October 3, 2023

Harith Rajagopalan, M.D., Ph.D. Chief Executive Officer Fractyl Health, Inc. 17 Hartwell Avenue Lexington, MA 02421

Inc.

Re: Fractyl Health,

Draft Registration Statement on Form S-1

Amendment No. 6 to

Submitted September

21, 2023

CIK 0001572616

Dear Harith Rajagopalan:

 $\label{eq:weak_problem} \mbox{We have reviewed your amended draft registration statement and have the following}$

comment.

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

 ${\tt EDGAR.}$ If you do not believe our comment applies to your facts and circumstances or do not

believe an amendment is appropriate, please tell us why in your response.

 $\hbox{ After reviewing the information you provide in response to this letter and your amended} \\$

draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 6 to Draft Registration Statement on Form S-1

Prospectus Summary Our Development Pipeline, page 2

1. We note your response to prior comment 2 and reissue in part. Please further clarify if both the "CE Mark" approval arrow and "Insulin-Treated T2D" arrow are for separate indications. To the extent both both of these arrows are targeting the same

indication, revise the Revita section of your pipeline table so that the same indication does not appear twice.

Please contact Michael Fay at 202-551-3812 or Brian Cascio at 202-551-3676 if you

have questions regarding comments on the financial statements and related matters. Please $% \left(1\right) =\left(1\right) +\left(1\right) +$

contact Tyler Howes at 202-551-3370 or Alan Campbell at 202-551-4224 with any other

questions.

Harith Rajagopalan, M.D., Ph.D.

Fractyl Health, Inc.

October 3, 2023

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Sincerely,

FirstName LastNameHarith Rajagopalan, M.D., Ph.D.

Division of Corporation

Finance

Office of Industrial

Applications and Comapany NameFractyl Health, Inc.

Services

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cc: Nathan Ajiashvili, Esq. FirstName LastName