

**Table S7: Association between change in otitis progression rate and phenotypic attributes.**

Phenotypic attribute <sup>1</sup>	PCV7 or PCV13 serotypes		Non-vaccine serotypes	
	<i>Ages 0-11 months</i>	<i>Ages 12-35 months</i>	<i>Ages 0-11 months</i>	<i>Ages 12-35 months</i>
Resistance to neutrophil killing	0.75 (0.55, 1.10)	1.08 (0.78, 1.50)	0.78 (0.31, 1.91)	0.55 (0.20, 1.32)
Strength of anionic charge	0.94 (0.68, 1.33)	1.13 (0.82, 1.57)	1.11 (0.88, 1.37)	1.08 (0.84, 1.38)
Capsular size	0.88 (0.63, 1.28)	1.19 (0.84, 1.62)	0.71 (0.36, 1.41)	0.62 (0.31, 1.17)
IPD case-fatality ratio	0.81 (0.58, 1.16)	1.14 (0.80, 1.58)	0.95 (0.77, 1.18)	1.00 (0.79, 1.25)
Metabolic efficiency	0.90 (0.67, 1.21)	1.03 (0.73, 1.45)	1.08 (0.84, 1.39)	1.07 (0.82, 1.40)
Invasiveness	0.54 (0.21, 1.53)	0.84 (0.33, 2.27)	<b>0.77 (0.62, 0.94)</b>	0.85 (0.68, 1.06)

<sup>1</sup>Phenotype characteristics and serotypes for which data were available are summarized in Tables 1 and S2.