July 16, 2021

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

Re: IsoPlexis

Corporation

Amendment No. 1 to Draft Registration

Statement on Form S-1

Submitted July 2,

2021

CIK No. 0001615055

Dear Mr. Mackay:

We have reviewed your amended draft registration statement and have the following $% \left(1\right) =\left(1\right) +\left(1\right) +$

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 $% \left(1\right) =\left(1\right) +\left(1\right) +$

 $\ensuremath{\mathsf{EDGAR}}.$ 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.

 $\qquad \qquad \text{After reviewing the information you provide in response to these comments and your } \\$

amended draft registration statement or filed registration statement, we may have additional $% \left(1\right) =\left(1\right) +\left(1\right$

comments.

Amendment No. 1 to Draft Registration Statement on Form S-1 submitted July 2, 2021

 $\label{thm:management} \mbox{Management's Discussion and Analysis of Financial Condition and Results} \\ \mbox{of Operation}$

Overview, page 59

1. We note your response to our prior comment 9. Please expand your disclosure in this section to disclose that you do not have supply agreements with certain suppliers

of critical components

and materials beyond purchase orders, as referenced on page 25.

Sean Mackay

FirstName LastNameSean Mackay

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FirstName LastName

Business

Intellectual Property, page 87

2. We note your response to our prior comment 19, which we reissue in part. Please revise ${\sf P}$

to disclose the scope of patent protection and products or processes to which such patents

 $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

patents and patent applications. Please also disclose the applicable foreign jurisdictions for

your issued patents. Please consider tabular disclosure in addition to the narrative

provided. License Agreements, page 90

We refer to your disclosure on page 90 relating to the additional patent rights you licensed

under the amended Yale Agreement in January 2018. Please expand your disclosure to

clearly identify the nature and scope of the patent rights that you in-licensed. Please also

revise your disclosure to include when the last-to-expire licensed patent right under the

Yale Agreement is scheduled to expire and the aggregate amounts paid to date under the

Yale Agreement.

We refer to your disclosure on page 91 relating to your Caltech Agreement. Please revise

your disclosure to include when the last-to-expire licensed patent right under the Caltech

Agreement is scheduled to expire. Please also clarify whether there are any potential

future milestone payments.

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.

Sincerely,

Division of

Corporation Finance

Office of Life

Sciences

cc: Matthew Jones, Esq.