







con il patrocinio di













## Cosa c'è all'orizzonte in epatologia, pancreatologia e Lower GI

### **IBS**

#### **Cesare Cremon**

Policlinico di Sant'Orsola Azienda Ospedaliero - Universitaria di Bologna IRCCS Istituto di Ricovero e Cura a Carattere scientifico

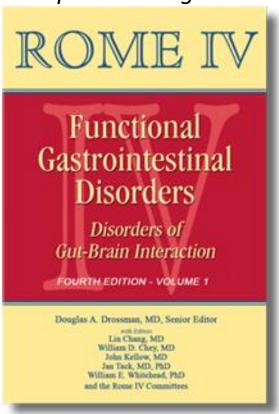


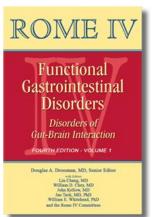
## Functional Gastro-Intestinal Disorders (FGIDs): Disorders of Gut-Brain Interaction

the old days...
"a young anxious woman", "an exclusion diagnosis"



the present...
"a positive diagnosis"

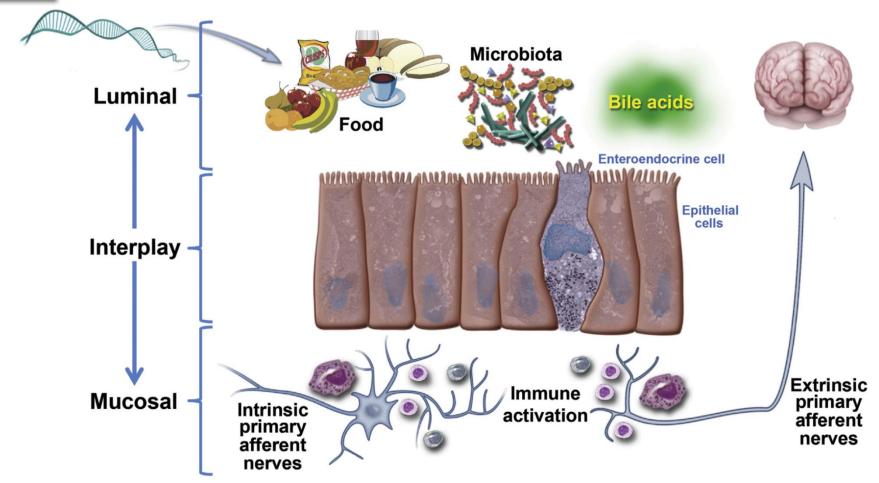




## The Intestinal Microenvironment and Functional Gastrointestinal Disorders



Giovanni Barbara,<sup>1</sup> Christine Feinle-Bisset,<sup>2</sup> Uday C. Ghoshal,<sup>3</sup> Javier Santos,<sup>4</sup> Stepen J. Vanner,<sup>5</sup> Nathalie Vergnolle,<sup>6</sup> Erwin G. Zoetendal,<sup>7</sup> and Eamonn M. Quigley<sup>8</sup>

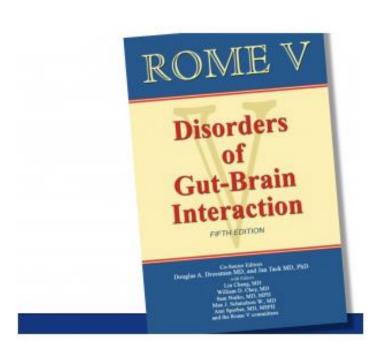


#### Functional Rome IV Criteria\* for IBS Gastrointestinal Disorders Disorders of Gut-Brain Interaction Recurrent abdominal pain > 1 day/week in the last 3 months associated with 2 or more of the following: **Associated with Associated with** Related to change in change in form of defecation frequency of stool stool

ROME

<sup>\*</sup>Criteria fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis

#### **About Rome V**



#### 144 Experts Representing 27 Countries



#### Rome V Chapter Committees - Vol 1

- 1. Disorders of Gut-Brain Interaction and the Rome V Process
- 2. Fundamentals of Neurogastroenterology Basic Science
- 3. Fundamentals of Neurogastroenterology Clinical Aspects of Brain- Gut Axis
- 4. Intestinal Microenvironment and Disorders of Gut Brain Interaction
- 5. Pharmacological, Pharmacokinetic and Pharmacogenomic Aspects of Disorders of Gut Brain Interaction
- 6. Age, Gender, Woman's Health and the Patient
- 7. Socio-Cultural Aspects of Disorders of Gut-Brain Interaction
- 8. Biopsychosocial Aspects of Gut-Brain Interaction

