Supplementary Materials

Which Probiotic Is the Most Effective for Treating Acute Diarrhea in Children? A Bayesian Network Meta-Analysis of Randomized Controlled Trials

Zengbin Li[1], Guixian Zhu[1], Chao Li[2], Hao Lai[1], Xin Liu[2], Lei Zhang[1,3,4,5,*]

[1] China-Australia Joint Research Center for Infectious Diseases, School of Public Health, Xi'an Jiaotong University Health Science Center, Xi'an, 710061, Shaanxi, People's Republic of China; lizengbin98@126.com (Z.L.); xianxianshell@163.com (G.Z.); xjtu_haolai@163.com (H.L.)

[2] Department of Epidemiology and Biostatistics, School of Public Health, Global Health Institute, Xi'an Jiaotong University Health Science Center, Xi'an, 710061, Shaanxi, People's Republic of China; lcxjtu@xjtu.edu.cn (C.L.); xinliu@xjtu.edu.cn (X.L.)

[3] Melbourne Sexual Health Centre, Alfred Health, Melbourne, Australia.

[4] Central Clinical School, Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Australia.

[5] Department of Epidemiology and Biostatistics, College of Public Health, Zhengzhou University, Zhengzhou, Henan, People's Republic of China.

[*] Correspondence: lei.zhang1@monash.edu (L.Z.); Tel.: (+8629-82655135)

Online Supplementary Contents

Table S1. Search strategies

We searched Embase, PubMed, and the Cochrane Library using a combination of MeSH and free text. Besides, we chose the title/abstract to limit the scope. The search terms include: “diarrhea”, “probiotic”, “children”, and “randomized controlled trial”. In order to include relevant literatures that meet the inclusion criteria as much as possible, we did not add “randomized controlled trial” to search in the Cochrane Library.

Search terms related to diarrhea	Diarrhea; diarrheas; diarrhea; diarrheas; acute diarrhea; diarrh*; gastroenteritis; gastroenteritides; acute gastroenteritis
Search terms related to probiotic	Probiotic; probiotics; probiotic*; prebiotics; prebiotic; prebiotic*; *bifidobacterial; bifidobacterium*; *lactobacillaceae*; *lactobacilli*; *lactobacillus*; *saccharomyces*; *saccharomyces*; *saccharomyc**; *saccharomyces boulardii*; *lactobacillus*; *enterococcus*; *escherichia coli*; *streptococcus*; *lactococcus*; *bacillus*; *lactobacilli*; *lactobacillus rhamnosus GG*; *lactobacillus reuteri*; *lactobacillus sporogenes*; *bifidobacterium longum*; *bifidobacterium breve*; *bifidobacterium bifidum*; *bifidobacterium lactis*; *bacillus*; *bacillus clausii*; *lactobacill**; *streptococcus thermophilus*; *streptococc**; *lactococc**; *bacillus subtilis*; *enterococcus*; *enterococcus faec**; *leuconostoc*; *pediococc**; *bulgarian bacillus*; *bacillus laterosporus*; *pediococcus acidilactici*; *lactis*
Search terms related to children	Children; child; child*; kids; kid; neonat; neonat*; baby; babies; pediatric; paediatric; infant; infants; toddler*; toddler; toddlers; adolescent; adolescents; adolescence; adolescen*; newborns; adolescen*; teenag*; youth*; young; preschooler; preschoolers; juvenile; juvenile*; pubescent; youth; teen; teens; teenage; teen-age; teenaged; teen-aged; teenager; teenagers; teen-ager; teen-agers; youngster; youngsters; minor; minors; infan*; newborn*; new-born*; infant, newborn; infants, newborn; newborn infant; newborn infants; newborns; newborn; neonate; neonates; infantile
Search terms related to randomized controlled trial	Randomized; random; randomly; random*; randomized controlled trial; clinical trials, randomized; trials, randomized clinical; controlled clinical trial; placebo; placebo*; trial; groupscrossover procedure; double-blind procedure; single-blind procedure; groups; assign*; allocat*; single blind; double blind; triple blind

Table S2. Characteristics of included studies

Study	Study Site	Intervention	N	Duration of hospitalization(day)	Duration of Diarrhea(day)	Duration of Fever(day)	Duration of Vomiting(day)	Day 2 Stool Frequency	Diarrhea lasting ≥2 days(N)
Vaghela 2020 [1]	India	*S. boulardii*	50	NA	NA	NA	NA	NA	44
		No treatment	50	NA	NA	NA	NA	NA	49
Shin 2020 [2]	Korea	*L. plantarum*	15	4.17±0.86	1.0±0.57	1.27±1.64	0.64±0.82	NA	NA
		No treatment	8	3.94±0.61	2.23±0.35	1.50±2.23	0.72±0.67	NA	NA
Mourey 2020 [3]	India	*S. boulardii*	49	NA	2.74±0.5	NA	NA	3.1±0.9	8
		Placebo	51	NA	3.97±0.73	NA	NA	3.6±1.3	36
Kluijfhout 2020 [4]	Belgium	*S. thermophilus* + *L. rhamnosus* + *L. acidophilus* + *B. lactis* + *B. infantis*	26	NA	3.04±1.36	NA	NA	NA	15
		Placebo	20	NA	4.2±1.34	NA	NA	NA	17
Chen 2020 [5]	China	*B. lactis* + *L. rhamnosus* + *L. acidophilus*	96	5.1±1.2	5.06±0.57	NA	NA	4.4±1.3	NA
		No treatment	98	6.3±1.4	6.0±0.83	NA	NA	4.7±1.9	NA
Szymanski 2019 [6]	Poland	*L. reuteri*	44	2.56±0.90	2.45±1.83	NA	NA	2.40±3.30	4
		Placebo	44	2.81±1.16	2.79±2.39	NA	NA	2.35±3.82	2
Sudha 2019	India	*Bacillus clausii*	59	NA	3.14±0.54	1.57±0.51	NA	6.84±1.76	54

[7]		Placebo	60	NA	3.4±0.64	1.60±0.58	NA	7.38±1.94	58
Islam 2019 [8]	Bangladesh	*Bacillus clausii*	160	3.8±1.4	3.2±1.3	NA	NA	5.8±2.0	NA
		No treatment	150	3.8±1.0	3.3±1.1	NA	NA	6.0±1.7	NA
Vidjeadevan 2018 [9]	India	*S. boulardii*	34	3.41±1.04	3.36±0.77	NA	NA	NA	NA
		Bacillus clausii	33	3.06±0.86	3.64±0.78	NA	NA	NA	NA
		No treatment	32	3.34±1.06	4.50±0.78	NA	NA	NA	NA
Schnadower 2018 [10]	USA	LGG	468	NA	2.53±2.45	NA	NA	2.46±2.81	243
		Placebo	475	NA	2.65±2.32	NA	NA	2.57±2.61	251
Javeed 2018 [11]	Pakistan	*S. boulardii*	157	NA	4.37±1.38	NA	NA	NA	157
		Placebo	157	NA	4.59±1.50	NA	NA	NA	157
Hong Chau 2018 [12]	Vietnam	*L. acidophilus*	150	3.29±1.56	3.36±1.78	NA	NA	NA	54
		Placebo	150	3.26±1.59	3.33±1.72	NA	NA	NA	60
Freedman 2018 [13]	Multicenter	*L. rhamnosus* + *L. helveticus*	414	NA	2.81±2.75	NA	NA	2.46±0.14	228
		Placebo	413	NA	3.0±2.92	NA	NA	2.81±0.19	225
Bhat 2018 [14]	India	*Bacillus clausii*	40	3.26±0.69	2.22±0.70	0.51±0.34	NA	3.98±1.40	NA
		S. boulardii	40	2.72±0.42	1.74±0.45	0.44±0.30	NA	4.48±1.77	NA
		No treatment	40	3.37±1.10	2.40±1.10	0.97±0.96	NA	4.18±2.63	NA
Sirsat 2017 [15]	India	*S. boulardii*	145	NA	NA	NA	NA	NA	82
		No treatment	145	NA	NA	NA	NA	NA	54

Park 2017 [16]	Korea	*L. acidophilus +B. longum*	28	NA	4.38±1.29	3.66±1.14	NA	NA	NA
		Placebo	29	NA	5.61±1.23	4.32±1.94	NA	NA	NA
Burki 2017 [17]	Pakistan	*S. boulardii*	100	NA	3.23±1.31	NA	NA	NA	60
		No treatment	100	NA	5.84±1.81	NA	NA	NA	80
Yazar 2016 [18]	Turkey	*L. casei + L. rhamnosus+ L. plantarum + B. lactis*	55	NA	3.79±1.20	NA	NA	NA	34
		No treatment	55	NA	4.76±1.29	NA	NA	NA	46
Sharif 2016 [19]	Iran	*S. boulardii*	100	NA	3.4±1.3	NA	NA	6.5±1.8	NA
		Placebo	100	NA	5.5±2.1	NA	NA	7.2±3.5	NA
Garcia-Menor 2016 [20]	Multicenter	*L. casei + L. rhamnosus + S. thermophilus + B. breve + L. acidophilus + B. infantis + B. bulgaricus*	43	NA	3.35±2.30	NA	NA	NA	19
		No treatment	42	NA	4.0±1.54	NA	NA	NA	20
Dash 2016 [21]	India	*S. boulardii*	64	NA	1.1±2.0	NA	NA	NA	NA
		No treatment	62	NA	2.03±2.0	NA	NA	NA	NA
Das 2016 [22]	India	*S. boulardii*	30	3.17±0.84	2.50±0.20	2.38±0.62	1.99±0.55	NA	NA
		Placebo	28	3.78±0.94	3.72±0.20	2.82±0.85	2.20±0.59	NA	NA
Lee 2015 [23]	Korea	*B. longum + B. lactis + L+ acidophilus + L. rhamnosus + L. plantarum + Pediococcus pentosaceus*	13	NA	6.1±0.5	1.1±1.9	1.6±1.6	NA	NA

		Placebo	16	NA	7.2±1.9	1.6±1.7	2.8±1.8	NA	NA
Hegar 2015 [24]	Indonesia	*L. rhamnosus + L. acidophilus*	56	NA	2.99±1.38	NA	NA	NA	NA
		Placebo	56	NA	2.78±1.32	NA	NA	NA	NA
Freedman 2015 [25]	Canada	*L. helveticus + L. rhamnosus*	61	NA	2.96±3.26	NA	1.51±1.93	NA	NA
		Placebo	62	NA	2.65±2.68	NA	1.57±1.80	NA	NA
El-Soud 2015 [26]	Egypt	*B. lactis*	25	NA	3.12±0.92	2.27±0.85	NA	NA	NA
		Placebo	25	NA	4.10±0.94	2.79±0.64	NA	NA	NA
Dinleyici 2015-1 [27]	Turkey	*S. boulardii*	220	4.60±1.72	3.14±1.38	NA	NA	NA	141
		No treatment	143	6.12±1.71	4.16±1.35	NA	NA	NA	120
Dinleyici 2015-2 [28]	Turkey	*L. reuteri*	29	NA	2.52±1.02	NA	NA	NA	13
		No treatment	31	NA	3.10±0.64	NA	NA	NA	27
Sindhu 2014 [29]	India	LGG	65	NA	4.35±2.27	NA	NA	NA	NA
		Placebo	59	NA	4.35±2.28	NA	NA	NA	NA
Dinleyici 2014 [30]	Turkey	*L. reuteri*	64	4.31±1.30	2.95±1.09	NA	NA	NA	32
		No treatment	63	5.46±1.77	4.33±1.18	NA	NA	NA	60
Huang 2014 [31]	China	*Bacillus mesentericus+ Clostridium butyricum+ Enterococcus faecalis*	82	5.7±2.4	1.8±1.6	2.2±1.5	NA	NA	NA
		No treatment	77	5.2±2.3	2.9±1.4	2.0±1.5	NA	NA	NA
Azim 2014	Pakistan	*S. boulardii*	45	3.09±0.46	NA	NA	NA	3.56±0.84	NA

