

SUPPLEMENTARY MATERIAL

STATISTICAL ANALYSIS

Categorical variables were described by absolute and relative frequencies. Quantitative variables were described by mean and standard deviation (SD) or by median and interquartile range (IQR). Categorical variables were compared using the chi-square or Fisher's exact test. Quantitative variables were compared using the Mann-Whitney U test or t-test in comparisons between 2 groups, and Kruskal-Wallis test or ANOVA when comparing 3 or more groups, according to the normality result determined by Kolmogorov-Smirnov. Comparisons of paired samples (before biologic treatment and during biologic treatment) were performed using Mc Nemar test for categorical variables, and paired samples Student's t test or Wilcoxon signed-rank test for quantitative variables. The effectiveness of biologics was compared, adjusting for duration of biologic and frequency of anosmia before biologic, using logistic regression models. Statistical analyses were conducted using GraphPad Prism 8 (GraphPad Software Inc, San Diego, CA, USA) and R 4.0.2 (R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria). A p-value <0.05 was considered statistically significant.

LIMITATIONS AND STRENGTHS OF THE STUDY

The main bias of the study is that smell was not evaluated objectively (i.e., olfactometry) because its retrospective nature. As it is a real-life study, the data between biologicals are not compared in a single treatment time horizon. Data on diagnosis of N-ERD were also gathered from the clinical history (past history of reactions to NSAIDs) rather than acetylsalicylic acid challenge.

The strengths of this study include its multicenter design with a large sample of patients receiving biological treatment. Additionally, this is the first study in a single airway (smell in asthma, CRSwNP with/without ERD).