Supplementary Table S1: Characteristics of Randomized Controlled Trials of Probiotics Versus Placebo in Children with Irritable Bowel Syndrome

Author, year	*Study design*	*Country*	*Sample IBS (N, age, sex)*	*Primary Outcome*	*Criteria for diagnosis*	*Treatment follow-up*	*Measurements*	*Treatment*	*Control*	*Quality assessment*
Giannetti, 2017	*Multicenter, randomized, double-blind, placebo-controlled, crossover trial*	*Italy*	*48 participants* *Mean age, 11.2 y; range, 8* *to 17.9 y* *female:male* *21:27*	*Efficacy in reducing gastrointestinal symptoms (abdominal pain resolution)*	*Rome III criteria*	*6 weeks*	*Questionnaire on Pediatric* *Gastrointestinal Symptoms, Rome III Version (QPGS-RIII)* *Functional Disability Inventory" (FDI)*	*B. longum BB536 + B.infantis M-63 + B. breve M-16V*	*Placebo*	*High risk*
Kianifar, 2015	*Double-blind, randomized controlled trial*	*Iran*	*60 participants* *Mean age* *7.1 ± 0.3 years* *female:male* *25:27*	*Efficacy in reducing gastrointestinal symptoms (pain severity)*	*Rome III criteria*	*4 weeks*	*Pain* *Severity* *Scale*	*Lactobacillus rhamnosus GG*	*Placebo*	*High risk*
Rahmani,	*Double-blind, randomized*	*Iran*	*30*	*Efficacy in reducing gastrointestinal*	*Rome III*	*4 weeks*	*Wang-Baker FACES Pain Rating*	*Lactobacillus*	*Placebo*	*High risk*

2020	*controlled trial*		*participants*	*symptoms (pain severity)*	*criteria*		*Scale (WBFPRS) 2*	*reuteri*		
Sudha, 2018	*Double-blind, randomized controlled trial*	*India*	*141 participants* *Mean age* *7.9 years* *range 4* *to 12 y* *female:male* *61:80*	*Efficacy in reducing gastrointestinal symptoms (abdominal pain resolution)*	*Rome III criteria*	*8 weeks*	*Global Assessment of Relief for Children with IBS (SGARC) Bristol stool scale Pain Severity score* *(auto-structured)*	*Bacillus coagulans Unique IS2*	*Placebo*	*High risk*
Vázquez-Frias, 2023	*Double-blind, randomized controlled trial*	*Mexico*	*253 participants* *female:male* *157:102*	*Efficacy and safety in reducing gastrointestinal symptoms (clinical improvement of symptoms)*	*Rome III criteria*	*8 weeks*	*Global Assessment of Relief for Children with IBS (SGARC)* *Global* *Assessment Questions (GAQ)* *Bristol stool scale* *Face* *Pain Scale–*	*Bacillus clausii*	*Placebo*	*High risk*

							Revised *IBS behavior (Behavior Scale).*			
Giorgio, 2025	*Double-blind, randomized controlled trial*	*Italy*	*72* *participants* *Median age* *12.2 ± 1.8 years* *female:male* *42:30*	*Efficacy in reducing gastrointestinal symptoms (abdominal pain resolution)*	*Rome IV criteria*	*12 weeks*	*Total IBS-Symptom Severity Scale (IBS-SSS)* *Bristol Stool Chart*	*Bifidobacterium adolescentis PRL2019*	*Placebo*	*Low risk*