

Department of Surgery
2026 Research Day
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Title:

Considerations of Race and Ethnicity in Biologic Therapy for CRSwNP: A Scoping Review

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Background:

Biologic therapies have reshaped treatment for chronic rhinosinusitis with nasal polyps (CRSwNP), but equitable use depends on whether clinical trials and real-world evidence adequately represent diverse populations. Incomplete reporting or analysis of race and ethnicity can obscure differential treatment responses, limit generalizability, and perpetuate inequities. This scoping review aims to map the extent and quality of race/ethnicity reporting in CRSwNP biologic studies to identify critical gaps affecting equitable implementation.

Methods:

A scoping review following PRISMA-ScR guidelines identified English-language studies (2015-2025) evaluating FDA-approved biologics for CRSwNP (dupilumab, mepolizumab, and omalizumab). Data extraction focused on adherence to NIH and CONSORT race/ethnicity reporting standards and whether studies reported race/ethnicity, performed stratified analyses, and discussed race/ethnicity in interpretation or limitations.

Results (or Preliminary Results):

Forty-five studies met inclusion criteria, representing a broad range of study designs and geographic regions. All three biologics were represented, with dupilumab most frequently studied. Race or ethnicity was reported in baseline demographic tables in 20 studies, while only nine studies conducted stratified analyses by race, ethnicity, or geographic proxy. Seven studies explicitly discussed race or ethnicity in the main text. Adherence to NIH reporting expectations was limited: only two studies used standardized categories or reported race and ethnicity separately, and no studies described methods of handling missing race or ethnicity data. Participants of White or European ancestry predominated in reporting studies, often comprising more than 80-90% of enrolled cohorts. Analyses of access-related factors, such as insurance status or referral patterns, were primarily confined to US-based real-world studies.

Conclusions (or Preliminary Conclusions):

Despite the rapid expansion of CRSwNP biologic research, race and ethnicity remain inconsistently captured and rarely incorporated into analytic frameworks. Existing standardized reporting guidelines are applied variably, limiting the ability to assess differential treatment effectiveness, safety, and access across populations. These findings highlight a critical gap in the current evidence base and underscore the need for future CRSwNP biologic studies to move beyond demographic reporting toward intentional inclusion, standardized data-collection, and race- and ethnicity-informed analyses to support equitable, evidence-based care.