#### Rome V Chapter Committees – Vol 2

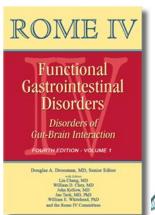
- 9. Esophageal Disorders of Gut Brain Interaction
- 10. Gastroduodenal Disorders of Gut Brain Interaction
- 11. Bowel Disorders of Gut Brain Interaction
- 12. Centrally Mediated Disorders of Gastrointestinal Pain
- 13. Gallbladder and Sphincter of Oddi Disorders of Gut Brain Interaction
- 14. Anorectal Disorders of Gut Brain Interaction
- 15. Childhood Disorders of Gut-Brain Interaction: Upper GI
- 16. Childhood Disorders of Gut-Brain Interaction: Lower GI/Pain
- 17. Design of Treatment Trials for Disorders of Gut-Brain Interaction
- 18. Development and Validation of the Rome V Diagnostic Questionnaire
- 19. History of Disorders of Gut-Brain Interaction and the Rome Foundation

#### Challenges for Rome V

- Updates on Key Knowledge (microbiome, food/diet, CNS mechanisms and treatments, sex differences)
- Address Diagnostic Overlap (FD and gastroparesis, bloating/distension with other diagnoses, GI and Non-GI)
- Harmonize Cross-Cultural Differences in Diagnosis (e.g., IBS pain/discomfort, bloating)
- Role of Biomarkers in Diagnosis and Treatment
- Development of Clinical Criteria
- Incorporate Brain-Gut Treatment and Integrated Care
- Improve Communication Skills to Optimize Patient- Provider Relationship in the Modern Era

The Work has Begun-Timetable for Rome V

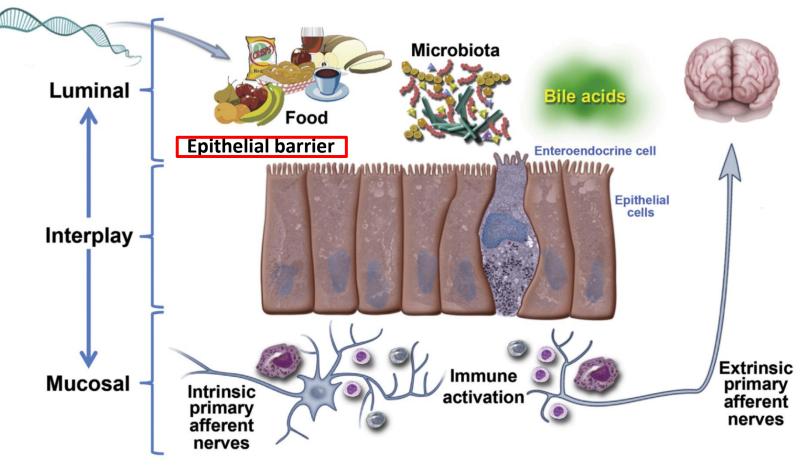
Publication Gastroenterology supplement Mar- May 2026 and Rome V book Document E sent for copyediting May 2025 MDCP and Algorithms completed Begin MDCP and Algorithms Jan 2025 Slide work completed Oct 2024 Document D/Gastro article sent for outside review Jan 2024 Begin Document D and Gastroenterology article Dec 2023 Meeting in Rome – Revision and Harmonization DDW symposium – Support Committee presentations May, 2023 Begin slide work Jan 2023 **Begin Document C** Chapter committees review and revise Document B May 2022 Chapter committees begin Document A May 2021 Support committees begin work Editorial Board, Chapter chairs/co-chairs and committee Mar 2021 members selected



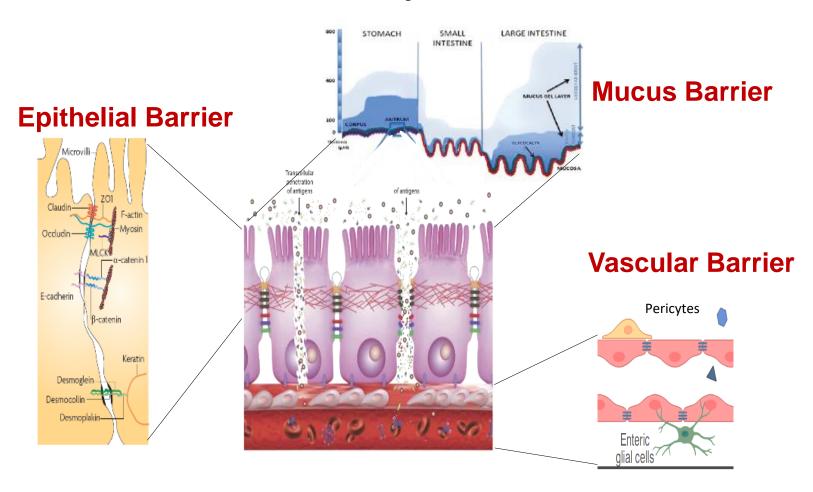
#### The Intestinal Microenvironment and Functional Gastrointestinal Disorders



