# CASE

# THE CONSIDERATION OF ibs-smart AS A STUDY FIRST-IN-LINE TEST FOR IBS



#### **Demographics:**

- Female
- 46 years old

#### **Symptoms:**

- Abdominal bloating
- Diarrhea
- Persisting for 2-3 years

#### **Gastroenteritis Risk:**

 Frequently travels to Asia for business

#### Other GI Conditions or **Family History:**

None

#### **Specialists Consulted:**

- Primary care physician
- Gastroenterologist

A patient suffering from GI symptoms separately experienced an exclusionary and an inclusionary diagnostic pathway before being provided with a diagnosis of irritable bowel syndrome and an accompanying, effective treatment plan.

# **EXCLUSIONARY PATHWAY**

Ordered by: Gastroenterologist

Test:	Results:	Cost:
EGD	Normal	\$3,947
Colonoscopy	Normal	\$4,469
H Pylori	Negative	\$295
Celiac Panel	Negative	\$178
Endoscopy (For Barrett's Esophagus)	Negative	\$5,950
Stool Studies (Bacterial, Ova and Parasite)	Negative	\$119

Cost estimates are national averages from MDSave

# **INCLUSIONARY PATHWAY**

Ordered by: Primary care physican

Test:	Results:	Cost:
ibs-smart	Positive	\$220

# **RESULTING TREATMENTS AND OUTCOMES**

Diagnostic Pathway: Treatment(s): Outcome:

Exclusionary Proton Pump Inhibitors Sucralfate

Inclusionary (ibs-smart) Rifaximin Symptoms completely Patient counseling about resolved two months after food poisoning prevention treatment was completed

A positive result with ibs-smart indicated that the patient could be **confidently** diagnosed with irritable bowel syndrome and that the cause was a damaged microbiome from an instance of gastroenteritis. This data allowed the patient's primary care physician to quickly prescribe treatment that targeted the microbiome. As a result, the patient's symptoms were resolved soon after treatment was completed.

## ibs-smart RESULTS: A CLOSER LOOK

Antibody:	Patient Value:	<b>Level:</b>	Interpretation: Immune response is no longer active at elevated levels, suggesting gastroenteritis was not recent.
Anti-CdtB	0.82 (OD)	Not Elevated	
Anti-vinculin	1.91 (OD)	Elevated	Autoimmunity has developed against protein critical for gut function, damaging the microbiome.

These test results indicated irritable bowel syndrome with a **positive predictive value of 96%** and a **specificity of 91%**. The additional data provided by the test helped the physician to understand and **explain the entire progression** of the patient's specific case of IBS.

### **CONCLUSIONS**

The utilization of ibs-smart as a first-in-line test for patients with diarrheal IBS symptoms offers significant benefits over a solely exclusionary approach to the diagnosis.

- The fastest path to treatment: Test results are provided within four days of receiving a patient's sample, and positive results have a 96% 100% positive predictive value.
- More personalized treatment: Test results provide insight into the progression of irritable bowel syndrome in the patient.
- **Significant cost and time savings:** Patients could save over \$14,000 by avoiding potentially unnecessary procedures.