[32]		No treatment	45	5.07±0.93	NA	NA	NA	5.31±0.73	NA
Aggarwal 2014 [33]	India	*LGG*	100	3.33±0.56	2.59±0.56	NA	0.62±0.48	NA	NA
		No treatment	100	3.84±0.65	3.34±0.56	NA	0.81±0.43	NA	NA
Phavichitr 2013 [34]	Thailand	*L. acidophilus + B. bifidum*	53	2.35±0.76	4.35±2.29	NA	NA	NA	NA
		Placebo	53	3.0±1.52	5.0±1.52	NA	NA	NA	NA
Dinleyici 2013 [35]	Turkey	*L. acidophilus + L. rhamnosus + B. bifidum, B. longum + Enterococcus faecium*	113	4.94±1.70	3.25±1.27	NA	NA	3.38 ±1.6	82
		No treatment	96	5.77±1.97	4.78±1.56	NA	NA	4.65±3.61	90
Burande 2013 [36]	India	*S. boulardii*	35	NA	3.4±1.4	NA	NA	NA	NA
		No treatment	35	NA	5.5±2.1	NA	NA	NA	NA
Riaz 2012 [37]	India	*S. boulardii*	43	NA	2.06±0.99	NA	NA	10.96±8.04	NA
		Placebo	47	NA	2.76±1.22	NA	NA	16.21±17.39	NA
Nixon 2012 [38]	USA	LGG	63	NA	2.82±1.50	NA	NA	NA	NA
		Placebo	66	NA	3.08±1.65	NA	NA	NA	NA
Khan 2012 [39]	Pakistan	*S. boulardii*	210	NA	3.43±5.58	NA	NA	NA	11
		No treatment	210	NA	4.50±5.58	NA	NA	NA	120
Francavilla 2012 [40]	Italy	*L. reuteri*	35	NA	2.1±1.7	NA	NA	4.3±1.7	16
		Placebo	34	NA	3.3±2.1	NA	NA	6.3±2.1	25
Erdogan 2012	Turkey	*S. boulardii*	25	NA	6.6±1.7	NA	NA	NA	NA

[41]		*B. lactis*	25	NA	4.1±1.3	NA	NA	NA	NA
		No treatment	25	NA	7.0±1.6	NA	NA	NA	NA
Vandenplas 2011 [42]	Belgium	*S. thermophilus* + *L. rhamnosus* + *L. acidophilus* + *B. lactis* + *B. infantis*	57	NA	3.05±1.28	NA	NA	3.14±1.52	25
		Placebo	54	NA	4.31±0.83	NA	NA	3.69±1.99	40
Dutta 2011 [43]	India	*L. sporogenes*	78	NA	1.42±0.85	NA	NA	NA	NA
		Placebo	70	NA	1.52±0.89	NA	NA	NA	NA
Dalgic 2011 [44]	Turkey	*S. boulardii*	60	5.30±1.73	4.78±1.46	NA	0.85±0.54	NA	NA
		Placebo	60	5.81±2.08	5.35±1.80	NA	0.68±0.47	NA	
Correa 2011 [45]	Brazil	*S. boulardii*	90	NA	NA	NA	NA	NA	39
		Placebo	86	NA	NA	NA	NA	NA	69
Ritchie 2010 [46]	Australia	LGG	33	NA	2.18±2.08	NA	NA	3.30±2.54	13
		Placebo	31	NA	2.13±1.77	NA	NA	4.70±2.59	12
Rerksuppaphol 2010 [47]	Thailand	*L. acidophilus* + *B. bifidum*	23	NA	NA	NA	NA	NA	4
		Placebo	22	NA	NA	NA	NA	NA	11
Grandy 2010 [48]	Bolivia	*S. boulardii*	21	NA	2.92±1.21	NA	NA	NA	NA
		L. acidophilus + *L. rhamnosus* + *B. longum* + *S. boulardii*	23	NA	2.50±1.23	NA	NA	NA	NA
		Placebo	20	NA	5.68±1.76	NA	NA	NA	NA
Chen 2010	China	*Bacillus mesentericus* +	150	2.9±0.8	2.50±1.32	1.73±0.98	1.18±0.88	2.72±1.25	NA

[49]		*Enterococcus faecalis* + *Clostridium butyricum*							
		Placebo	143	4.2±2.1	3.60±1.57	2.08±1.45	1.81±1.36	4.37±2.83	NA
Misra 2009 [50]	India	LGG	105	NA	2.94±0.98	NA	NA	NA	NA
		Placebo	105	NA	3.25±1.43	NA	NA	NA	NA
Teran 2009 [51]	Bolivia	*L. acidophilus* + *L. rhamnosus* + *B. longum* + *S. boulardii*	25	3.46±1.40	2.38±1.06	1.0±1.13	NA	6.79±7.08	7
		No treatment	25	4.20±1.14	3.11±1.11	1.0±0.83	NA	7.36±4.72	16
Kianifar 2009 [52]	Iran	*L. acidophilus* + *B. bifidum*	32	2.1±0.7	3.4±0.8	NA	NA	NA	NA
		Placebo	30	2.7±0.6	4.5±0.8	NA	NA	NA	NA
Basu 2009 [53]	India	LGG	374	6.22±1.16	5.07±1.24	NA	4.12±1.47	22.99±6.09	NA
		No treatment	185	9.75±2.06	7.23±1.27	NA	4.18±1.58	23.49±6.10	NA
Rafeey 2008 [54]	Iran	*L. acidophilus*	40	3.4±0.9	NA	NA	NA	4.0±3.2	NA
		Placebo	40	4.0±1.1	NA	NA	NA	4.0±3.6	NA
Narayanappa 2008 [55]	India	*Bifilac*	40	NA	4.35±1.25	NA	NA	3.98±2.71	NA
		Placebo	40	NA	5.45±1.69	NA	NA	4.83±2.77	NA
Mao 2008 [56]	China	*B. lactis* + *S. thermophilus*	141	NA	2.79±0.15	NA	NA	NA	NA
		Placebo	71	NA	2.83±0.17	NA	NA	NA	NA
Villarruel 2007 [57]	Argentina	*S. boulardii*	44	NA	4.70±1.94	NA	NA	NA	NA
		Placebo	44	NA	6.16±3.20	NA	NA	NA	NA

Ozkan 2007 [58]	Turkey	*S. boulardii*	16	NA	NA	NA	NA	3.06±0.33	NA
		Placebo	11	NA	NA	NA	NA	4.27±0.38	NA
Canani 2007 [59]	Italy	LGG	100	NA	3.33±1.50	1.36±0.78	1.36±0.78	4.70±1.50	NA
		S. boulardii	91	NA	4.38±0.45	1.89±0.23	1.64±0.79	5.35±2.26	NA
		Bacillus clausii	100	NA	4.7±1.0	2.0±1.56	1.50±0.78	5.35±2.26	NA
		L. bulgaricus + L. acidophilus + S. thermophilus + B. bifidum	97	NA	3.06±1.63	1.701.56±	1.36±0.77	4.70±1.51	NA
		Enterococcus faecium	91	NA	4.84±1.73	2.0±1.54	1.50±0.77	5.35±2.26	NA
		No treatment	92	NA	4.7±1.0	1.64±0.78	1.64±0.77	5.35±2.26	NA
Henker 2007 [60]	Multicenter	*Escherichia coli Nissle 1917*	55	NA	2.93±0.98	NA	NA	NA	21
		Placebo	58	NA	4.37±0.38	NA	NA	NA	32
Basu 2007 [61]	India	LGG	323	9.3±1.3	6.8±2.1	NA	3.2±1.1	24.3±4.8	NA
		Placebo	323	9.2±1.2	6.6±2.3	NA	3.3±1.2	24.2±5.3	NA
Vivatvakin 2006 [62]	Thailand	*L. acidophilus + B. infantis*	35	2.1±1.2	1.6±0.7	NA	NA	2.2±2.0	2
		No treatment	36	1.6±1.0	2.9±1.7	NA	NA	2.6±2.2	11
Szymanski 2006 [63]	Poland	*Three L. rhamnosus*	46	NA	3.48±2.32	NA	NA	3.0±2.8	NA
		Placebo	41	NA	4.0±2.98	NA	NA	2.9±2.9	NA
Billoo 2006 [64]	Parkistan	*S. boulardii*	50	NA	3.60±1.77	NA	NA	NA	NA
		No treatment	50	NA	4.80±1.77	NA	NA	NA	NA

Sarker 2005 [65]	Bangladesh	*L. paracasei*	115	NA	3.77±1.88	NA	NA	NA	NA
		Placebo	115	NA	3.93±1.80	NA	NA	NA	NA
Kurugol 2005 [66]	Turkey	*S. boulardii*	100	2.9±1.2	4.7±2.5	1.0±0.8	1.2±1.0	NA	20
		Placebo	100	3.9±1.5	5.5±3.2	1.1±0.9	1.3±1.0	NA	55
Kowalska-Duplaga 2004 [67]	Poland	*L. acidophilus + B. bifidum + L. bulgaricus*	86	4.71±1.38	2.28±1.25	NA	NA	NA	NA
		Placebo	87	5.0±2.38	2.57±1.42	NA	NA	NA	NA
Costa-Ribeiro 2003 [68]	Brazil	LGG	61	NA	1.59±0.16	NA	NA	NA	31
		Placebo	63	NA	1.63±0.19	NA	NA	NA	45
Rosenfeldt 2002-1 [69]	Denmark	*L. rhamnosus + L. reuteri*	24	NA	3.16±1.65	NA	NA	NA	NA
		Placebo	19	NA	4.82±3.54	NA	NA	NA	NA
Rosenfeldt 2002-2 [70]	Denmark	*L. rhamnosus + L. reuteri*	30	1.6±1.0	3.40±1.55	1.9±1.7	1.2±1.2	NA	NA
		Placebo	39	2.7±2.0	4.21±1.98	2.1±2	1.6±1.4	NA	NA
Hafeez 2002 [71]	Pakistan	*S. boulardii*	51	NA	3.60±1.49	NA	NA	NA	NA
		No treatment	50	NA	4.50±1.49	NA	NA	NA	NA
Urganci 2001 [72]	Turkey	*S. boulardii*	50	NA	NA	NA	NA	3.78±0.71	28
		No treatment	50	NA	NA	NA	NA	4.24±0.99	42
Lee 2001 [73]	China	*L. acidophilus + B. infantis*	50	NA	3.1±0.7	NA	NA	1.9±1.9	NA
		No treatment	50	NA	3.6±0.8	NA	NA	3.7±2.4	NA
Boudraa 2001	Algeria	*L. bulgaricus + S.*	56	NA	1.84±1.40	NA	NA	NA	9

[74]		*thermophilus*							
		Placebo	56	NA	2.57±1.48	NA	NA	NA	23
Guandalini 2000 [75]	Multicenter	LGG	147	3.28±0.93	2.43±1.15	NA	NA	NA	78
		Placebo	140	4.01±0.89	3.0±1.49	NA	NA	NA	90
Hernandez 1998 [76]	Mexico	*S. boulardii*	25	NA	NA	NA	NA	NA	5
		Placebo	25	NA	NA	NA	NA	NA	11
Shornikova 1997-1 [77]	Russia	LGG	59	7.6±5.6	2.7±2.2	NA	NA	NA	NA
		Placebo	64	9.2±6.3	3.7±2.8	NA	NA	NA	NA
Shornikova 1997-2 [78]	Finland	*L. reuteri*	41	NA	1.70±1.02	NA	NA	1.9±2.4	11
		Placebo	25	NA	2.5±1.5	NA	NA	3.8±2.8	11
Shornikova 1997-3 [79]	Finland	*L. reuteri*	19	NA	1.7±1.6	NA	NA	1.0±2.3	3
		Placebo	21	NA	2.9±2.3	NA	NA	2.5±2.3	11
Guarino 1997 [80]	Italy	LGG	52	NA	3.20±1.44	NA	NA	NA	NA
		Placebo	48	NA	5.90±1.39	NA	NA	NA	NA
Pant 1996 [81]	Thailand	LGG	14	NA	1.9±0.6	NA	NA	3.5±1.3	NA
		Placebo	12	NA	3.3±2.3	NA	NA	5.2±2.8	NA
Raza 1995 [82]	Pakistan	LGG	19	NA	NA	NA	NA	5.8±3.1	NA
		Placebo	17	NA	NA	NA	NA	7.0±3.3	NA
Isolauri 1994	Finland	LGG	21	NA	1.5±0.7	NA	NA	NA	2

[83]		No treatment	21	NA	2.3±0.8	NA	NA	NA	9
Cetina-Sauri 1994 [84]	Mexico	*S. boulardii*	65	NA	NA	NA	NA	3.76±2.31	41
		Placebo	65	NA	NA	NA	NA	4.38±2.73	58

Footnote. *Saccharomyces (S.)*; *Lactobacillus (L.)*; *Bifidobacterium (B.)*; *Lactobacillus rhamnosus* GG (LGG); Not applicable (NA).

