

How To Use the IBS Diagnosis Web Application

1. Go to website at “<https://ibsdiagnosis.shinyapps.io/IBSDiagnosis/>”
2. This is what the initial screen should show.

IBS Diagnosis

Input parameters

Megasphaera:

Alistipes onderdonkii:

Bacteroides:

Ruminococcus:

Akkermansia muciniphila:

Barnesiellaceae:

Status/Output

[1] "Server is ready for calculation."

1 = IBS Constipation
2 = IBS Diarrhea
3 = IBS Mixed
4 = Healthy Patient

3. Input bacteria values in the left side of the window shown in the red square. These values can be typed in.

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4. Once all values have been input, click the button in orange that says “Submit”
5. Once this is done a short report will be displayed in the Status/Output panel of the site this is shown in the purple box below.

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Prediction	X1	X2	X3	X4
1	0.80	0.15	0.05	0.00

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- The report will show the possibility of the patient having either IBS-Constipation which correlates with 1, IBS-Diarrhea for 2, IBS-Mixed for 3, and a Healthy Patient for 4. This information is also displayed in the legend below the report.
- Under the "Prediction" Label, this is what the model has predicted what IBS subtype the patient may have, this is boxed in blue. Again the numerical value that is stated to be the prediction can be compared to the legend shown in the orange box below.

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