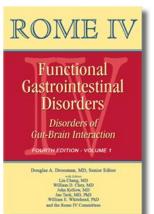
Giovanni Barbara, <sup>1</sup> Christine Feinle-Bisset, <sup>2</sup> Uday C. Ghoshal, <sup>3</sup> Javier Santos, <sup>4</sup> Stepen J. Vanner, <sup>5</sup> Nathalie Vergnolle, <sup>6</sup> Erwin G. Zoetendal, <sup>7</sup> and Eamonn M. Quigley <sup>8</sup>



# Gut Mucus, Epithelial & Vascular Barriers: three layers of defence



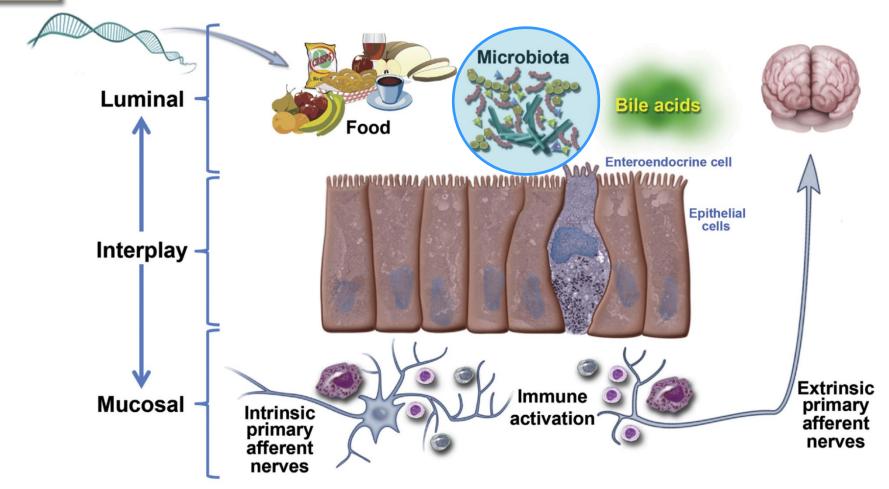
Turner JR. Nat Rev Immunol 2009;9:799-809 Spadoni I et al., Science 2015;350:830-4



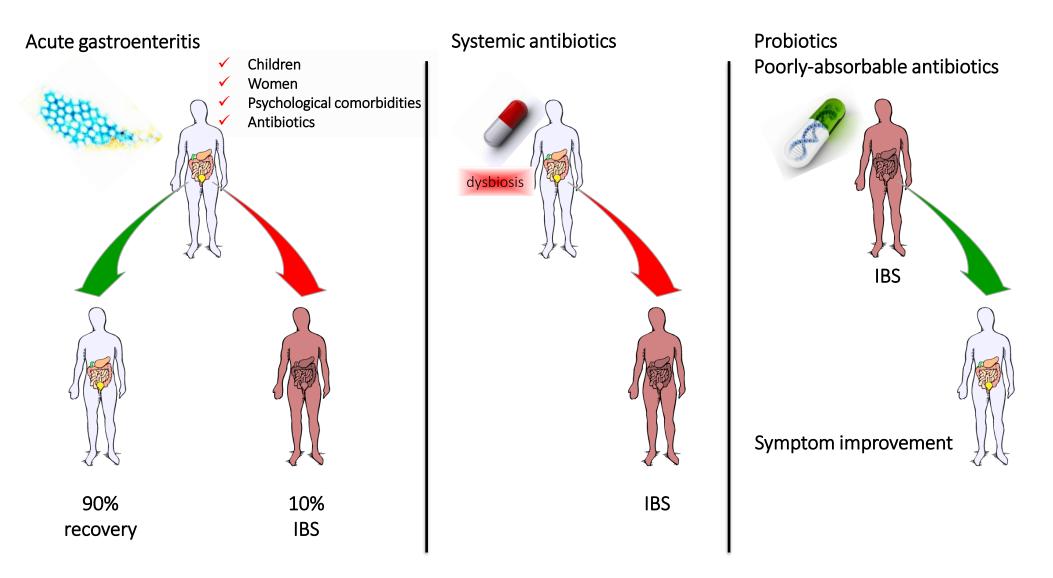
#### The Intestinal Microenvironment and Functional Gastrointestinal Disorders