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Figure S1. Risk of bias graph

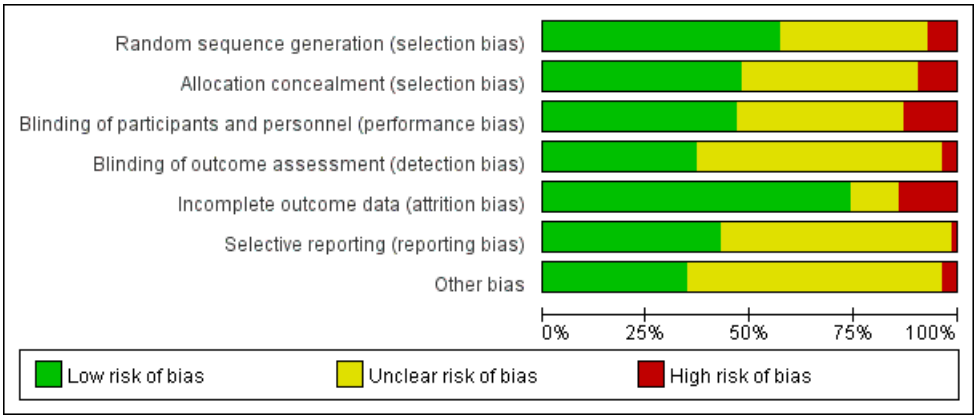


Figure S2. Risk of bias summary

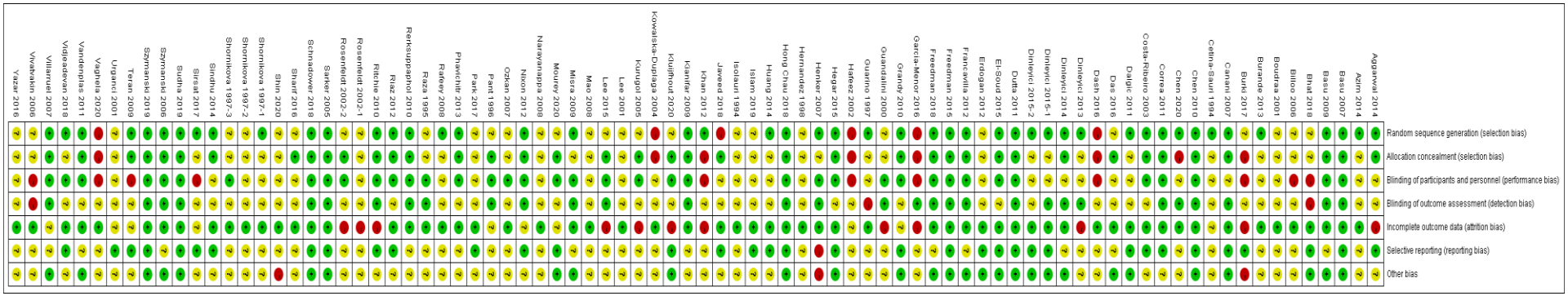
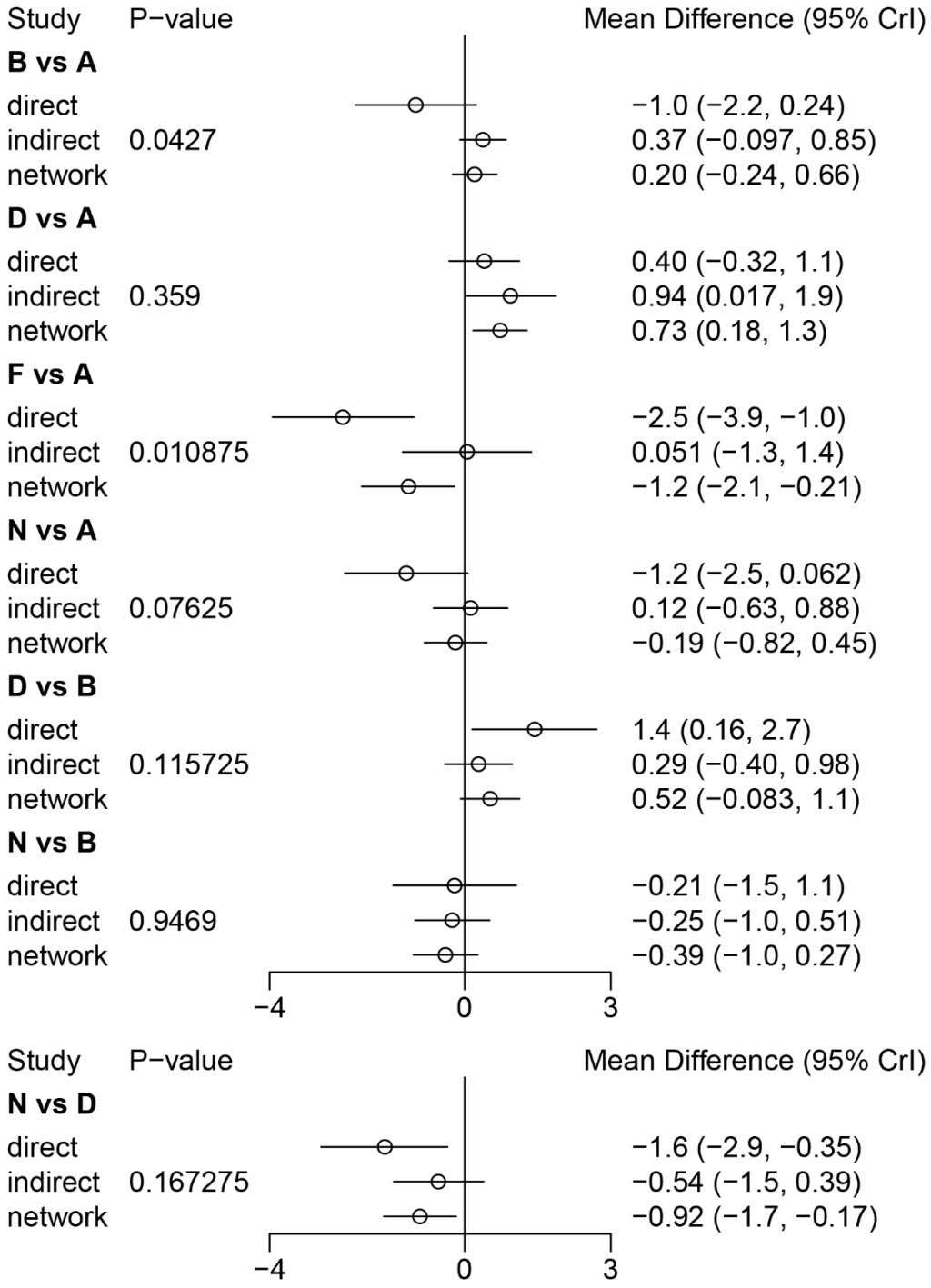
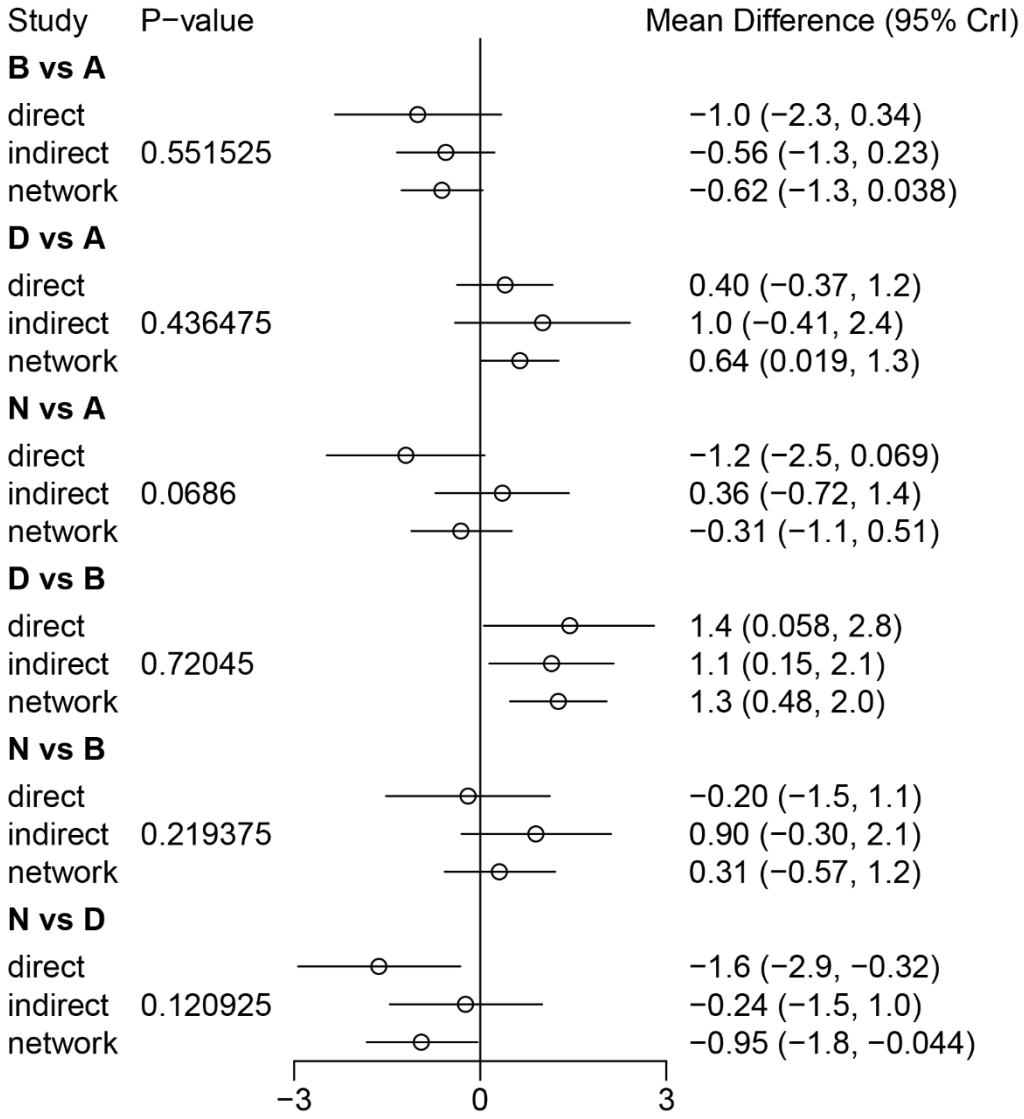


Figure S3. Incoherence plot for the duration of diarrhea (control = placebo/no treatment)



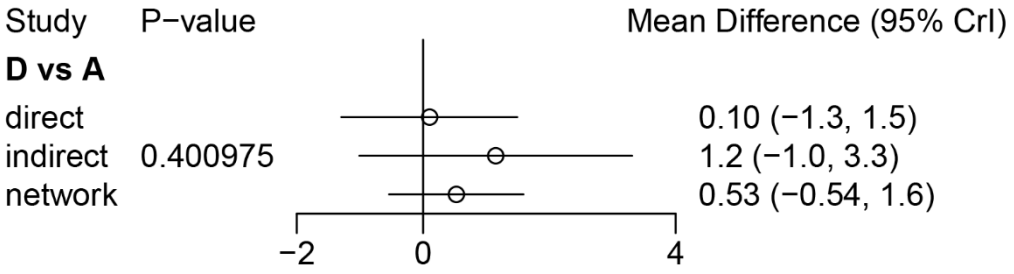
Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **F**, *B. lactis*; **N**, *L.* species (spp) + *B.* spp + *S.* spp.

