

Supplementary Online Content

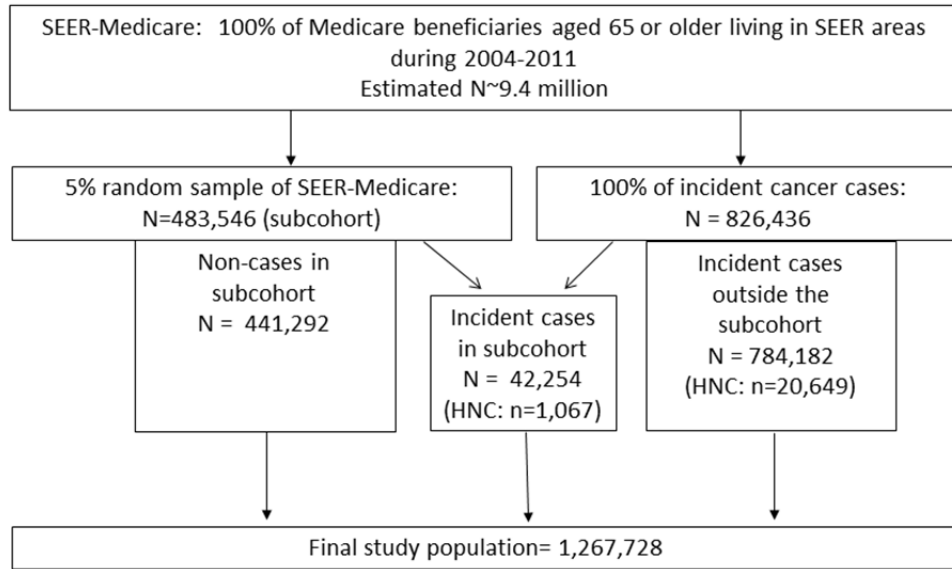
Beachler DC, Engels EA. Chronic sinusitis and risk of head and neck cancer in the US elderly population. *JAMA Otolaryngol Head Neck Surg*. Published online September 8, 2016. doi:10.1001/jamaoto.2016.2624

eFigure. Study design for case-cohort study examining chronic sinusitis and cancer risk

eTable. Associations of medical conditions and nasal endoscopy with select HNCs

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Study design for case-cohort study examining chronic sinusitis and cancer risk*



*The SEER-Medicare database includes Medicare claims data for 100% of the cancer cases in this source population, identified by SEER, as well as a random 5% sample of the entire source population (9.4 million Medicare beneficiaries).

eTable. Associations of medical conditions and nasal endoscopy with select HNCs

Cancer Type	Total Cases	Unadjusted HR (95%CI)	Adjusted HR* (95% CI)
Chronic Sinusitis[#]			
Nasopharynx	576	3.47 (2.57-4.68)	3.71 (2.75-5.02)
HPV-related OPC	4,439	1.31 (1.11-1.54)	1.33 (1.13-1.57)
Nasal Cavity and Paranasal Sinus	1,168	5.22 (4.33-6.28)	5.49 (4.56-6.62)
Nasal Endoscopy for individuals with chronic sinusitis[#]			
Nasopharynx	576	4.13 (2.04-8.36)	4.01 (1.97-8.13)
HPV-related OPC	4,439	1.37 (0.88-2.13)	1.23 (0.79-1.91)
Nasal Cavity and Paranasal Sinus	1,168	11.07 (8.07-15.20)	11.39 (8.29-15.66)
Otitis Media[#]			
Nasopharynx	576	10.57 (8.37-13.35)	11.96 (9.46-15.12)
HPV-related OPC	4,439	1.25 (1.03-1.50)	1.36 (1.13-1.64)
Nasal Cavity and Paranasal Sinus	1,168	1.88 (1.41-2.53)	1.97 (1.46-2.64)
Pharyngitis[#]			
Nasopharynx	576	1.73 (1.11-2.72)	1.49 (0.95-2.35)
HPV-related OPC	4,439	2.77 (2.41-3.19)	3.18 (2.77-3.66)
Nasal Cavity and Paranasal Sinus	1,168	1.01 (0.68-1.51)	1.12 (0.75-1.68)
Tonsillitis[#]			
Nasopharynx	576	0 [^]	0 [^]
HPV-related OPC	4,439	5.04 (3.43-7.39)	6.20 (4.19-9.19)
Nasal Cavity and Paranasal Sinus	1,168	0.67 (0.09-4.76)	0.79 (0.11-5.65)

*Analyses were adjusted for age, sex, race/ethnicity, and calendar year at start of follow-up.

[^]There were no nasopharynx cancers in individuals with tonsillitis.

[#]All medical conditions (chronic sinusitis, otitis media, tonsillitis, and pharyngitis) definitions required at least one hospital or two physician or outpatient claims at least 30 days apart.