

**S8 Table. Summary of Sensitivity Analyses**

Description	# Cases / # Participants	# of Studies	Pooled Effect Estimate	95% CI	I <sup>2</sup> (%)	p-value for Heterogeneity	Ref.
Adults only*	145358 / 6002023	21	1.36	1.18-1.56	94.4	<0.001	24,25,27,28,31,32,33,36,38,39,40,44,45,46,47,48,49,50,51,52,54
PPI only†	222715 / 6812317	24	1.48	1.14-1.92	99.2	<0.001	23,24,25,27,28,31,32,33,35,36,37,38,39,40,43,44,46,47,48,49,50,51,52,54
Strict CAP definition‡	3733 / 15698	7	1.22	0.99-1.52	65.8	0.007	23,25,28,33,35,39,45
Low risk of bias§	135030 / 6000720	13	1.26	1.09-1.45	96.3	<0.001	24,25,27,31,32,33,37,39,45,46,47,48,49
Adjusted effect estimate	149226 / 6018673	15	1.33	1.16-1.52	95.7	<0.001	24,25,27,28,31,32,35,36,37,39,45,46,47,48,49
Observational studies only	222815 / 6809694	22	1.49	1.15-1.93	99.3	<0.001	23,24,25,27,28,31,32,33,34,35,36,37,39,40,43,44,45,46,47,48,49,54

**Abbreviations:** CI, confidence interval; Ref, study reference number

\* Adults only includes studies with more than 95% participants ≥18 years old

† PPI only includes studies with exposure defined as PPI use not grouped with other gastric acid suppressing drugs

‡ Strict CAP definition includes studies that required radiographic confirmation of CAP as part of their case definition

§ Low Risk of Bias includes studies with low risk of bias as determined by defined as low risk on ≥4 out of 7 criteria for cohort studies and ≥6 out of 8 criteria for case-control studies using the modified Newcastle-Ottawa Scale