Figure S4. Incoherence plot for the duration of diarrhea (control = no treatment)



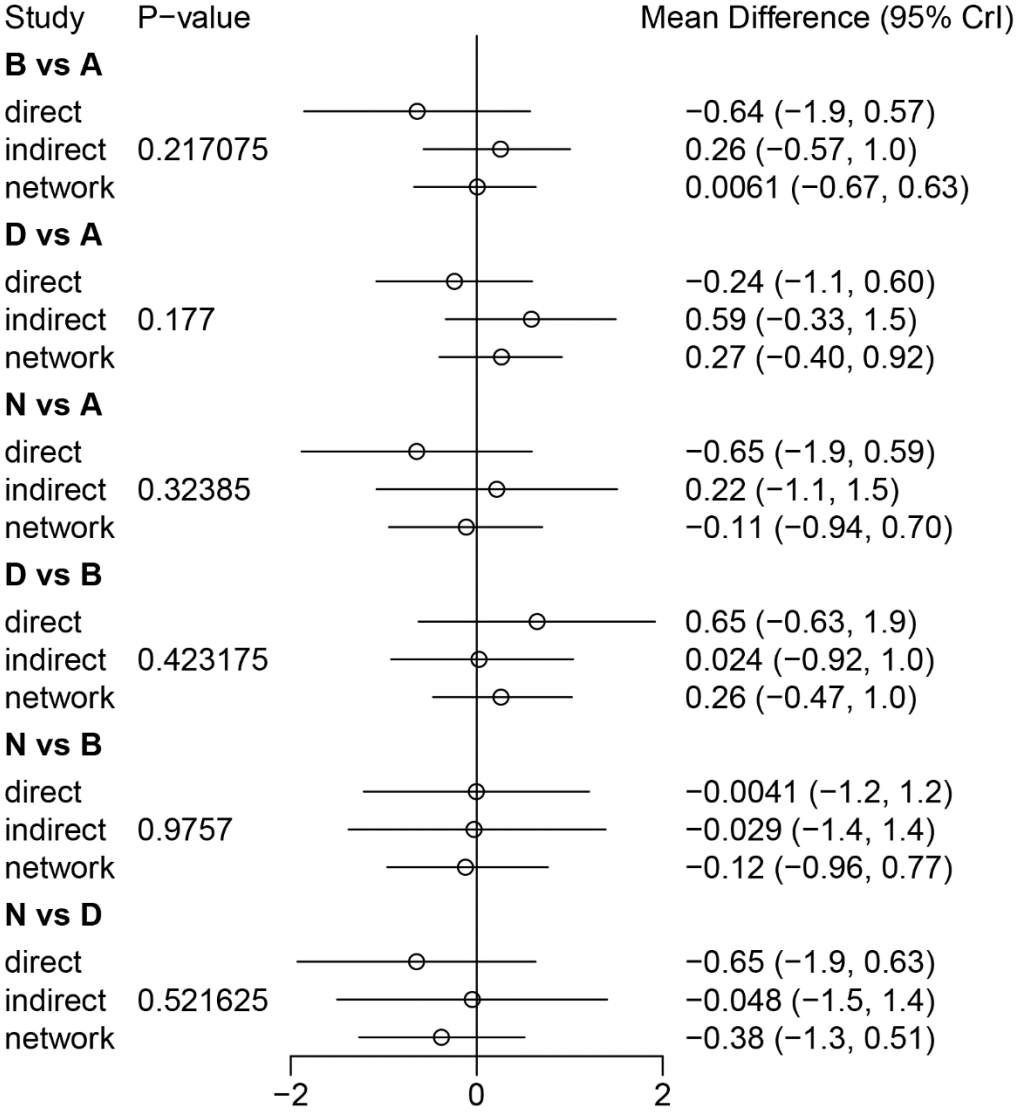
Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **F**, *B. lactis*; **N**, *L.* spp + *B.* spp + *S.* spp.

Figure S5. Incoherence plot for the duration of hospitalization



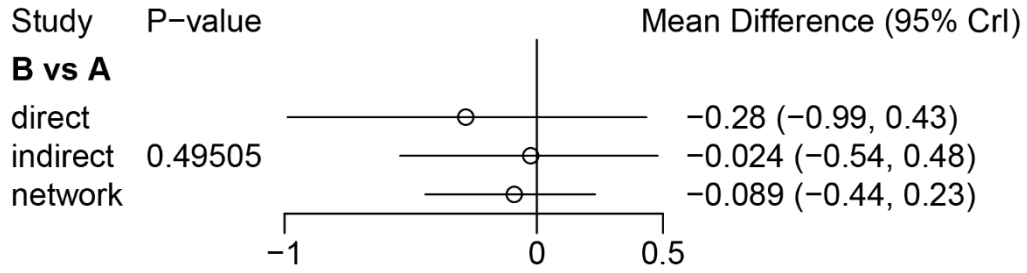
Footnote. **A**, *S. boulardii*; **D**, *Bacillus clausii.*

Figure S6. Incoherence plot for the mean stool frequency on day 2



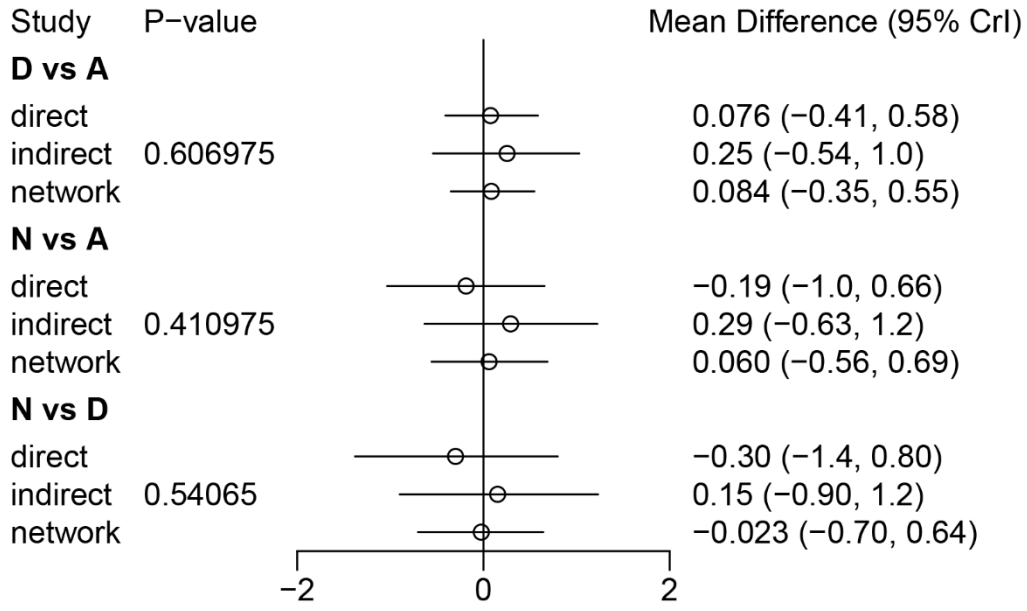
Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **N**, *L*. spp + *B*. spp + *S*. spp.

Figure S7. Incoherence plot for the duration of vomiting



Footnote. **A**, *S. boulardii*; **B**, LGG.

Figure S8. Incoherence plot for the duration of fever



Footnote. **A**, *S. boulardii*; **D**, *Bacillus clausii*; **N**, *L*. spp + *B*. spp + *S*. spp.

Table S3. Heterogeneity for the duration of diarrhea (control = placebo/no treatment)

Comparison	I^2(pair−wise)	I^2(network)	P
A vs B	NA	97.4%	0.032
A vs D	0	76.7%	0.11
A vs F	NA	88.9%	0.024
A vs K	NA	NA	NA
A vs N	NA	95.8%	0.053
A vs U	87.6%	88.4%	NA
B vs D	NA	80.0%	0.15
B vs K	NA	NA	NA
B vs N	NA	0	0.81
B vs U	98.1%	98.3%	NA
C vs U	49.9%	49.9%	NA
D vs K	NA	NA	NA
D vs N	NA	62.8%	0.26
D vs U	55.1%	54.7%	NA
E vs U	NA	NA	NA
F vs U	93.1%	95.4%	NA
G vs U	NA	NA	NA
H vs U	NA	NA	NA
I vs U	NA	NA	NA
J vs U	NA	NA	NA
K vs N	NA	NA	NA
K vs U	NA	NA	NA
L vs U	47.4%	48.1%	NA
M vs U	64.0%	64.0%	NA
N vs U	3.2%	14.2%	NA
O vs U	NA	NA	NA
P vs U	NA	NA	NA
Q vs U	0	0	NA
R vs U	NA	NA	NA
S vs U	NA	NA	NA

T vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **H**, *L. plantarum*; **I**, *ECN 1917*; **J**, *L. paracasei*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo/no treatment).

Table S4. Heterogeneity for the duration of diarrhea (control = placebo)

Comparison	I^2**(pair−wise)**	I^2**(network)**	**P**
A vs U	73.9%	73.8%	NA
B vs U	83.6%	83.6%	NA
C vs U	0	0	NA
D vs U	NA	NA	NA
E vs U	NA	NA	NA
F vs U	NA	NA	NA
G vs U	NA	NA	NA
I vs U	NA	NA	NA
J vs U	NA	NA	NA
L vs U	42.9%	42.9%	NA
M vs U	70.5%	70.5%	NA
N vs U	0	0	NA
P vs U	NA	NA	NA
Q vs U	NA	NA	NA
S vs U	NA	NA	NA
T vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **I**, *ECN 1917*; **J**, *L. paracasei*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo).

Table S5. Heterogeneity for the duration of diarrhea (control = no treatment)

Comparison	I^2(pair−wise)	I^2(network)	P
A vs B	NA	75.7%	0.47
A vs D	0	58.7%	0.17
A vs F	NA	NA	NA
A vs K	NA	NA	NA
A vs N	NA	94.7%	0.067
A vs U	89.1%	88.7%	NA
B vs D	NA	0	0.76
B vs K	NA	NA	NA
B vs N	NA	0	0.53
B vs U	97.5%	97.5%	NA
C vs U	86.1%	86.1%	NA
D vs K	NA	NA	NA
D vs N	NA	61.2%	0.26
D vs U	66.5%	68.0%	NA
F vs U	NA	NA	NA
H vs U	NA	NA	NA
K vs N	NA	NA	NA
K vs U	NA	NA	NA
M vs U	65.0%	65.3%	NA
N vs U	32.8%	65.8%	NA
O vs U	NA	NA	NA
Q vs U	NA	NA	NA
R vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (no treatment).

Table S6. Heterogeneity for diarrhea lasting ≥2 days

Comparison	I^2(pair−wise)	I^2(network)	P
A vs U	91.6%	91.6%	NA
B vs U	81.9%	82.0%	NA
C vs U	67.4%	67.4%	NA
D vs U	NA	NA	NA
E vs U	NA	NA	NA
I vs U	NA	NA	NA
L vs U	NA	NA	NA
M vs U	0	0	NA
N vs U	46.0%	46.7%	NA
O vs U	NA	NA	NA
R vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **I**, *ECN 1917*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (placebo/no treatment).

Table S7. Heterogeneity for the duration of hospitalization

Comparison	I^2(pair−wise)	I^2(network)	P
A vs D	92.3%	82.1%	0.26
A vs U	91.4%	91.6%	NA
B vs U	99.0%	99.0%	NA
C vs U	85.2%	85.2%	NA
D vs U	0	72.0%	NA
E vs U	79.8%	80.0%	NA
F vs U	NA	NA	NA
H vs U	NA	NA	NA
L vs U	NA	NA	NA
M vs U	62.2%	62.2%	NA
N vs U	NA	NA	NA
Q vs U	96.3%	96.3%	NA
R vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **H**, *L. plantarum*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (placebo/no treatment).

