

June 10, 2021

Sean Mackay  
Chief Executive Officer  
IsoPlexis Corporation  
35 NE Industrial Rd.  
Branford, CT 06405

Re: IsoPlexis  
Draft Registration  
Submitted May 13,  
CIK No. 0001615055

Corporation  
Statement on Form S-1  
2021

Dear Mr. Mackay:

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 May 13, 2021

Market, Industry and Other Data, page ii

1. Your statements that:  
(i) the estimated market and industry data included in the prospectus is inherently uncertain and imprecise, (ii) investors are cautioned not to place undue reliance on such market and industry data or any other such estimates, and (iii) you have not independently verified any third-party information and data from your internal research has not been verified by any independent source may imply an inappropriate disclaimer of responsibility with respect to the third party information. Please either delete these statements or specifically state that you are liable for such information.

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Prospectus Summary  
Overview, page 1

2. Please define proteomics and bulk proteomics at first use.  
3. We note your statement that your platform has been rapidly adopted by certain parties.  
Your Summary should provide a balanced presentation of your business.  
Please provide a

discussion of the challenges you face in scaling your operations, including your dependence on converting customers to your platform and that growth may require you to incorporate new equipment and implement new technology systems and laboratory processes, as referenced on page 13. Please also disclose in the Summary that your platform is marketed to customers as research-use-only (RUO) products, as referenced on page 27.  
Our Platform, page 2

4. Please revise to provide the basis for your statements that your IsoSpeak software is capable of rapidly returning "publication quality" content.  
Recent Developments, page 5

5. Please revise your disclosure to identify the Sellers that are party to the Patent Purchase Agreement, describe the nature and scope of the intellectual property acquired and disclose the material rights and obligations of the parties under the agreement. Please also file the Patent Purchase Agreement and the Assumption Agreement as exhibits to the registration statement or tell us why such filing is not required.  
Risk Factors  
Risks Related to Our Intellectual Property  
Certain of our in-licensed patents are, and our future owned and in-licensed patents may be, subject to a reservation of rights..., page 40

6. Please provide additional disclosure regarding the technology or technologies subject to march-in rights; the portion of your business that would be affected by the exercise of march-in rights; and whether and how you may be compensated in the event such rights are exercised.  
Risks Related to Our Common Stock and This Offering  
Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum, page 42

7. Please revise your disclosure to indicate that your forum selection provision that relates to certain litigation, including any derivative action, does not apply to suits brought to enforce any duty or liability created by the Securities Act or Exchange Act or the rules and regulations thereunder, as referenced on page 112. Please also revise your risk factor to disclose that there is also a risk that your exclusive forum provisions may result  
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in increased costs for investors to bring a claim.  
Use of Proceeds, page 53

8. Please revise to identify the principal purposes for which the net proceeds are intended to be used and the approximate amount intended to be used for each such purpose. To the extent that you do not have a current specific plan for the proceeds, or a significant portion thereof, please include a statement to this effect and add related disclosure under an appropriate heading in the risk factor section. Refer to Item 504 of Regulation S-K.  
Management's Discussion and Analysis of Financial Condition and Results of Operations  
Overview, page 59

9. We note your disclosure that certain of your suppliers of components and materials are single or sole source suppliers. Please revise your disclosure to identify your sole source suppliers and the components and/or materials they supply to you. Please also disclose the material terms of your agreements with such suppliers. Alternatively, please explain to us why such disclosure would not be material to investors. Please also file your supply agreements as exhibits to your registration statement or tell us why you believe such filing is not required.  
Grant Income, page 62

10. We note your disclosure that you are engaged in various Small Business Innovation Research grants with the federal government. Please expand your disclosure in your Business section to disclose the material terms of these grants, including any conditions on funding, obligations under the grants, and the intellectual property rights of each party. Alternatively, please explain to us why such disclosure would not be material to investors.  
Results of Operations, page 63

11. Please address the following regarding your research and development expenses:  
Revise to provide a break down of your research and development expenses by product candidate. If you do not track your expenses by product candidate, disclose that fact.  
Revise to provide a breakdown of your research and development expense by type of expense.  
You disclose at the top of page 64 that a portion of the increase in research and development expense was related to a new product released in March 2021. Revise to identify the new product and quantify the amount of expense related to that product.  
Critical Accounting Policies and Significant Judgements and Estimates  
Share-Based Compensation, page 68

12. Once you have an estimated offering price or range, please explain to us the reasons for  
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any differences between the recent valuations of your common stock leading up to the initial public offering and the estimated offering price. Please also explain how you considered recent preferred stock issuances in your valuation of common stock. This information will help facilitate our review of your accounting for equity issuances including stock compensation and beneficial conversion features.  
Please discuss with the staff how to submit your response.

