, and disclose a brief explanation of the FDA approval process, including a discussion of the general timeline and the fact that approval may never be obtained. Our Market Opportunity, page 94 13. Please revise the table on page 96 to include Phase 3 of the FDA approval process. Sales and Marketing, page 102 We note your disclosure on page 102 that you intend to expand your 14 sales, support and marketing efforts in regions with a concentrated life sciences presence. Please disclose your plans, including the regions in which you intend to expand, whether you intend to increase your sales employees or increase the number of third-party distributors, an estimate of the costs and an estimate of the timeline of your current plans. Similarly, please discuss your specific plans for moving the cleanroom assembly activities in-house, Doug Doerfler MaxCyte, Inc. June 10, 2021 Page 4 including the timeline, the steps involved in establishing your cleanroom for assembly activities and an estimate of the costs of establishing the cleanroom. Description of Capital Stock Choice of Forum, page 136 We note your disclosure that the exclusive forum provision in the 15. fifteenth amended and restated certificate of incorporation, which identifies the Court of Chancery of the State of Delaware as the exclusive forum for specified actions, does not apply to suits brought to enforce a duty or liability created by the Securities Act or Exchange Act. Please ensure that the exclusive forum provision in the governing documents states this clearly, or tell us how you will inform investors in future filings that the provision does not apply to any actions arising under the Securities Act or Exchange Act. We also note your disclosure on page 136 that the fifteenth amended and restated certificate of incorporation will provide that the federal district courts of the United State of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under

FirstName LastNameDoug Doerfler Comapany NameMaxCyte, Inc.

Corporation Finance June 10, 2021 Page 4 & Services FirstName LastName Sincerely, Division of Office of Trade