

Supplementary Table S1. Major studies on the preventive effects of probiotics against *Clostridioides difficile* infection (CDI).

Referenece	Country/region	Strain/species	No. of event (CDI)	
			Intervention	Placebo
Primary prevention				
Safdar <i>et al.</i> (2008)	US	<i>Lactobacillus acidophilus</i> <i>Bifidobacterium longum</i> <i>B. lactis</i> <i>L. rhamnosus</i>	4/23	6/16
Rajkumar <i>et al.</i> (2020)	UK	<i>L. casei</i> DN114001	106/549	103/577
Allen <i>et al.</i> (2013)	UK	<i>L. acidophilus</i> CUL60 and CUL21 <i>B. bifidum</i> CUL20 <i>B. lactis</i> CUL34	12/1470	17/1471
Zhang <i>et al.</i> (2017)	China	<i>Saccharomyces boulardii</i>	12/81	23/82
Pozzoni <i>et al.</i> (2012)	Italy	<i>S. boulardii</i>	3/106	2/98
Can <i>et al.</i> (2006)	Turkey	<i>S. boulardii</i>	1/73	2/78
Hickson <i>et al.</i> (2007)	UK	<i>L. casei</i> <i>L. bulgaricus</i> <i>Streptococcus thermophilus</i>	0/57	9/56
Secondary prevention				
Louie <i>et al.</i> (2023)	US, Canada	<i>Enterocloster bolteae</i> <i>Anaerotruncus colihominis</i> <i>Sellimonas intestinalis</i> <i>Clostridium_Q symbiosum</i> <i>Blautia</i> sp001304935 <i>Dorea_A longicatena</i> <i>Clostridium_AQ innocuum</i> <i>Flavonifractor plautii</i>	14/57	10/22
Chitapanarux <i>et al.</i> (2025)	Thailand	<i>S. boulardii</i>	1/59	8/61

Barker <i>et al.</i> (2017)	US	<i>L. acidophilus</i> NCFM <i>L. paracasei</i> Lpc-37 <i>B. lactis</i> Bi-07 <i>B. lactis</i> Bl-04	1/15	1/16
Plummer <i>et al.</i> (2004)	UK	<i>Lactobacillus</i> <i>Bifidobacterium</i>	2/69	5/69
McFarland <i>et al.</i> (1994)	US	<i>S. boulardii</i>	9/26	22/34
Wullt <i>et al.</i> (2003)	Sweden	<i>L. plantarum</i> 299v “CP101”	4/11	6/9
Allegretti <i>et al.</i> (2025)	US, Canada	full-spectrum, investigational, oral, lyophilized microbiome therapeutic	26/102	37/96