

Supplementary Online Content

Dierikx T, Malinowska A, Łukasik J, et al; Multispecies Probiotic in AAD Study Group. Probiotics and antibiotic-associated diarrhea in children: a randomized clinical trial. *JAMA Netw Open*. 2024;7(6):e2418129. doi:10.1001/jamanetworkopen.2024.18129

eTable 1. Characteristics of Included Participants and Participants Lost to Follow-Up

eFigure 1. Beta Diversity at All 4 Times

eFigure 2. Relative Abundance at Phylum Level

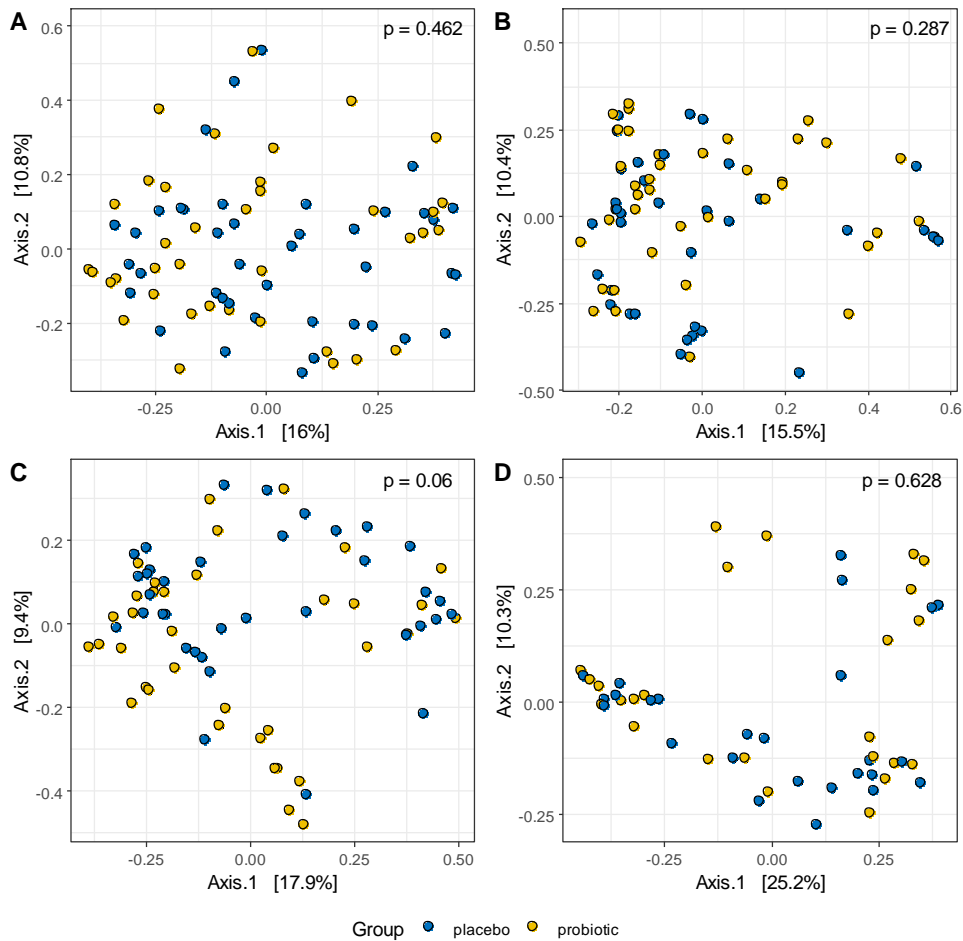
eFigure 3. Relative Abundance of Genera With Significantly Different Relative Abundance

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Characteristics of Included Participants and Participants Lost to Follow-Up

