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## HYDROGEN AND METHANE BREATH TEST – LACTULOSE

**Report Date:** 11 December 2019

### Patient Data

Patient: XXXXXXXX  
Patient Sex: Female  
Date of Birth: XXXXXXXX  
Date of Test: 08/12/19

### Clinician Data

Referring Physician: Dr XXXXX  
Performed by: Postal Kit  
Reported by: Marianne Otterstad

Dear Dr XXXXXXXX,

Thank you for referring this patient for a hydrogen and methane-based breath test. Using UK breath test consensus guidelines to assess for Small Intestinal Bacterial Overgrowth (SIBO), we used 10g of lactulose mixed with 200ml of water. Breath samples were collected every 15 minutes up to 135 minutes.

### RESULTS

European SIBO cut off values<sup>(1)</sup> ( $\geq 10$ ppm rise in Hydrogen above baseline within 60 minutes)  
Positive

North American SIBO cut off values<sup>(2)</sup> ( $\geq 20$ ppm rise in Hydrogen above baseline within 90 minutes)  
Positive

Methane cut off values ( $\geq 10$ ppm in Methane during the study)  
Negative

### CONCLUSION

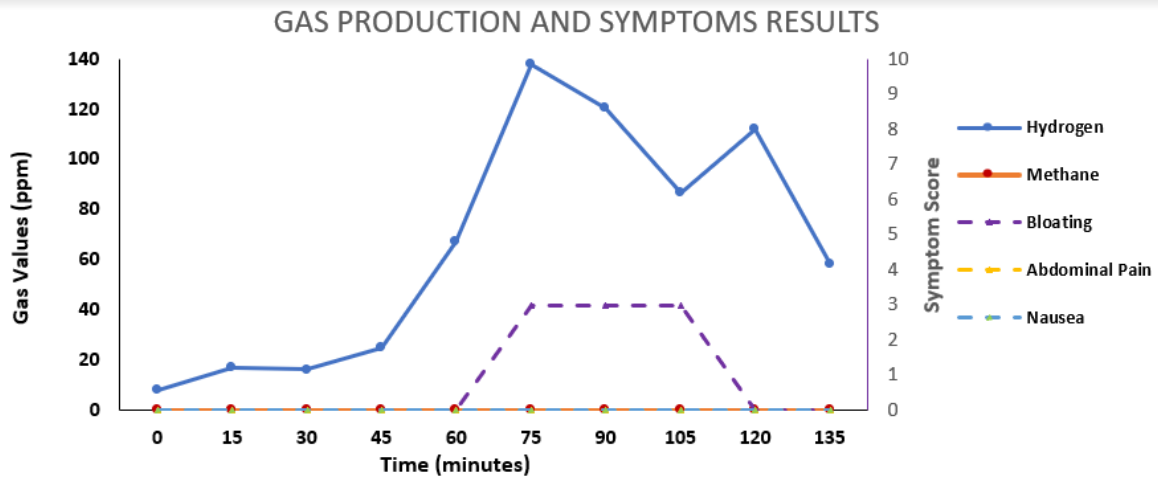
Your patient was deemed positive for SIBO (North American and European Guidelines). Rises in gas levels were associated with a concurrent rise in typical symptoms.

A graphical representation of these results and patient symptom's during the study can be found on the next page. Please do not hesitate to contact us if you require any further information.

Kind regards,

Dr Anthony R. Hobson Ph.D.  
Clinical Director

Marianne Otterstad BSc  
Gas Chromatography Scientist



Sample Time	Hydrogen (ppm)	Methane (ppm)	Carbon Dioxide (cf)	Bloating (0-10)	Abdominal Pain (0-10)	Nausea (0-10)
0	8	0	0.85	0	0	0
15	17	0	0.93	0	0	0
30	16	0	0.96	0	0	0
45	25	0	0.91	0	0	0
60	67	0	0.91	0	0	0
75	138	0	0.91	3	0	0
90	121	0	1.11	3	0	0
105	87	0	1.02	3	0	0
120	112	0	0.93	0	0	0
135	58	0	0.89	0	0	0

Hydrogen (H2) and Methane (CH4) values have been corrected for Carbon Dioxide (CO2) content in each sample as a quality assurance measure to ensure sample validity. Any Carbon Dioxide Correction Factor (cf) value over 2.50 is considered an invalid sample by the laboratory and is not included in the overall calculations of the test results.

**References**

1. Eisenmann A, Amann A, Said M, Datta B, Ledochowski M. Implementation and interpretation of hydrogen breath tests. Journal of Breath Research. 2008;2(4):1752-7155.
2. Rezaie A, Buresi M, Lembo A, Lin H, McCallum R, Rao S, et al. Hydrogen and Methane-Based Breath Testing in Gastrointestinal Disorders: The North American Consensus. Am J Gastroenterol. 2017;112(5):775-84.