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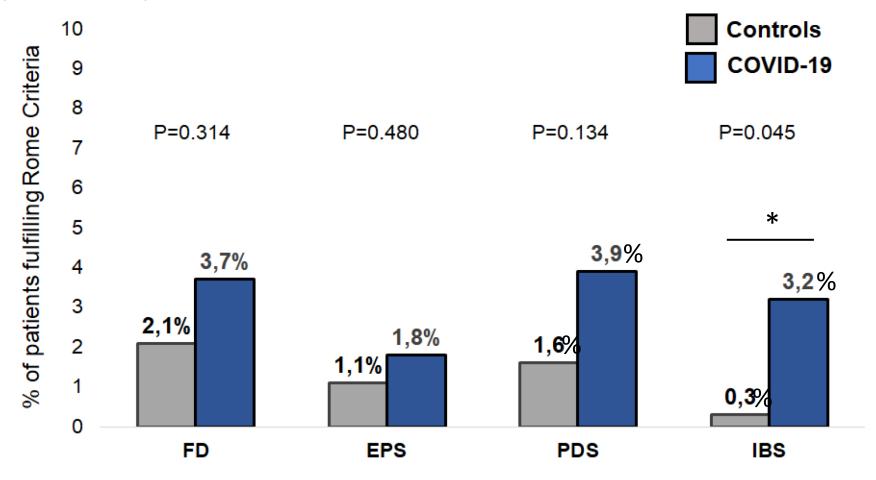
## Clinical scenarios linking IBS with the microbiota



Cremon C et al., Expert Rev Mol Diagn 2010;10:389-93 Barbara G et al., Gastroenterology 2016;150:1305-18

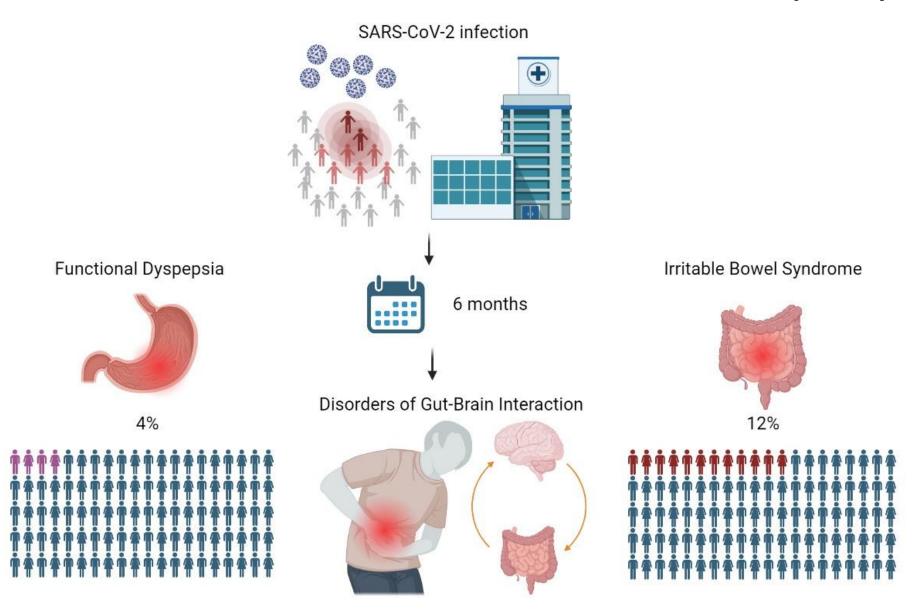
### Post-COVID-19 Irritable Bowel Syndrome

2183 hospitalized patients 1314 (64%) had a diagnosis of COVID-19 1 year follow-up

