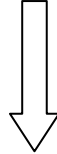


COREA (n=1520)

Inclusion criteria

severe asthma according to the
GINA guidelines



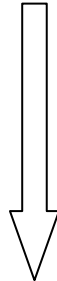
Severe asthma (n=352)

Inclusion criteria

1. patients on the treatment with moderate- to high-dose ICS and an LABA combination inhaler
2. patients who underwent all 3 pulmonary function tests under stable conditions
3. patients who were adequately treated and adherent to prescribed medications

Exclusion criteria

1. patients with any missing spirometry data at baseline or follow up visits
2. patients with acute exacerbated asthma
3. patients with serious non-pulmonary diseases or apparent pulmonary diseases such as emphysema or bronchiectasis on chest radiography



Severe asthma for the current study (n=235)

Evaluation for persistent airway obstruction



FAO (Fixed airway obstruction)
FEV1/FEV <0.7
(n=119)

RAO (Reversible airway obstruction)
FEV1/FVC \geq 0.7
(n=116)