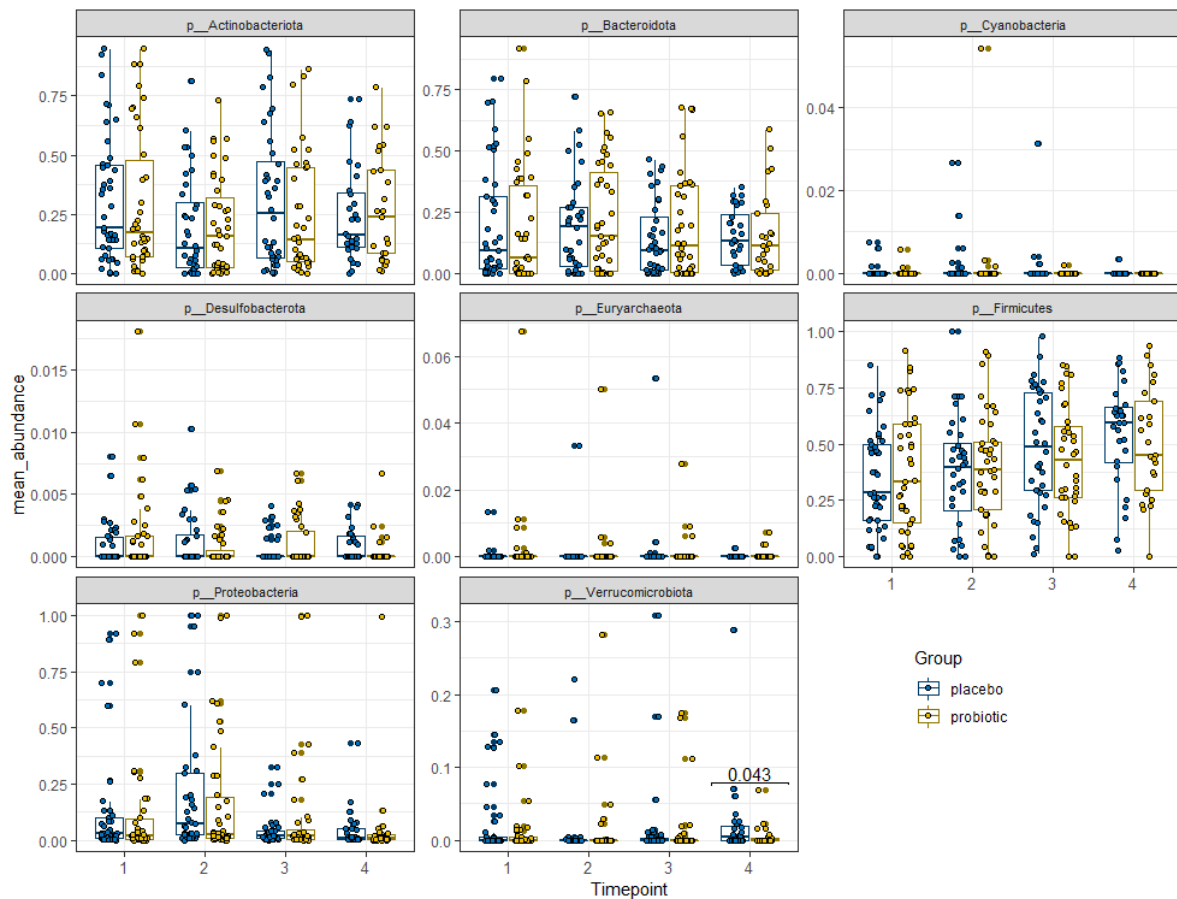
	Included (n = 88)	Lost to follow up (n=225)
Age, median [IQR], months	21 [10-53]	33 [16-68]
Female sex, n (%)	34 (39)	106 (47)
Male sex, n(%)	54 (61)	119 (53)
Subjects included in the Netherlands, n (%)	72 (82)	70 (31)
Inpatient, n (%)	47 (53)	191 (84)
Hospital stay, median [IQR], days	1,5 [0-4]	5 [3-7]
Antibiotic treatment duration, median [IQR], days	7 [7-10]	10 [7-10]
Antibiotic administration route, n (%)		
Only oral	63 (72)	72 (32)
Only intravenous	5 (6)	109 (48)
Intravenous followed by oral	20 (23)	44 (20)
Reason for treatment, n (%)		
URTI	13 (15)	76 (34)
LRTI	25 (28)	69 (31)
UTI	22 (25)	34 (15)
joint	1 (1)	4 (2)
lymphadenitis	4 (5)	8 (4)
GI	2 (2)	8 (4)
Skin	13 (15)	11 (5)
NS	2 (2)	4 (2)
other	6 (7)	11 (5)
Antibiotic ^b , n (%)		
2 nd generation cephalosporin	5 (6)	38 (17)
3 rd generation cephalosporin	7 (8)	57 (25)
Aminopenicillin	29 (33)	92 (41)
Amoxicillin with clavulanic acid	52 (50)	64 (28)
Clindamycin	1 (1)	22 (10)
other	5 (6)	13 (6)
Two concomitant antibiotics, n (%)	4 (5)	27 (12)
Change of antibiotic class, n (%)	10 (11)	35 (16)
Diarrhoea cases, n (%) ^c	20 (23)	63 (28)
AAD cases, n (%) ^c	16 (18)	35 (16)