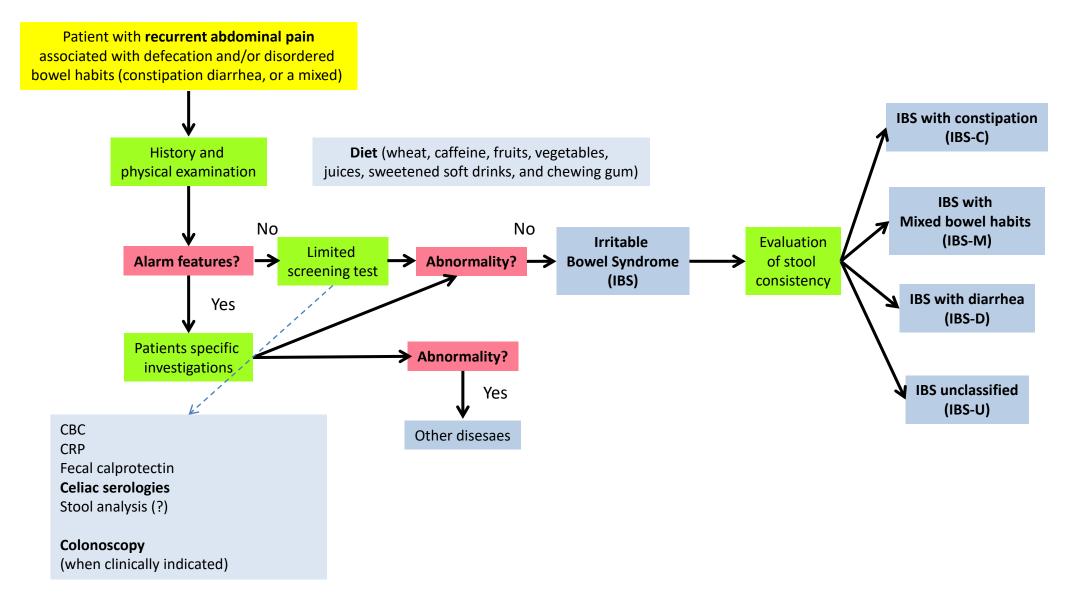


Marasco G, Cremon C. et al., Gut 2023, in press

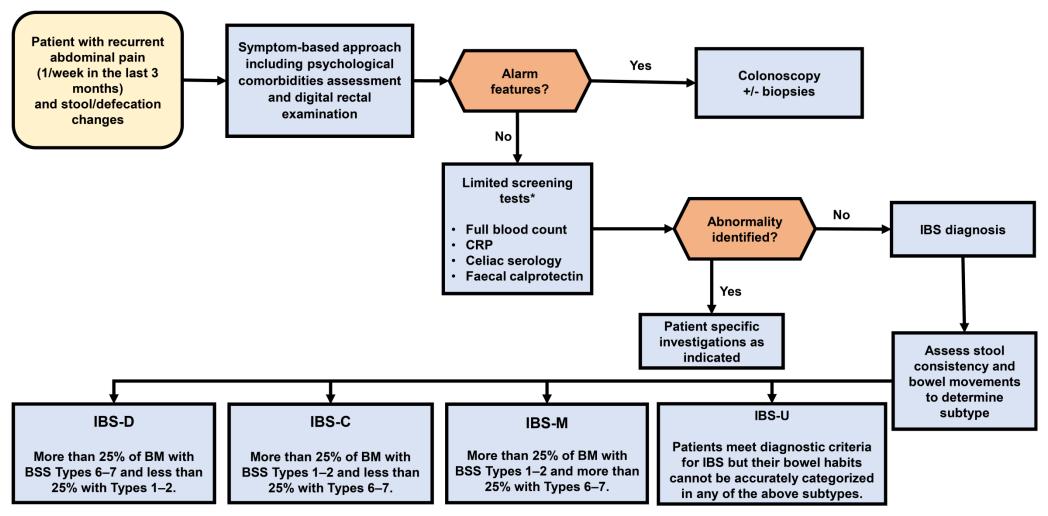
## Post COVID-19 Disorders of Gut-Brain Interaction (DGBI)