Table S8. Heterogeneity for the mean stool frequency on day 2

Comparison	I^2(pair−wise)	I^2(network)	P
A vs B	NA	59.7%	0.25
A vs D	0	62.0%	0.11
A vs K	NA	NA	NA
A vs N	NA	46.0%	0.30
A vs U	84.5%	87.6%	NA
B vs D	NA	2.22%	0.46
B vs K	NA	NA	NA
B vs N	NA	0	0.75
B vs U	49.2%	62.9%	NA
C vs U	49.0%	49.2%	NA
D vs K	NA	NA	NA
D vs N	NA	0	0.57
E vs U	NA	NA	NA
K vs N	NA	NA	NA
K vs U	NA	NA	NA
L vs U	98.9%	99.2%	NA
M vs U	80.5%	80.7%	NA
N vs U	0	0	NA
Q vs U	NA	NA	NA
R vs U	NA	NA	NA
T vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo/no treatment).

Table S9. Heterogeneity for the duration of vomiting

Comparison	I^2(pair−wise)	I^2(network)	P
A vs B	NA	0	0.66
A vs D	NA	NA	NA
A vs K	NA	NA	NA
A vs N	NA	NA	NA
A vs U	83.7%	84.3%	NA
B vs D	NA	NA	NA
B vs K	NA	NA	NA
B vs N	NA	NA	NA
B vs U	0	0	NA
D vs K	NA	NA	NA
D vs N	NA	NA	NA
D vs U	NA	NA	NA
H vs U	NA	NA	NA
K vs N	NA	NA	NA
K vs U	NA	NA	NA
L vs U	0	0	NA
N vs U	NA	NA	NA
Q vs U	NA	NA	NA
S vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **U**, Control (placebo/no treatment).

Table S10. Heterogeneity for the duration of fever

Comparison	I^2(pair−wise)	I^2(network)	P
A vs B	NA	NA	NA
A vs D	0	0	0.98
A vs K	NA	NA	NA
A vs N	NA	0	0.47
A vs U	83.6%	83.9%	NA
B vs D	NA	NA	NA
B vs K	NA	NA	NA
B vs N	NA	NA	NA
B vs U	NA	NA	NA
D vs K	NA	NA	NA
D vs N	NA	0	0.91
D vs U	47.1%	34.0%	NA
F vs U	NA	NA	NA
H vs U	NA	NA	NA
K vs N	NA	NA	NA
K vs U	NA	NA	NA
L vs U	NA	NA	NA
M vs U	NA	NA	NA
N vs U	0	0	NA
Q vs U	76.6%	76.5%	NA
S vs U	NA	NA	NA

Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **U**, Control (placebo/no treatment).

Table S11. NMA results for the duration of diarrhea (control = placebo/no treatment)

A	**A**																				
B	1.0 (-0.24, 2.2)	**B**																			
C	-0.07 (-0.73, 0.59)	0.13 (-0.55, 0.81)	**C**																		
D	-0.73 (-1.28, -0.17)	-0.52 (-1.13, 0.08)	-0.65 (-1.44, 0.12)	**D**																	
E	-1.01 (-2.34, 0.31)	-0.81 (-2.15, 0.53)	-0.94 (-2.36, 0.48)	-0.29 (-1.68, 1.1)	**E**																
F	2.5 (1.0, 3.9)	1.35 (0.37, 2.34)	1.22 (0.14, 2.32)	1.88 (0.83, 2.93)	2.16 (0.58, 3.76)	**F**															
G	-0.89 (-2.19, 0.41)	-0.68 (-2, 0.63)	-0.81 (-2.21, 0.58)	-0.16 (-1.53, 1.21)	0.13 (-1.68, 1.94)	-2.04 (-3.61, -0.48)	**G**														
H	0.24 (-1.08, 1.57)	0.45 (-0.89, 1.78)	0.32 (-1.1, 1.73)	0.97 (-0.42, 2.36)	1.26 (-0.57, 3.08)	-0.91 (-2.5, 0.68)	1.13 (-0.67, 2.94)	**H**													
I	0.45 (-0.85, 1.75)	0.65 (-0.65, 1.96)	0.53 (-0.87, 1.92)	1.18 (-0.19, 2.55)	1.46 (-0.34, 3.28)	-0.7 (-2.27, 0.86)	1.34 (-0.45, 3.12)	0.21 (-1.6, 2.02)	**I**												
J	-0.82 (-2.18, 0.53)	-0.62 (-1.99, 0.74)	-0.75 (-2.19, 0.7)	-0.1 (-1.52, 1.32)	0.19 (-1.66, 2.04)	-1.97 (-3.59, -0.37)	0.06 (-1.77, 1.9)	-1.07 (-2.92, 0.78)	-1.28 (-3.1, 0.55)	**J**											

K	-1.14 (-2.21, -0.08)	-0.94 (-2.01, 0.13)	-1.07 (-2.27, 0.12)	-0.42 (-1.53, 0.69)	-0.13 (-1.79, 1.54)	-2.29 (-3.69, -0.91)	-0.26 (-1.9, 1.38)	-1.39 (-3.05, 0.27)	-1.59 (-3.24, 0.04)	-0.32 (-2, 1.36)	**K**									
L	-0.68 (-1.37, 0.02)	-0.47 (-1.18, 0.24)	-0.61 (-1.46, 0.25)	0.05 (-0.76, 0.86)	0.34 (-1.09, 1.78)	-1.83 (-2.94, -0.71)	0.21 (-1.2, 1.62)	-0.92 (-2.35, 0.52)	-1.13 (-2.54, 0.28)	0.14 (-1.31, 1.61)	0.47 (-0.75, 1.69)	**L**								
M	-0.12 (-0.68, 0.43)	0.08 (-0.49, 0.66)	-0.05 (-0.8, 0.7)	0.6 (-0.09, 1.3)	0.89 (-0.48, 2.27)	-1.27 (-2.31, -0.24)	0.76 (-0.58, 2.12)	-0.36 (-1.73, 1.01)	-0.57 (-1.92, 0.78)	0.7 (-0.69, 2.11)	1.02 (-0.12, 2.17)	0.56 (-0.23, 1.33)	**M**							
N	0.19 (-0.46, 0.82)	0.39 (-0.27, 1.05)	0.26 (-0.56, 1.08)	0.91 (0.17, 1.66)	1.2 (-0.21, 2.61)	-0.96 (-2.06, 0.12)	1.07 (-0.32, 2.47)	-0.06 (-1.47, 1.35)	-0.26 (-1.66, 1.12)	1.01 (-0.44, 2.45)	1.33 (0.2, 2.47)	0.87 (0.01, 1.71)	0.31 (-0.44, 1.05)	**N**						
O	-0.26 (-1.64, 1.12)	-0.05 (-1.44, 1.33)	-0.18 (-1.65, 1.28)	0.47 (-0.97, 1.91)	0.76 (-1.1, 2.62)	-1.41 (-3.05, 0.22)	0.63 (-1.21, 2.47)	-0.5 (-2.36, 1.36)	-0.71 (-2.55, 1.13)	0.57 (-1.32, 2.44)	0.89 (-0.81, 2.59)	0.42 (-1.07, 1.9)	-0.13 (-1.56, 1.29)	-0.44 (-1.91, 1.02)	**O**					
P	-0.95 (-2.22, 0.33)	-0.74 (-2.02, 0.54)	-0.87 (-2.24, 0.5)	-0.22 (-1.56, 1.12)	0.07 (-1.72, 1.85)	-2.1 (-3.64, -0.56)	-0.06 (-1.83, 1.72)	-1.19 (-2.98, 0.59)	-1.4 (-3.16, 0.37)	-0.12 (-1.92, 1.69)	0.2 (-1.41, 1.81)	-0.27 (-1.65, 1.11)	-0.82 (-2.15, 0.5)	-1.13 (-2.5, 0.24)	-0.69 (-2.51, 1.14)	**P**				
Q	0.12 (-0.85, 1.08)	0.32 (-0.66, 1.3)	0.19 (-0.9, 1.28)	0.84 (-0.21, 1.89)	1.13 (-0.46, 2.72)	-1.04 (-2.34, 0.26)	1 (-0.56, 2.57)	-0.13 (-1.71, 1.45)	-0.34 (-1.9, 1.23)	0.94 (-0.67, 2.54)	1.26 (-0.13, 2.65)	0.79 (-0.32, 1.9)	0.24 (-0.79, 1.26)	-0.07 (-1.16, 1.02)	0.37 (-1.25, 2)	1.06 (-0.48, 2.6)	**Q**			
R	0.55 (-0.78, 1.87)	0.75 (-0.59, 2.09)	0.62 (-0.8, 2.04)	1.27 (-0.12, 2.66)	1.56 (-0.27, 3.39)	-0.6 (-2.2, 0.98)	1.43 (-0.38, 3.24)	0.3 (-1.52, 2.12)	0.1 (-1.71, 1.9)	1.37 (-0.48, 3.21)	1.69 (0.03, 3.35)	1.23 (-0.22, 2.65)	0.67 (-0.71, 2.04)	0.36 (-1.06, 1.77)	0.8 (-1.06, 2.67)	1.49 (-0.3, 3.28)	0.43 (-1.15, 2.02)	**R**		
S	0.11 (-1.48, 1.71)	0.32 (-1.29, 1.92)	0.19 (-1.48, 1.86)	0.84 (-0.81, 2.49)	1.13 (-0.91, 3.16)	-1.04 (-2.86, 0.78)	1 (-1.02, 3.01)	-0.13 (-2.16, 1.9)	-0.34 (-2.35, 1.67)	0.94 (-1.1, 2.98)	1.26 (-0.63, 3.14)	0.79 (-0.89, 2.47)	0.24 (-1.4, 1.87)	-0.07 (-1.74, 1.6)	0.37 (-1.69, 2.43)	1.06 (-0.93, 3.05)	0 (-1.82, 1.81)	-0.43 (-2.47, 1.6)	**S**	
T	0.11 (-1.31, 1.54)	0.32 (-1.11, 1.75)	0.19 (-1.32, 1.7)	0.84 (-0.64, 2.33)	1.13 (-0.77, 3.03)	-1.03 (-2.71, 0.63)	1 (-0.88, 2.88)	-0.13 (-2.03, 1.78)	-0.34 (-2.21, 1.54)	0.94 (-0.98, 2.86)	1.26 (-0.48, 3)	0.79 (-0.73, 2.32)	0.24 (-1.23, 1.71)	-0.07 (-1.58, 1.44)	0.37 (-1.56, 2.31)	1.06 (-0.8, 2.92)	0 (-1.67, 1.67)	-0.43 (-2.32, 1.47)	0 (-2.09, 2.1)	**T**

U	-0.99 (-1.29, -0.68)	-0.78 (-1.12, -0.44)	-0.91 (-1.5, -0.32)	-0.26 (-0.78, 0.26)	0.03 (-1.27, 1.32)	-2.13 (-3.06, -1.22)	-0.1 (-1.36, 1.17)	-1.23 (-2.52, 0.06)	-1.44 (-2.7, -0.17)	-0.16 (-1.48, 1.16)	0.16 (-0.88, 1.2)	-0.31 (-0.93, 0.31)	-0.86 (-1.33, -0.4)	-1.17 (-1.75, -0.59)	-0.73 (-2.07, 0.61)	-0.04 (-1.28, 1.2)	-1.1 (-2.02, -0.18)	-1.53 (-2.82, -0.24)	-1.1 (-2.66, 0.47)	-1.1 (-2.49, 0.29)	**U**

Footnote. Results were mean change [95% confidence interval (CrI)] from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **H**, *L. plantarum*; **I**, *ECN 1917*; **J**, *L. paracasei*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo/no treatment).