13. Revise your table on page 69 to reflect all such equity-based awards through the date of the registration statement.  
Our Platform, page 74

14. We note your disclosure on page 63 that revenue consists of sales of instruments and consumables in addition to service revenue. Please expand your disclosure to describe the principal services that you offer to customers.  
Rapid data analysis and insights, page 74

15. We note your statement that accelerated insights from your IsoSpeak software can significantly shorten drug development timelines. Given the uncertainty with regard to drug development, please revise this statement to remove any implication that use of your platform successfully mitigates such uncertainty. Our Product Development Approach, page 80

16. We note your disclosure on page 1 that you are expanding your capabilities to include applications for infectious diseases, inflammatory conditions, and neurological diseases. We also note your disclosure on page 4 that you intend to further develop your product roadmap to integrate sequencing and functional proteomic biology from single cells to enable novel applications in discovery biology and on page 3 that your long term strategy is ultimately to add additional applications serving clinical diagnostics research that will allow you to serve additional markets you believe to be worth approximately \$10 billion. You also state on page 16 that you intend to launch additional new products in the next six to twelve months. Please expand your disclosure in the Business section to describe your material research and development projects, including those that are material to the implementation of your growth strategy. Intellectual Property , page 83

17. We note your disclosure on page 38 that you rely on an in-license from certain third parties with respect to certain patent rights relating to multiplexed detection and high throughput single cell polyomics, certain patent rights relating to methods and compositions for quantifying metabolites and certain patent rights relating to the detection of target molecules. Please disclose the material terms of this agreement, including the nature and scope of the intellectual property transferred, each parties' rights and obligations, the duration of the agreement, the royalty rates or range and the royalty term, Sean Mackay  
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the termination provisions, aggregate amounts paid under the agreement to date, and the aggregate future potential milestone payments. Please also provide this disclosure for the license agreements referenced on page on F-24 and F-25. With respect to your license agreements with Yale University and California Institute of Technology, please quantify the value of preferred stock issued to your counterparty at the time of issuance. Please also file these agreements as exhibits to the registration statement. Alternatively, please explain to us why such filing is not required.

18. Please revise to briefly discuss that your products contain software licensed by third-party authors under open source licenses, as referenced on page 41.

19. Please revise your intellectual property disclosure to clearly identify each material patent or group of related patents, the type of patent protection granted for each technology, the product(s) or product candidate(s) dependent on each patent, related expiration and jurisdiction, including any foreign jurisdiction, of each pending or issued patent. Please also revise to include your patent disclosure as of a more recent date and include

applicable disclosure for those patents acquired pursuant to the Patent Purchase Agreement.  
Employment Agreements , page 97

20. We note your disclosure that Messrs. Strahley and Siesel each executed an offer letter with the Company in November 2019 and May 2020, respectively. Please file such offer letter agreements as exhibits to your registration statement. Refer to Item 601(b)(10) of Regulation S-K. Principal Stockholders, page 102

21. Please identify the natural person or persons who directly or indirectly exercise sole or shared voting and/or dispositive power with respect to the common stock held by your 5% stockholders identified in the table on page 102. Financial Statements  
Note 3 - Fair Value Measurements, page F-14  
Note 7 - Debt, page F-18

22. Please provide us with additional information regarding your accounting for the loan commitment asset of \$2.2 million related to the future loan commitment. Please advise to identify the contractual features of the loan comment that led you to conclude that the commitment for the second tranche under the Credit Agreement qualifies as a freestanding financial instrument required to be recorded at fair value. Tell us the accounting literature upon which you relied in assessing these features.

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General

23. 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. You may contact Jeanne Bennett at 202-551-3606 or Kevin Vaughn at 202-551-3494 if you have questions regarding comments on the financial statements and related matters. Please contact Deanna Virginio at 202-551-4530 or Christine Westbrook at 202-551-5019 with any other questions.

FirstName LastNameSean Mackay  
Corporation Finance  
Comapany NameIsoPlexis Corporation  
Sciences  
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cc: Matthew Jones, Esq.  
FirstName LastName

Sincerely,  
Division of  
Office of Life