### Rome IV diagnostic algorithm for IBS

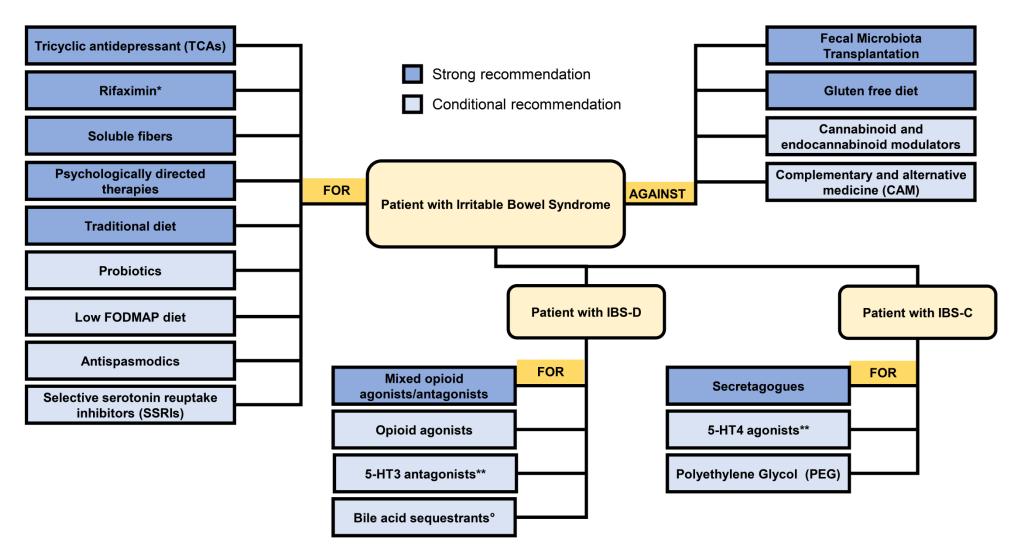


### Italian guidelines for the management of irritable bowel syndrome



• Stool testing for enteric pathogens, food and lactose intolerance, food allergies, and routine diagnostic test for small intestine bacterial overgrowth are not recommended

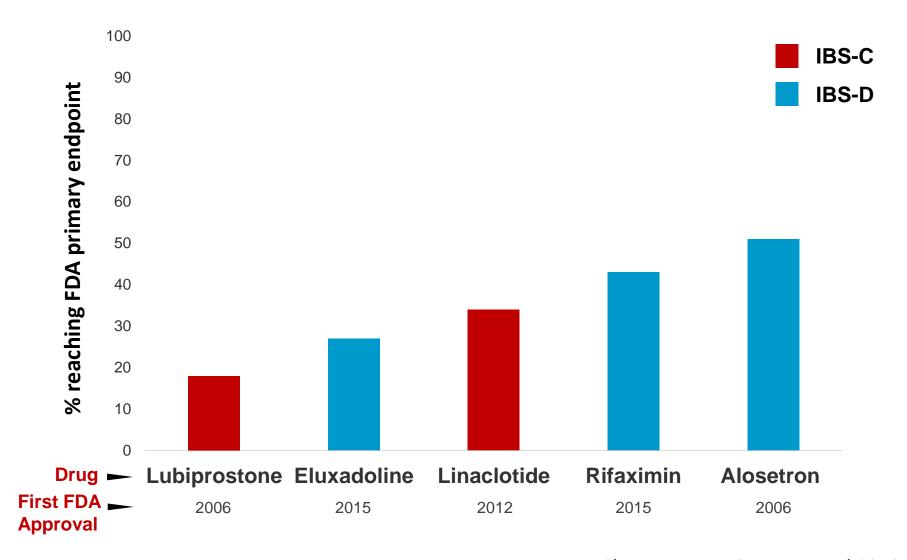
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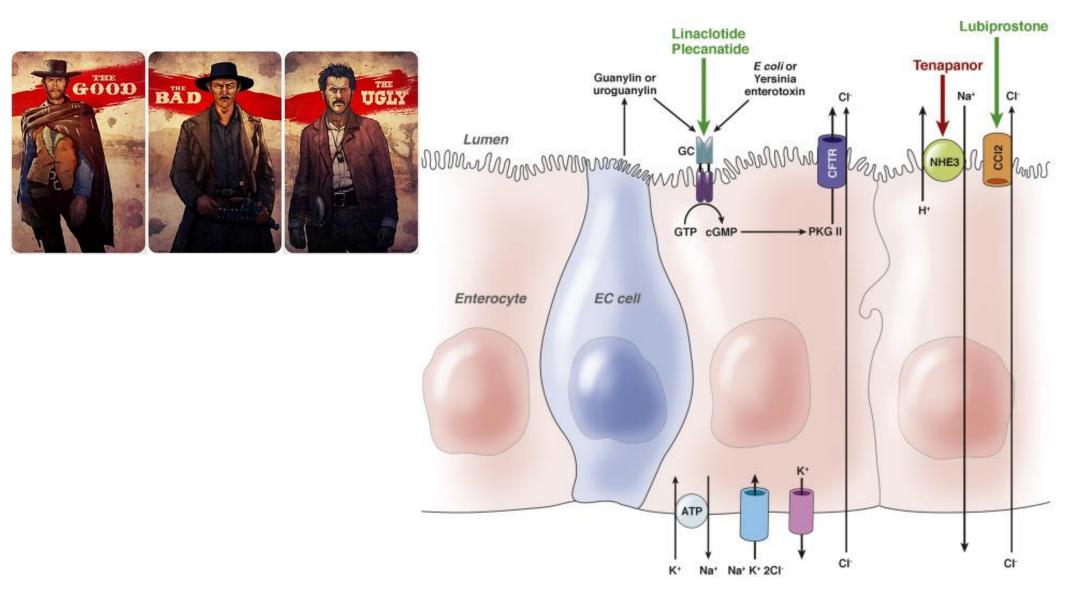
<sup>\*</sup>in patients with IBS without constipation; \*\*in patients who have failed conventional therapy;

