

Up to **50%** of patients with severe asthma are **uncontrolled** despite current treatment<sup>1\*</sup>

~**15–20%** of US patients with severe asthma are currently ineligible for a biologic<sup>2</sup>



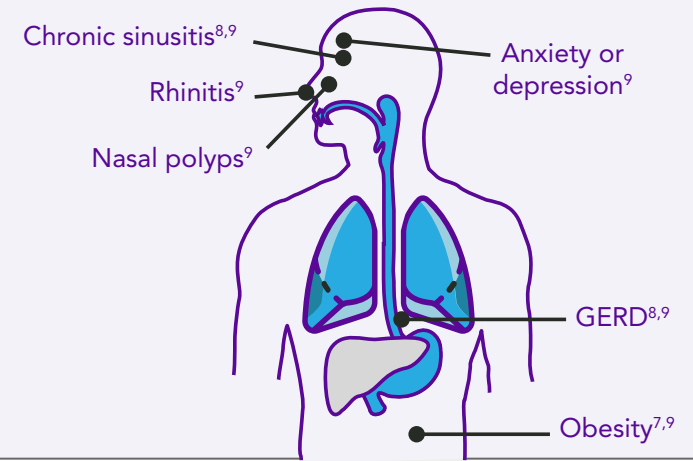
Increased asthma severity is associated with more frequent exacerbations<sup>3–6</sup> and worse asthma control (eg ACQ)<sup>3,4</sup>

Increased risk of mortality<sup>7†</sup>



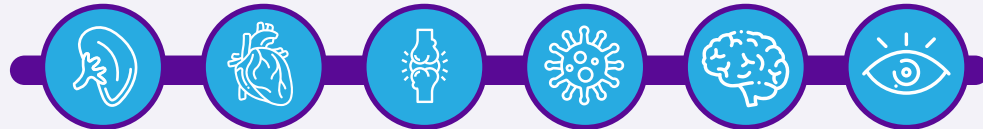
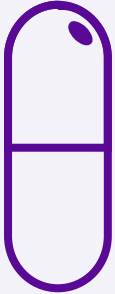
**7.1%** severe asthma versus **4.5%** without asthma

High comorbidity burden<sup>6–9‡</sup>



**Severe asthma** still causes substantial clinical and economic burden, despite treatment

More frequent use<sup>4,6</sup> and higher dose of oral corticosteroids<sup>8</sup> with increasing asthma severity



Increased exposure to systemic corticosteroids is associated with increased risk of complications<sup>10</sup>

Higher healthcare costs (medical resource use and pharmacy costs; 2012–2013 data)<sup>6§</sup>

**1.86x** higher

**\$20,536**

Severe asthma

**\$11,070**

Non-severe asthma



**1.89x** higher Pharmacy costs



**1.75x** higher Outpatient costs



**1.96x** higher Hospitalisation costs

\*In this systematic literature review, uncontrolled asthma was defined as inadequate control despite the use of medium- to high-dose ICS and at least one additional treatment, such as a LABA. Criteria for defining asthma control varied among studies included in the review.

†Case-control study using medical claims database in France. Patients with severe asthma (treated with omalizumab and/or medium- or high-dose ICS and a LABA) were compared with matched controls (no asthma). Percentages relate to 3-year cumulative mortality rate ( $p=0.007$ ). ‡Compared with persistent asthma, patients without asthma, mild-to-moderate asthma or severe controlled asthma. §Retrospective analysis of US healthcare administrative claims database. Patients were categorised as having persistent asthma ( $n=63597$ ) or severe asthma ( $n=1762$ ). Data depicted are mean cost for all-cause healthcare (ie all health plan and patient paid amounts for all medical resource use and pharmacy claims) in USD for 2013. Overall cost and cost subtypes were significantly different between the two patient groups ( $p<0.001$  for each comparison). ACQ, Asthma Control Questionnaire; GERD, gastro-oesophageal reflux disease; ICS, inhaled corticosteroid(s); LABA, long-acting beta-agonist; USD, US dollars

1. Chen S, et al. Curr Med Res Opin 2018;34:2075–2088; 2. Akenroye A, et al. J Allergy Clin Immunol 2019;145:1295–1297; 3. Shaw DE, et al. Eur Respir J 2015;46:1308–1321; 4. Pretolani M, et al. Eur Respir J 2017;50. pii: 1700019; 5. Suruki RY, et al. BMC Pulm Med 2017;17:74; 6. Chastek B, et al. J Manag Care Spec Pharm 2016;22:848–861; 7. Bourdin A, et al. J Allergy Clin Immunol Pract 2019;7:1477–1487; 8. Nagase H, et al. Allergol Int 2020;69:53–60; 9. Zeiger RS, et al. J Allergy Clin Immunol Pract 2016;4:120–129; 10. Lefebvre P, et al. J Allergy Clin Immunol 2015;136:1488–1495  
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