

**Table S1.** Summary of p-value results for Adonis tests. Adonis tests were performed on pair-wise comparisons between treatment cohorts.

			Adonis Test (p-value)	
			Abundance	Incidence
<b>Pair-Wise Comparisons</b>	<i>Av-CD291.2 Pre-Treatment</i>	Av-CD291.2 Post-Treatment	0.136	0.48
	<i>Placebo Pre-Treatment</i>	Placebo Post-Treatment	0.303	0.097
	<i>LD-Fidaxomicin Pre-Treatment</i>	LD-Fidaxomicin Post-Treatment	<b>0.02</b>	<b>0.001</b>
	Placebo Post-Treatment	Av-CD291.2 Post-Treatment	0.229	0.107
	Av-CD291.2 Post-Treatment	LD-Fidaxomicin Post-Treatment	<b>0.005</b>	<b>0.001</b>
	LD-Fidaxomicin Post-Treatment	Placebo Post-Treatment	<b>0.042</b>	<b>0.003</b>

The p-values < 0.05 are highlighted in **red**.