<sup>°</sup> in patients with proven bile acid diarrhea or as initial trial if testing is not available.

## **Efficacy of top five therapies for IBS**



## Secretagogues for IBS-C: The good, the bad, and the ugly?



Pannemans J, Tack J. Gastroenterology 2018; 155:1677-1679

### **GUIDELINES**

## AGA Clinical Practice Guideline on the Pharmacological Management of Irritable Bowel Syndrome With Constipation



**Lin Chang**, <sup>1,\*</sup>**Shahnaz Sultan**, <sup>2,3,\*</sup>Anthony Lembo, <sup>4</sup> G. Nicholas Verne, <sup>5</sup> Walter Smalley, <sup>6</sup> and Joel J. Heidelbaugh <sup>7</sup>

New or updated recommendations <sup>a</sup>	Strength of recommendation	Certainty of evidence
1. In patients with IBS-C, the AGA suggests using tenapanor	Conditional	Moderate
2. In patients with IBS-C, the AGA suggests using plecanatide	Conditional	Moderate
3. In patients with IBS-C, the AGA recommends using linaclotide	Strong	High
4. In patients with IBS-C, the AGA suggests using tegaserod Implementation remark: Tegaserod was reapproved for women under the age of 65 years without a history of cardiovascular ischemic events (such as myocardial infarction, stroke, TIA, or angina)	Conditional	Moderate
5. In patients with IBS-C, the AGA suggests using lubiprostone	Conditional	Moderate
6. In patients with IBS-C, the AGA suggests using PEG laxatives	Conditional	Low
7. In patients with IBS, the AGA suggests using TCAs	Conditional	Low
8. In patients with IBS, the AGA suggests against using SSRIs	Conditional	Low
9. In patients with IBS, the AGA suggests using antispasmodics	Conditional	Low

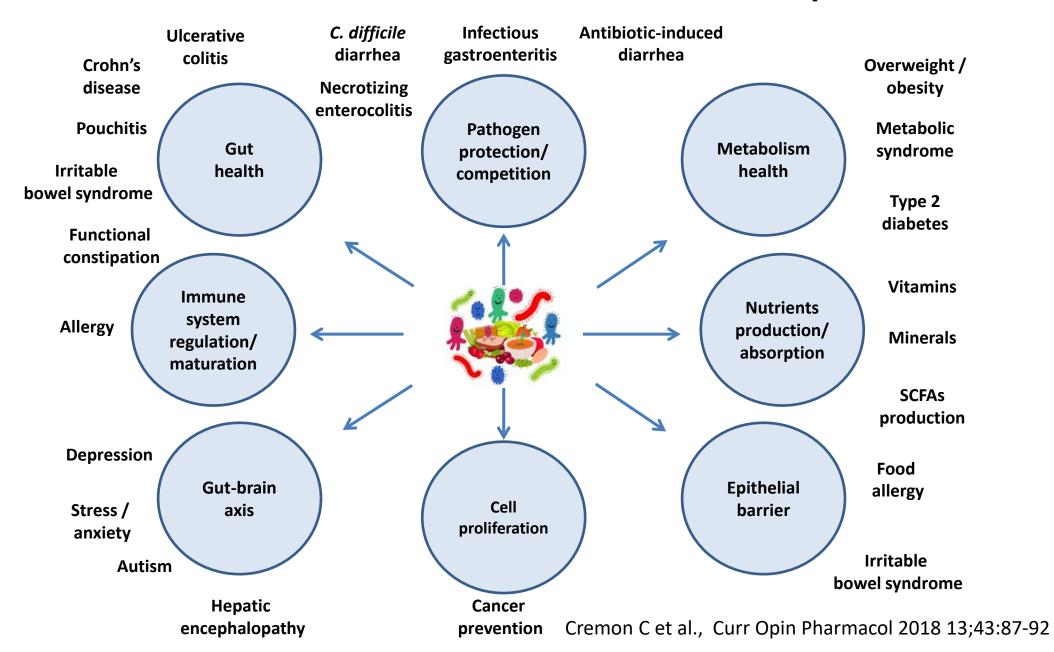
# AGA Clinical Practice Guideline on the Pharmacological Management of Irritable Bowel Syndrome With Diarrhea



