

Supplemental Table 1. Sensitivity analyses for population density and eosinophilic esophagitis^a

Population density ^b	Primary analysis result aOR (95% CI) ^c	Adjusted for climate aOR (95% CI) ^d	EoE vs reflux esophagitis aOR (95% CI) ^e	Adjusted for EGD volume aOR (95% CI) ^f	Proportion with normal biopsies (%)
1-251	1.59 (1.45, 1.76)	1.63 (1.48, 1.80)	1.34 (1.22, 1.48)	1.55 (1.40, 1.71)	29.1
252-820	1.48 (1.35, 1.61)	1.53 (1.40, 1.67)	1.39 (1.27, 1.51)	1.47 (1.35, 1.61)	30.7
821-1,937	1.26 (1.16, 1.37)	1.29 (1.19, 1.41)	1.30 (1.20, 1.42)	1.27 (1.17, 1.39)	31.9
1,938-3,744	1.26 (1.15, 1.37)	1.28 (1.18, 1.39)	1.19 (1.09, 1.29)	1.28 (1.17, 1.39)	31.6
3,745-144,333	Referent	Referent	Referent	Referent	34.2

^a Defined as esophageal eosinophilia (≥ 15 eos/hpf) with dysphagia

^b Persons per square mile

^c Adjusting for age, sex, distance patient traveled to endoscopy site, and the proportion in the population in each zip code that reported White race

^d Same case definition and adjustment factors as for the primary analysis, but now also adjusting for residential climate zone

^e Same case definition and adjustment factors as for the primary analysis, but using comparator group of reflux esophagitis (as defined on esophageal biopsy by a mixed active/chronic inflammatory pattern with basal hyperplasia)

^f Same case definition and adjustment factors as for the primary analysis, but now also adjusting for the number of endoscopies in the database performed at the endoscopy center where the patient sought services