eFigure 1. Beta Diversity at All 4 Times



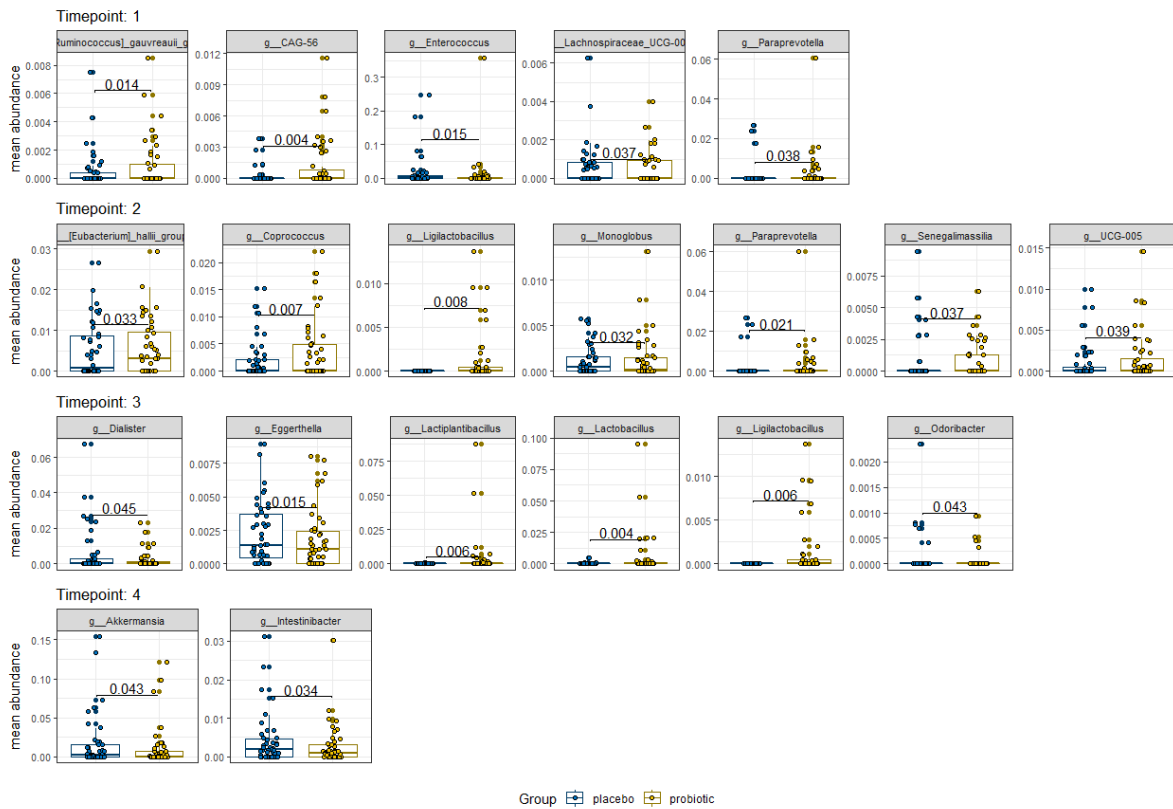
Beta-diversity is demonstrated at four time-points: At inclusion (A), at the last day of the antibiotic course (B), at the last day of the placebo or probiotic supplementation (C) and one month after the study intervention (D). There were no significant changes between the placebo group and the probiotic group at all four time-points. Axis 1 and 2 represents the first and second principal coordinate.

eFigure 2. Relative Abundance at Phylum Level



The relative abundance of the observed phyla is demonstrated at four time-points: At inclusion, at the last day of the antibiotic course, at the last day of the placebo or probiotic supplementation and one month after the study intervention. One month after the intervention, the relative abundance of Verrucomicrobiota was significantly higher in the placebo group compared to the probiotic group ($p=0.043$).

eFigure 3. Relative Abundance of Genera With Significantly Different Relative Abundance



The relative abundance of the observed genera that significantly differed in relative abundance between the placebo and probiotic group is demonstrated at four time-points: At inclusion, at the last day of the antibiotic course, at the last day of the placebo or probiotic supplementation and one month after the study intervention. Significant differences were found in the abundance of 18 different taxa spread across the four time-points. An overview of all observed genera including in the placebo and probiotic group is given in supplemental dataset 1 along with adjusted p-values.