

July 30, 2021

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

Corporation  
Statement on Form S-1

Re: IsoPlexis  
Registration  
Filed July 20, 2021  
File No. 333-258046

Dear Mr. Mackay:

We have reviewed your 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.

Form S-1 filed July 20, 2021

Prospectus Summary  
Recent Developments  
Preliminary Financial Results for the Second Quarter Ended June 30, 2021, page 5

1. Please revise this section to identify and discuss the factors and trends that led to the significant differences in revenues and loss from operations for the periods presented here.

Exhibits

2. Please file a signed copy of the Exhibit 5.1 opinion.

Sean Mackay  
IsoPlexis Corporation  
July 30, 2021  
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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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 Jane Park at 202-551-7439 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