Table S12. NMA results for the duration of diarrhea (control = placebo)

A	**A**																
B	-1.02(-1.44, -0.57)	**B**															
C	-0.41(-1.05, 0.23)	0.61(-0.01, 1.21)	**C**														
D	-0.99(-1.76, -0.22)	0.03(-0.73, 0.76)	-0.58(-1.47, 0.3)	**D**													
E	-1.28(-2.12, -0.44)	-0.26(-1.09, 0.54)	-0.87(-1.82, 0.07)	-0.29(-1.33, 0.75)	**E**												
F	-0.27(-1.18, 0.63)	0.75(-0.15, 1.62)	0.14(-0.87, 1.14)	0.72(-0.37, 1.81)	1.01(-0.13, 2.15)	**F**											
G	-1.15(-1.95, -0.35)	-0.13(-0.92, 0.62)	-0.74(-1.65, 0.16)	-0.16(-1.16, 0.84)	0.13(-0.93, 1.19)	-0.88(-1.98, 0.23)	**G**										
I	0.19(-0.61, 0.98)	1.21(0.43, 1.96)	0.6(-0.3, 1.5)	1.18(0.18, 2.18)	1.47(0.42, 2.52)	0.46(-0.64, 1.57)	1.34(0.32, 2.36)	**I**									
J	-1.09(-1.97, -0.21)	-0.07(-0.94, 0.78)	-0.68(-1.66, 0.3)	-0.1(-1.17, 0.98)	0.19(-0.93, 1.32)	-0.82(-1.98, 0.35)	0.06(-1.03, 1.15)	-1.28(-2.36, -0.19)	**J**								
L	-1.02(-1.55, -0.47)	0(-0.5, 0.5)	-0.61(-1.29, 0.09)	-0.03(-0.83, 0.8)	0.26(-0.6, 1.15)	-0.75(-1.68, 0.21)	0.13(-0.69, 0.98)	-1.21(-2.03, -0.36)	0.07(-0.84, 1)	**L**							
M	-0.46(-0.99,	0.56(0.06	-0.05(-0.74,	0.53(-0.28,	0.82(-0.05,	-0.18(-1.12,	0.69(-0.13,	-0.65(-	0.63(-0.28,	0.57(-0.04,	**M**						

	0.09)	, 1.06)	0.65)	1.35)	1.71)	0.76)	1.54)	1.47, 0.2)	1.56)	1.15)							
N	-0.06(-0.76, 0.64)	0.96(0.28, 1.62)	0.35(-0.47, 1.17)	0.93(0, 1.86)	1.22(0.24, 2.21)	0.21(-0.82, 1.25)	1.09(0.14, 2.04)	-0.25(-1.19, 0.7)	1.03(0.01, 2.05)	0.96(0.2, 1.7)	0.4(-0.35, 1.14)	**N**					
P	-1.21(-1.96, -0.46)	-0.19(-0.93, 0.52)	-0.8(-1.67, 0.06)	-0.22(-1.19, 0.74)	0.07(-0.95, 1.09)	-0.94(-2.01, 0.14)	-0.06(-1.04, 0.92)	-1.4(-2.38, -0.41)	-0.12(-1.17, 0.93)	-0.19(-1, 0.59)	-0.75(-1.55, 0.03)	-1.15(-2.06, -0.24)	**P**				
Q	-0.15(-0.97, 0.67)	0.87(0.06, 1.65)	0.26(-0.67, 1.18)	0.84(-0.18, 1.86)	1.13(0.06, 2.21)	0.12(-1, 1.24)	1(-0.04, 2.03)	-0.34(-1.38, 0.7)	0.94(-0.16, 2.04)	0.87(-0.01, 1.71)	0.3(-0.56, 1.16)	-0.09(-1.06, 0.87)	1.06(0.06, 2.06)	**Q**			
S	-0.15(-1.37, 1.07)	0.87(-0.34, 2.06)	0.26(-1.04, 1.55)	0.84(-0.52, 2.2)	1.13(-0.27, 2.53)	0.12(-1.32, 1.57)	1(-0.37, 2.37)	-0.34(-1.71, 1.04)	0.94(-0.49, 2.38)	0.87(-0.39, 2.11)	0.31(-0.94, 1.55)	-0.09(-1.42, 1.23)	1.06(-0.29, 2.41)	0(-1.38, 1.39)	**S**		
T	-0.15(-1.14, 0.84)	0.87(-0.11, 1.83)	0.26(-0.82, 1.34)	0.84(-0.32, 2)	1.13(-0.08, 2.34)	0.12(-1.13, 1.37)	1(-0.18, 2.17)	-0.34(-1.51, 0.84)	0.94(-0.3, 2.17)	0.87(-0.16, 1.88)	0.31(-0.72, 1.32)	-0.09(-1.21, 1.02)	1.06(-0.08, 2.2)	0(-1.19, 1.19)	0(-1.49, 1.5)	**T**	
U	-1.25(-1.59, -0.91)	-0.23(-0.51, 0.02)	-0.84(-1.39, -0.29)	-0.26(-0.96, 0.44)	0.03(-0.74, 0.8)	-0.98(-1.82, -0.14)	-0.1(-0.82, 0.62)	-1.44(-2.16, -0.72)	-0.16(-0.98, 0.65)	-0.23(-0.67, 0.18)	-0.79(-1.22, -0.38)	-1.19(-1.81, -0.58)	-0.04(-0.71, 0.63)	-1.1(-1.84, -0.35)	-1.1(-2.27, 0.08)	-1.1(-2.03, -0.17)	**U**

Footnote. Results were mean change (95% CrI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **I**, *ECN 1917*; **J**, *L. paracasei*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo).

Table S13. NMA results for the duration of diarrhea (control = no treatment)

A	**A**												
B	0.62 (-0.04, 1.27)	**B**											
C	0.03 (-0.97, 1.04)	-0.58 (-1.68, 0.51)	**C**										
D	-0.64 (-1.26, -0.02)	-1.26 (-2.03, -0.49)	-0.67 (-1.78, 0.43)	**D**									
F	2.22 (0.92, 3.52)	1.6 (0.19, 3.01)	2.18 (0.58, 3.79)	2.86 (1.45, 4.26)	**F**								
H	0.28 (-1.09, 1.65)	-0.34 (-1.77, 1.09)	0.25 (-1.37, 1.86)	0.92 (-0.52, 2.36)	-1.94 (-3.78, -0.09)	**H**							
K	-0.94 (-2.04, 0.15)	-1.55 (-2.71, -0.41)	-0.97 (-2.41, 0.45)	-0.3 (-1.44, 0.85)	-3.16 (-4.83, -1.49)	-1.22 (-2.92, 0.48)	**K**						
M	0.02 (-0.69, 0.72)	-0.6 (-1.42, 0.22)	-0.02 (-1.13, 1.1)	0.66 (-0.18, 1.5)	-2.2 (-3.63, -0.77)	-0.26 (-1.71, 1.18)	0.95 (-0.28, 2.19)	**M**					
N	0.31 (-0.5, 1.1)	-0.31 (-1.2, 0.57)	0.28 (-0.93, 1.46)	0.95 (0.05, 1.83)	-1.91 (-3.41, -0.43)	0.03 (-1.49, 1.53)	1.25 (0.04, 2.44)	0.29 (-0.67, 1.23)	**N**				
O	-0.22 (-1.64, 1.2)	-0.84 (-2.32, 0.64)	-0.25 (-1.91, 1.4)	0.42 (-1.07, 1.9)	-2.44 (-4.33, -0.56)	-0.5 (-2.39, 1.39)	0.72 (-1.02, 2.46)	-0.24 (-1.73, 1.25)	-0.53 (-2.07, 1.03)	**O**			
Q	0.15 (-1.25, 1.54)	-0.47 (-1.93, 0.99)	0.12 (-1.52, 1.75)	0.79 (-0.68, 2.25)	-2.07 (-3.94, -0.2)	-0.13 (-2.01, 1.75)	1.09 (-0.64, 2.81)	0.13 (-1.34, 1.6)	-0.16 (-1.69, 1.39)	0.37 (-1.54, 2.28)	**Q**		
R	0.58 (-0.8, 1.95)	-0.04 (-1.47, 1.39)	0.55 (-1.07, 2.16)	1.22 (-0.22, 2.67)	-1.64 (-3.49, 0.21)	0.3 (-1.55, 2.16)	1.52 (-0.18, 3.22)	0.56 (-0.89, 2.01)	0.27 (-1.24, 1.8)	0.8 (-1.1, 2.7)	0.43 (-1.45, 2.31)	**R**	
U	-0.95 (-1.33, -0.58)	-1.57 (-2.13, -1.01)	-0.98 (-1.92, -0.04)	-0.31 (-0.9, 0.28)	-3.17 (-4.47, -1.87)	-1.23 (-2.55, 0.08)	-0.01 (-1.09, 1.06)	-0.97 (-1.57, -0.37)	-1.26 (-1.99, -0.51)	-0.73 (-2.1, 0.64)	-1.1 (-2.44, 0.24)	-1.53 (-2.85, -0.21)	**U**

Footnote. Results were mean change (95% CrI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (no treatment).

Table S14. NMA results for diarrhea lasting ≥2 days

A	**A**											
B	0.39(0.12, 1.20)	**B**										
C	0.94(0.29, 2.9)	2.4(0.62, 9.1)	**C**									
D	0.67(0.047, 12.0)	1.7(0.11, 33.0)	0.72(0.046, 14.0)	**D**								
E	0.26(0.031, 2.1)	0.67(0.072, 6.0)	0.27(0.030, 2.5)	0.38(0.013, 10.0)	**E**							
I	0.44(0.050, 3.8)	1.1(0.11, 11.0)	0.46(0.048, 4.6)	0.65(0.020, 18.0)	1.7(0.095, 30.0)	**I**						
L	0.21(0.027, 1.7)	0.55(0.061, 4.8)	0.23(0.026, 2.0)	0.31(0.011, 8.1)	0.82(0.050, 14.0)	0.48(0.028, 8.4)	**L**					
M	1.1(0.24, 4.8)	2.8(0.54, 14.0)	1.1(0.22, 6.0)	1.6(0.072, 29.0)	4.2(0.38, 47.0)	2.5(0.21, 29.0)	5.0(0.47, 55.0)	**M**				
N	0.62(0.17, 2.3)	1.6(0.37, 6.9)	0.66(0.16, 2.9)	0.93(0.046, 15.0)	2.4(0.25, 24.0)	1.4(0.14, 15.0)	2.9(0.31, 28.0)	0.58(0.10, 3.3)	**N**			
O	0.82(0.088, 7.6)	2.1(0.20, 22.0)	0.87(0.086, 9.2)	1.2(0.037, 35.0)	3.2(0.17, 59.0)	1.9(0.096, 37.0)	3.9(0.21, 70.0)	0.77(0.061, 9.5)	1.3(0.12, 14.0)	**O**		
R	1.3(0.14, 13.0)	3.4(0.32, 36.0)	1.4(0.14, 15.0)	1.9(0.058, 56.0)	5.1(0.27, 97.0)	3.0(0.15, 61.0)	6.2(0.34, 200)	1.2(0.097, 16.0)	2.1(0.19, 24.0)	1.6(0.078, 34.0)	**R**	
U	0.22(0.11, 0.41)	0.56(0.21, 1.4)	0.23(0.090, 0.60)	0.32(0.020, 4.2)	0.84(0.11, 6.2)	0.50(0.062, 4.0)	1.0(0.14, 7.3)	0.20(0.052, 0.77)	0.35(0.11, 1.0)	0.26(0.031, 2.2)	0.16(0.019, 1.4)	**U**

Footnote. Results are Odds Ratio (95% CrI) from the network meta-analysis. Odds ratios < 1 indicates that the listed intervention is better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **I**, *ECN 1917*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (placebo/no treatment).