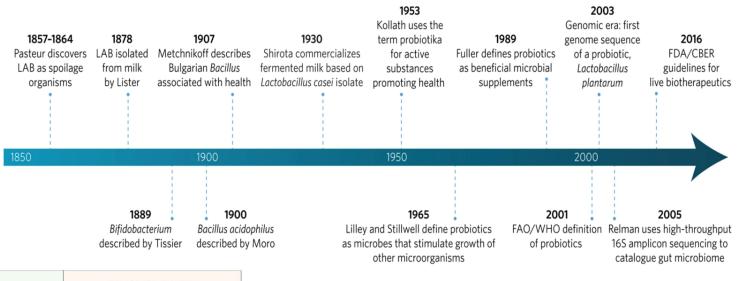
**Anthony Lembo**, <sup>1,\*</sup> **Shahnaz Sultan**, <sup>2,3,\*</sup> Lin Chang, <sup>4</sup> Joel J. Heidelbaugh, <sup>5</sup> Walter Smalley, <sup>6</sup> and G. Nicholas Verne <sup>7</sup>

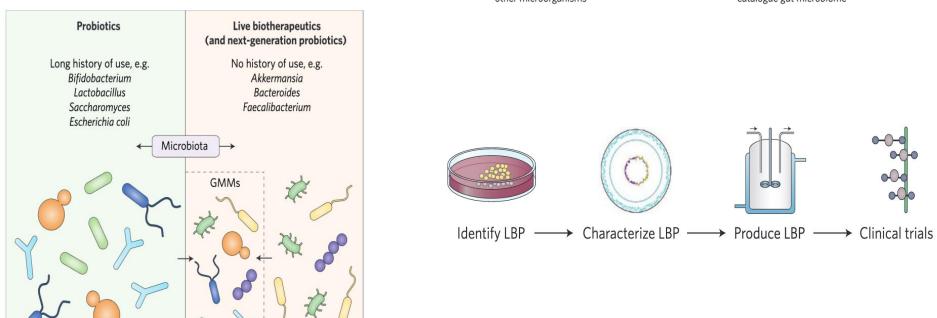
New or updated recommendations <sup>a</sup>	Strength of recommendation	Certainty in evidence
In patients with IBS-D, the AGA suggests using eluxadoline     Implementation remark: eluxadoline is contraindicated in patients without a gallbladder or those who drink more than 3 alcoholic beverages per day	Conditional	Moderate
2a. In patients with IBS-D, the AGA suggests using rifaximin	Conditional	Moderate
2b. In patients with IBS-D with initial response to rifaximin who develop recurrent symptoms, the AGA suggests retreatment with rifaximin	Conditional	Moderate
3. In patients with IBS-D, the AGA suggests using alosetron	Conditional	Moderate
4. In patients with IBS-D, the AGA suggests using loperamide	Conditional	Very low
5. In patients with IBS, the AGA suggests using TCAs	Conditional	Low
6. In patients with IBS, the AGA suggests against using SSRIs	Conditional	Low
7. In patients with IBS, the AGA suggests using antispasmodics	Conditional	Low

## **Probiotics: mechanisms of action and clinical implications**



#### The future: Next Generation Probiotics





Food and supplements

Medicine





ADOPTED: 7 July 2021

doi: 10.2903/j.efsa.2021.6780

## Safety of pasteurised Akkermansia muciniphila as a novel food pursuant to Regulation (EU) 2015/2283

EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA),
Dominique Turck, Torsten Bohn, Jacqueline Castenmiller, Stefaan De Henauw,
Karen Ildico Hirsch-Ernst, Alexandre Maciuk, Inge Mangelsdorf, Harry J McArdle,
Androniki Naska, Carmen Pelaez, Kristina Pentieva, Alfonso Siani, Frank Thies,
Sophia Tsabouri, Marco Vinceti, Francesco Cubadda, Thomas Frenzel, Marina Heinonen,
Rosangela Marchelli, Monika Neuhäuser-Berthold, Morten Poulsen, Miguel Prieto Maradona,
Josef Rudolf Schlatter, Henk van Loveren, Reinhard Ackerl and Helle Katrine Knutsen





Probiotic Cremon C, IBS DAYS 2022