

**Supplementary table S1.** Shannon Diversity Indices (SDI) and Jaccard dissimilarity indices in infant clusters

**Swab A. At the onset of ARI\***

	Cluster A1	Cluster A2	Cluster A3	Cluster A4	Cluster A5	p value <sup>§</sup>
<b>Index</b>						
SDI <sup>†</sup>	0.67 (0.63)	1.18 (0.68)	1.02 (0.94)	2.54 (1.52)	0.87 (0.76)	< 0.001
Jaccard <sup>‡</sup>	0.35 (0.43)	0.56 (0.35)	0.73 (0.37)	0.83 (0.28)	0.81 (0.26)	< 0.001

**Swab B. Three weeks after the onset of ARI\***

	Cluster B1	Cluster B2	Cluster B3	p value <sup>§</sup>
<b>Index</b>				
SDI <sup>†</sup>	0.88 (0.76)	2.40 (0.56)	1.06 (0.69)	< 0.001
Jaccard <sup>‡</sup>	0.46 (0.34)	0.74 (0.21)	0.52 (0.49)	< 0.001

\*ARI, acute respiratory infection. <sup>†</sup>SDI, Shannon diversity index. <sup>‡</sup>Jaccard dissimilarity index. <sup>§</sup>Kruskal-Wallis test. Data are presented as median, (IQR).