Table S15. NMA results for the duration of hospitalization

A	**A**											
B	0.33 (-0.79, 1.46)	**B**										
C	-0.19 (-1.7, 1.32)	-0.51 (-2.12, 1.08)	**C**									
D	-0.53 (-1.6, 0.55)	-0.85 (-2.19, 0.48)	-0.34 (-2.01, 1.34)	**D**								
E	-0.6 (-2.09, 0.89)	-0.92 (-2.52, 0.66)	-0.41 (-2.29, 1.47)	-0.07 (-1.73, 1.59)	**E**							
H	-1.11 (-3.15, 0.94)	-1.44 (-3.55, 0.68)	-0.92 (-3.27, 1.44)	-0.58 (-2.75, 1.59)	-0.51 (-2.84, 1.82)	**H**						
L	0.22 (-1.86, 2.3)	-0.11 (-2.27, 2.04)	0.41 (-1.97, 2.78)	0.74 (-1.46, 2.96)	0.82 (-1.55, 3.19)	1.33 (-1.42, 4.08)	**L**					
M	-0.22 (-1.32, 0.87)	-0.55 (-1.78, 0.66)	-0.04 (-1.61, 1.54)	0.3 (-1.01, 1.62)	0.38 (-1.19, 1.94)	0.89 (-1.21, 2.98)	-0.44 (-2.57, 1.69)	**M**				
N	-0.14 (-2.21, 1.93)	-0.47 (-2.62, 1.68)	0.05 (-2.32, 2.41)	0.38 (-1.81, 2.58)	0.46 (-1.9, 2.82)	0.97 (-1.78, 3.7)	-0.36 (-3.12, 2.42)	0.08 (-2.05, 2.21)	**N**			
Q	-0.42 (-1.96, 1.09)	-0.75 (-2.38, 0.85)	-0.23 (-2.15, 1.66)	0.11 (-1.59, 1.79)	0.18 (-1.73, 2.07)	0.69 (-1.69, 3.03)	-0.64 (-3.03, 1.74)	-0.2 (-1.8, 1.39)	-0.28 (-2.68, 2.09)	**Q**		

R	-0.05 (-2.07, 1.98)	-0.38 (-2.47, 1.71)	0.14 (-2.19, 2.47)	0.47 (-1.67, 2.63)	0.54 (-1.77, 2.87)	1.06 (-1.64, 3.75)	-0.27 (-3, 2.47)	0.17 (-1.9, 2.25)	0.09 (-2.64, 2.81)	0.37 (-1.95, 2.71)	**R**	
U	-0.88 (-1.58, -0.18)	-1.21 (-2.09, -0.33)	-0.69 (-2.02, 0.65)	-0.35 (-1.36, 0.65)	-0.28 (-1.6, 1.04)	0.23 (-1.69, 2.15)	-1.1 (-3.06, 0.86)	-0.65 (-1.5, 0.19)	-0.74 (-2.69, 1.22)	-0.46 (-1.8, 0.91)	-0.83 (-2.73, 1.07)	**U**

Footnote. Results were mean change (CI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **H**, *L. plantarum*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E*. spp + C. spp; **R**, *L*. spp + *B*. spp + *E*. spp; **U**, Control (placebo/no treatment).

Table S16. NMA results for the mean stool frequency on day 2

A	**A**												
B	-0.0077(-0.64, 0.67)	**B**											
C	0.79(-0.15, 1.7)	0.80(-0.21, 1.8)	**C**										
D	-0.27(-0.91, 0.40)	-0.26(-1.0, 0.47)	-1.1(-2.1, -0.033)	**D**									
E	-0.67(-2.6, 1.2)	-0.66(-2.6, 1.3)	-1.5(-3.5, 0.58)	-0.40(-2.3, 1.9)	**E**								
K	-0.44(-1.5, 0.63)	-0.43(-1.5, 0.64)	-1.2(-2.5, 0.10)	-0.18(-1.3, 0.92)	0.23(-1.9, 2.3)	**K**							
L	-0.44(-1.4,	-0.44(-1.5,	-1.2(-2.5, -	-0.18(-1.3,	0.22(-1.9,	-0.0017(-	**L**						

	0.55)	0.59)	0.0054)	0.88)	2.3)	1.4, 1.3)							
M	0.12(-0.74, 1.0)	0.12(-0.82, 1.0)	-0.68(-1.8, 0.48)	0.38(-0.57, 1.4)	0.78(-1.2, 2.8)	0.56(-0.72, 1.8)	0.56(-0.60, 1.8)	**M**					
N	0.11(-0.71, 0.94)	0.12(-0.76, 0.96)	-0.68(-1.8, 0.46)	0.38(-0.51, 1.3)	0.78(-1.2, 2.8)	0.55(-0.60, 1.7)	0.55(-0.60, 1.7)	-0.0047(-1.1, 1.1)	**N**				
Q	0.98(-0.29, 2.3)	0.99(-0.35, 2.3)	0.19(-1.3, 1.7)	1.3(-0.094, 2.6)	1.6(-0.56, 3.9)	1.4(-0.16, 3.0)	1.4(-0.068, 3.0)	0.87(-0.58, 2.3)	0.87(-0.56, 2.3)	**Q**			
R	0.61(-0.80, 2.0)	0.61(-0.85, 2.1)	-0.18(-1.8, 1.4)	0.87(-0.59, 2.3)	1.3(-1.0, 3.6)	1.1(-0.65, 2.7)	1.1(-0.56, 2.7)	0.49(-1.1, 2.0)	0.50(-1.0, 2.0)	-0.38(-2.2, 1.4)	**R**		
T	0.19(-1.5, 1.9)	0.19(-1.5, 1.9)	-0.60(-2.4, 1.2)	0.45(-1.3, 2.2)	0.85(-1.6, 3.3)	0.63(-1.3, 2.6)	0.63(-1.2, 2.5)	0.069(-1.7, 1.9)	0.074(-1.7, 1.9)	-0.80(-2.8, 1.2)	-0.42(-2.5, 1.7)	**T**	
U	-0.66(-1.1, -0.23)	-0.66(-1.2, -0.14)	-1.5(-2.3, -0.61)	-0.40(-0.98, 0.18)	0.0018(-1.9, 1.9)	-0.22(-1.3, 0.80)	-0.22(-1.1, 0.70)	-0.78(-1.6, -0.021)	-0.77(-1.5, -0.014)	-1.6(-2.9, -0.44)	-1.3(-2.6, 0.073)	-0.85(-2.5, 0.77)	**U**

Footnote. Results were mean change (95% CrI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E*. spp + C. spp; **R**, *L*. spp + *B*. spp + *E*. spp; **T**, *L*. spp + *S*. spp + *C*. spp + *Bacillus* spp; **U**, Control (placebo/no treatment).

Table S17. NMA results for the duration of vomiting

A	**A**									
B	0.09 (-0.23, 0.44)	**B**								
D	0.05 (-0.46, 0.57)	-0.04 (-0.56, 0.47)	**D**							
H	0.01 (-0.78, 0.82)	-0.08 (-0.88, 0.72)	-0.04 (-0.95, 0.87)	**H**						
K	0.05 (-0.45, 0.56)	-0.04 (-0.55, 0.46)	0 (-0.58, 0.58)	0.04 (-0.86, 0.94)	**K**					
L	0.17 (-0.43, 0.78)	0.08 (-0.53, 0.68)	0.12 (-0.62, 0.86)	0.16 (-0.78, 1.1)	0.12 (-0.61, 0.85)	**L**				
N	0.19 (-0.31, 0.71)	0.1 (-0.41, 0.6)	0.14 (-0.44, 0.72)	0.18 (-0.73, 1.08)	0.14 (-0.43, 0.71)	0.02 (-0.71, 0.75)	**N**			
Q	0.56 (0, 1.15)	0.47 (-0.11, 1.04)	0.51 (-0.21, 1.23)	0.55 (-0.37, 1.47)	0.51 (-0.2, 1.22)	0.39 (-0.36, 1.15)	0.37 (-0.34, 1.08)	**Q**		
S	1.14 (-0.2, 2.47)	1.04 (-0.29, 2.37)	1.09 (-0.31, 2.48)	1.13 (-0.4, 2.64)	1.09 (-0.31, 2.48)	0.96 (-0.45, 2.39)	0.94 (-0.45, 2.33)	0.57 (-0.84, 1.98)	**S**	
U	-0.07 (-0.31, 0.19)	-0.16 (-0.42, 0.09)	-0.12 (-0.61, 0.38)	-0.08 (-0.84, 0.68)	-0.12 (-0.6, 0.36)	-0.24 (-0.79, 0.31)	-0.26 (-0.75, 0.23)	-0.63 (-1.15, -0.11)	-1.2 (-2.51, 0.11)	**U**

Footnote. Results were mean change (95% CrI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **N**, *L.* spp + *B.* spp+ *S*. spp; **Q**, *Bacillus* spp + *E*. spp + C. spp; **S,** L. spp + B. spp + *P*. spp; **U**, Control (placebo/no treatment).

Table S18. NMA results for the duration of fever

A	**A**											
B	0.37 (-0.29, 1.02)	**B**										
D	-0.09 (-0.55, 0.36)	-0.46 (-1.17, 0.25)	**D**									
F	0.33 (-0.52, 1.19)	-0.04 (-1.05, 0.99)	0.42 (-0.46, 1.32)	**F**								
H	0.05 (-1.85, 1.97)	-0.32 (-2.3, 1.68)	0.14 (-1.78, 2.08)	-0.29 (-2.31, 1.76)	**H**							
K	-0.27 (-1.05, 0.5)	-0.64 (-1.51, 0.24)	-0.18 (-1, 0.64)	-0.6 (-1.71, 0.49)	-0.32 (-2.36, 1.71)	**K**						
L	0.02 (-1.12, 1.16)	-0.35 (-1.61, 0.92)	0.11 (-1.05, 1.27)	-0.31 (-1.65, 1.02)	-0.03 (-2.2, 2.14)	0.29 (-1.04, 1.63)	**L**					
M	0.47 (-0.63, 1.58)	0.1 (-1.13, 1.34)	0.56 (-0.56, 1.7)	0.14 (-1.17, 1.45)	0.42 (-1.74, 2.57)	0.74 (-0.56, 2.05)	0.45 (-1.06, 1.97)	**M**				
N	-0.06 (-0.69, 0.57)	-0.43 (-1.22, 0.37)	0.03 (-0.64, 0.71)	-0.4 (-1.38, 0.59)	-0.11 (-2.1, 1.85)	0.21 (-0.68, 1.11)	-0.08 (-1.31, 1.16)	-0.53 (-1.74, 0.67)	**N**			
Q	-0.06 (-0.72, 0.56)	-0.44 (-1.29, 0.41)	0.02 (-0.67, 0.7)	-0.4 (-1.37, 0.54)	-0.11 (-2.08, 1.83)	0.2 (-0.75, 1.14)	-0.08 (-1.3, 1.12)	-0.54 (-1.73, 0.64)	0 (-0.82, 0.78)	**Q**		
S	0.31 (-1.19, 1.81)	-0.06 (-1.65, 1.54)	0.4 (-1.12, 1.93)	-0.02 (-1.68, 1.64)	0.26 (-2.13, 2.65)	0.58 (-1.07, 2.24)	0.29 (-1.54, 2.14)	-0.16 (-1.96, 1.65)	0.37 (-1.21, 1.95)	0.38 (-1.18, 1.95)	**S**	
U	-0.18 (-0.53, 0.16)	-0.56 (-1.2, 0.11)	-0.1 (-0.5, 0.33)	-0.52 (-1.3, 0.27)	-0.23 (-2.13, 1.64)	0.08 (-0.68, 0.86)	-0.2 (-1.29, 0.89)	-0.66 (-1.7, 0.39)	-0.12 (-0.71, 0.47)	-0.12 (-0.65, 0.44)	-0.5 (-1.97, 0.97)	**U**

Footnote. Results were mean change (95% CrI) from the network meta-analysis. Mean difference values less than 0 indicates that the listed intervention was better than the row intervention. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **U**, Control (placebo/no treatment).

