**Supplementary Tables**

**Supplementary Table 1**. Definition of severe asthma through medication purchases.

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| **Severe asthma definition (**[**1**](#_ENREF_1)**)** | **ICS** | **High-dose ICS threshold,**  **daily dose in μg** |
| High-dose ICS | Beclomethasone dipropionate | >2000 (DPI or CFC MDI)  >1000 (HFA MDI) |
| Budesonide | >1600 (MDI or DPI) |
| Ciclesonide | >320 (HFA MDI) |
| Fluticasone propionate | >1000 (HFA MDI or DPI) |
| Mometasone furoate | >800 (DPI) |
| And second controller, e.g. LABA (and/or OCS) | | |

CFC: chlorofluorocarbon; DPI: dry powder inhaler; HFA: hydrofluoroalkane; ICS: inhaled corticosteroid; LABA: long-acting β2-agonist; MDI: metered dose inhaler; OCS: oral corticosteroid.

1. Chung KF, Wenzel SE, Brozek JL, Bush A, Castro M, Sterk PJ, et al. International ERS/ATS guidelines on definition, evaluation and treatment of severe asthma. Eur Respir J. 2014;43(2):343-73.

**Supplementary Table 2**. Comorbidities occurring in >10% of patients in the total asthma population, stratified by asthma severity\*.

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| --- | --- | --- | --- | --- | --- |
| **ICD-10 code** | **Comorbidity** | **Total population (%)** | **Asthma severity** | | **p-value for  non-severe vs severe** |
| **Non-severe (%)** | **Severe (%)** |  |
| I10 | Essential (primary) hypertension | 28.6 | 27.9 | 35.5 | <0.001 |
| R10 | Abdominal and pelvic pain | 17.7 | 17.6 | 18.3 | 0.57 |
| J18 | Pneumonia, unspecified organism | 13.4 | 12.6 | 22.6 | <0.001 |
| J30 | Vasomotor and allergic rhinitis | 12.8 | 12.9 | 11.4 | 0.13 |
| I48 | Atrial fibrillation and flutter | 11.3 | 11.1 | 14.4 | <0.001 |
| H25 | Age-related cataract | 11.2 | 10.6 | 17.9 | <0.001 |
| G47 | Sleep disorders | 11.2 | 10.8 | 15.1 | <0.001 |
| E11 | Type 2 diabetes mellitus | 10.5 | 10.2 | 13.9 | <0.001 |

\*Patients were divided into two groups (non-severe and severe) according to the most severe category reached during follow-up

ICD: International Classification of Diseases.