Table S19. Certainty of evidence for the duration of diarrhea

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs B	1	Very low	Serious	Serious	Very serious	Not serious
A vs D	3	Moderate	Serious	Not serious	Not serious	Not serious
A vs F	1	Very low	Serious	Serious	Very serious	Serious
A vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	20	Low	Not serious	Not serious	Serious	Serious
B vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs U	15	Low	Not serious	Not serious	Serious	Serious
C vs U	6	Moderate	Not serious	Not serious	Not serious	Serious
D vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	4	Low	Not serious	Not serious	Serious	Serious
E vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
F vs U	2	Low	Serious	Not serious	Serious	Not serious
G vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
H vs U	1	Low	Serious	Not serious	Not serious	Serious
I vs U	1	Very low	Very serious	Not serious	Not serious	Serious
J vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
L vs U	6	High	Not serious	Not serious	Not serious	Not serious
M vs U	8	Low	Not serious	Not serious	Serious	Serious
N vs U	5	Moderate	Not serious	Not serious	Not serious	Serious
O vs U	1	Low	Serious	Not serious	Not serious	Serious
P vs U	1	Low	Serious	Not serious	Not serious	Serious
Q vs U	2	Low	Serious	Not serious	Not serious	Serious
R vs U	1	Low	Serious	Not serious	Not serious	Serious
S vs U	1	Low	Serious	Not serious	Not serious	Serious
T vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **H**, *L. plantarum*; **I**, *ECN 1917*; **J**, *L. paracasei*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**,

Control (placebo/no treatment).

Table S20. Certainty of evidence for the duration of diarrhea (control = placebo)

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs U	6	Moderate	Not serious	Not serious	Serious	Not serious
B vs U	10	Moderate	Not serious	Not serious	Serious	Not serious
C vs U	4	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
E vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
F vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
G vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
I vs U	1	Very low	Very serious	Not serious	Not serious	Serious
J vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
L vs U	6	High	Not serious	Not serious	Not serious	Not serious
M vs U	4	Low	Serious	Not serious	Serious	Not serious
N vs U	2	Moderate	Serious	Not serious	Not serious	Not serious
P vs U	1	Low	Serious	Not serious	Not serious	Serious
Q vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
S vs U	1	Low	Serious	Not serious	Not serious	Serious
T vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **F**, *B. lactis*; **G**, *L. sporogenes*; **I**, *ECN 1917*; **J**, *L. paracasei*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **P**, *B.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo).

Table S21. Certainty of evidence for the duration of diarrhea (control = no treatment)

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs B	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs D	3	Moderate	Serious	Not serious	Not serious	Not serious
A vs F	1	Low	Serious	Not serious	Not serious	Serious
A vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	14	Low	Not serious	Not serious	Serious	Serious
B vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs U	5	Low	Not serious	Not serious	Serious	Serious

C vs U	2	Low	Serious	Not serious	Serious	Not serious
D vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	2	Low	Serious	Not serious	Serious	Not serious
F vs U	1	Low	Serious	Not serious	Not serious	Serious
H vs U	1	Low	Serious	Not serious	Not serious	Serious
K vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
M vs U	4	Low	Not serious	Not serious	Serious	Serious
N vs U	3	Very low	Serious	Not serious	Serious	Serious
O vs U	1	Low	Serious	Not serious	Not serious	Serious
Q vs U	1	Low	Serious	Not serious	Not serious	Serious
R vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (no treatment).

Table S22. Certainty of evidence for diarrhea lasting ≥2 days

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs U	12	Moderate	Not serious	Not serious	Serious	Not serious
B vs U	5	Low	Serious	Not serious	Serious	Not serious
C vs U	6	Moderate	Not serious	Not serious	Serious	Not serious
D vs U	1	Low	Very serious	Not serious	Not serious	Not serious
E vs U	1	Low	Very serious	Not serious	Not serious	Not serious
I vs U	1	Very low	Very serious	Not serious	Not serious	Serious
L vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
M vs U	3	Low	Serious	Not serious	Not serious	Serious
N vs U	4	Low	Serious	Not serious	Not serious	Serious
O vs U	1	Very low	Very serious	Not serious	Not serious	Serious
R vs U	1	Very low	Very serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **I**, *ECN 1917*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **O**, *L.* spp + *S.* spp; **P**, *B.* spp + *S.* spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (placebo/no treatment).

Table S23. Certainty of evidence for the duration of hospitalization

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	7	Low	Not serious	Not serious	Serious	Serious
B vs U	5	Low	Not serious	Not serious	Serious	Serious
C vs U	2	Low	Serious	Not serious	Serious	Not serious
D vs U	3	Low	Not serious	Not serious	Serious	Serious
E vs U	2	Low	Serious	Not serious	Serious	Not serious
F vs U	1	Low	Serious	Not serious	Not serious	Serious
H vs U	1	Low	Serious	Not serious	Not serious	Serious
L vs U	1	Low	Serious	Not serious	Not serious	Serious
M vs U	5	Low	Not serious	Not serious	Serious	Serious
N vs U	1	Low	Serious	Not serious	Not serious	Serious
Q vs U	2	Low	Serious	Not serious	Serious	Not serious
R vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **H**, *L. plantarum*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **U**, Control (placebo/no treatment).

Table S24. Certainty of evidence for the mean stool frequency on day 2

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs B	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs D	2	Low	Serious	Not serious	Not serious	Serious
A vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	9	Moderate	Not serious	Not serious	Serious	Not serious
B vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs U	7	Moderate	Not serious	Not serious	Serious	Not serious
C vs U	4	Moderate	Serious	Not serious	Not serious	Not serious
D vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	4	High	Not serious	Not serious	Not serious	Not serious
D vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
E vs U	1	Low	Serious	Not serious	Not serious	Serious
K vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
L vs U	2	Low	Serious	Not serious	Serious	Not serious
M vs U	3	Very low	Serious	Not serious	Serious	Serious
N vs U	3	Moderate	Serious	Not serious	Not serious	Not serious
Q vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
R vs U	1	Low	Serious	Not serious	Not serious	Serious
T vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **C**, *L. reuteri*; **D**, *Bacillus clausii*; **E**, *L. acidophilus*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **R**, *L.* spp + *B.* spp + *E.* spp; **T**, *L.* spp + *S.* spp + *C.* spp + *Bacillus* spp; **U**, Control (placebo/no treatment).

Table S25. Certainty of evidence for the duration of vomiting

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs B	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	4	Moderate	Not serious	Not serious	Serious	Not serious
B vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs U	4	High	Not serious	Not serious	Not serious	Not serious
D vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
H vs U	1	Low	Serious	Not serious	Not serious	Serious
K vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
L vs U	2	Moderate	Serious	Not serious	Not serious	Not serious
N vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
Q vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
S vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **N**, *L.* spp + *B.* spp+ *S.* spp; **Q**, *Bacillus* spp + *E.* spp + C. spp; **S,** L. spp + B. spp + *P.* spp; **U**, Control (placebo/no treatment).

Table S26. Certainty of evidence for the duration of fever

Comparison	N of trials	Certainty of evidence	Imprecision	Indirectness	Inconsistency	Overall risk of bias
A vs B	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs D	2	Moderate	Serious	Not serious	Not serious	Not serious
A vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
A vs U	4	Low	Not serious	Not serious	Serious	Serious
B vs D	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
B vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs K	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
D vs U	3	Moderate	Serious	Not serious	Not serious	Not serious
F vs U	1	Low	Serious	Not serious	Not serious	Serious
H vs U	1	Low	Serious	Not serious	Not serious	Serious
K vs N	1	Moderate	Serious	Not serious	Not serious	Not serious
K vs U	1	Moderate	Serious	Not serious	Not serious	Not serious
L vs U	1	Low	Serious	Not serious	Not serious	Serious
M vs U	1	Low	Serious	Not serious	Not serious	Serious
N vs U	2	Moderate	Serious	Not serious	Not serious	Not serious
Q vs U	2	Moderate	Not serious	Not serious	Serious	Not serious
S vs U	1	Low	Serious	Not serious	Not serious	Serious

Footnote. **A**, *S. boulardii*; **B**, LGG; **D**, *Bacillus clausii*; **F**, *B. lactis*; **H**, *L. plantarum*; **K**, *E. faecium*; **L**, *L.* spp; **M**, *L.* spp + *B.* spp; **N**, *L.* spp + *B.* spp+ *S*. spp; **Q**, *Bacillus* spp + *E*. spp + C. spp; **S,** L. spp + B. spp + *P*. spp; **U**, Control (placebo/no treatment).

Table S27. Rank for outcomes

Intervention	Duration of diarrhea		Duration of diarrhea (control= placebo)		Duration of diarrhea (control= no treatment)		Diarrhea lasting ≥2 Days		Duration of hospitalization		Mean stool frequency on day 2		Duration of vomiting		Duration of fever	
	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank	SUCRA	Rank
S. boulardii	0.636	**8**	0.831	**2**	0.475	**9**	0.721	**3**	0.659	**3**	0.515	**7**	0.320	**9**	0.481	**6**
LGG	0.515	**12**	0.303	**11**	0.779	**2**	0.361	**9**	0.789	**1**	0.510	**8**	0.467	**5**	0.751	**1**
L. reuteri	0.589	**10**	0.619	**8**	0.498	**7**	0.689	**4**	0.550	**6**	0.852	**2**	-	-	-	-
Bacillus clausii	0.271	**16**	0.315	**10**	0.195	**11**	0.549	**6**	0.390	**9**	0.357	**9**	0.394	**7**	0.383	**10**
L. acidophilus	0.210	**20**	0.168	**16**	-	-	0.272	**10**	0.372	**10**	0.261	**12**	-	-	-	-
B. lactis	0.951	**1**	0.682	**7**	0.991	**1**	-	-	-	-	-	-	-	-	0.703	**3**
L. sporogenes	0.249	**17**	0.228	**13**	-	-	-	-	-	-	-	-	-	-	-	-
L. plantarum	0.695	**5**	-	-	0.597	**5**	-	-	0.230	**11**	-	-	0.370	**8**	0.493	**5**
ECN 1917	0.768	**3**	0.886	**1**	-	-	0.425	**8**	-	-	-	-	-	-	-	-
L. paracasei	0.275	**15**	0.264	**14**	-	-	-	-	-	-	-	-	-	-	-	-
E. faecium	0.150	**22**	-	**-**	0.120	**12**	-	-	-	-	0.277	**10**	0.395	**6**	0.263	
L. spp	0.294	**14**	0.296	**12**	-	-	0.220	**11**	0.678	**2**	0.271	**11**	0.527	**4**	0.477	**7**
L. spp + *B.* spp	0.563	**11**	0.595	**9**	0.488	**8**	0.723	**2**	0.541	**7**	0.573	**5**	-	-	0.742	**2**
L. spp + *B.* spp+ *S.* spp	0.718	**4**	0.792	**3**	0.634	**4**	0.536	**7**	0.557	**5**	0.574	**4**	0.569	**3**	0.413	**8**

L. spp + *S*. spp	0.497	**13**	-	**-**	0.393	**10**	0.612	**5**	-	-	-	-	-	-	-	-
B. spp + *S*. spp	0.227	**18**	0.193	**15**	-	-	-	-	-	-	-	-	-	-	-	-
Bacillus spp + *E*. spp + C. spp(	0.666	**6**	0.742	**4**	0.544	**6**	-	-	0.448	**8**	0.878	**1**	0.844	**2**	0.411	**9**
L. spp + *B*. spp + *E*. spp	0.795	**2**	-	-	0.710	**3**	0.740	**1**	0.590	**4**	0.751	**3**	-	-	-	-
L. spp + *B*. spp + *S*. spp + *P*. spp	0.633	**9**	0.718	**6**	-	-	-	-	-	-	-	-	0.919	**1**	0.621	**4**
L. spp + *S*. spp + *C*. spp + *Bacillus* spp	0.642	**7**	0.733	**5**	-	-	-	-	-	-	0.571	**6**	-	-	-	-
Control (placebo/no treatment)	0.156	**21**	0.134	**17**	0.07	**13**	0.153	**12**	0.197	**12**	0.122	**13**	0.194	**10**	0.263	**11**