S3 Table. Demographic and clinical baseline characteristics for matched patients with obstructive lung disease prescribed fine- vs. extra-fine particle ICS.

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| --- | --- | --- | --- | --- |
| **Demographic and clinical baseline characteristics** | | **ICS particle-size** | | **P-value**a |
| **Patients (n=13272)** | |
|  | | **Fine-particle ICS (n=6636)** | **Extra-fine particle ICS (n=6636)** |
| **Demographics** | | | | |
| Sex, femaleb | | 3936 (59) | 3936 (59) | NA |
| Age at ICS step-up date (index date), mean (SD)b | | 43 (18) | 43 (18) | 0.060 |
| Baseline weight BMI (kg/m2), mean (SD) | | 28 (7) | 28 (7) | 0.739 |
| Year of step-up date (index date), median (IQR) | | 2006 (2002, 2008) | 2006 (2003, 2008) | <0.001 |
|
| Smokingb | Unknown | 29 (0.4) | 29 (0.4) |  |
| Non-smokers | 4074 (61.4) | 4074 (61.4) | 0.703 |
| Current smokers | 1504 (22.7) | 1504 (22.7) |
| Ex-smokers | 1029 (15.5) | 1029 (15.5) |
| **Comorbidities and Therapy** | | | | |
| Rhinitis diagnosis and/or therapyc | | 2511 (37.8) | 2212 (33.3) | <0.001 |
| GERD diagnosis and/or drugsd | | 1637 (24.7) | 1625 (24.5) | 0.799 |
| Ischaemic heart disease diagnosisb,e | | 349 (5.3) | 340 (5.1) | 0.716 |
| Coding for pneumoniaf | | 3 (0) | 3 (0) | NA |
| Confirmed coding for pneumoniag | | 0 (0) | 1 (0) | 0.610 |
| Charlson Comorbidity Index score | 0 | 2618 (39.5) | 2576 (38.8) | 0.174 |
| 1-4 | 3472 (52.3) | 3462 (52.2) |
| 5+ | 546 (8.2) | 598 (9) |
| **Baseline characteristics** | | | | |
| Acute oral corticosteroid coursesb,h | 0 | 4899 (73.8) | 4899 (73.8) | NA |
| 1 | 1099 (16.6) | 1099 (16.6) |
| 2+ | 638 (9.6) | 638 (9.6) |
| Antibiotics prescribed with lower respiratory consultationb,i | 0 | 4505 (67.9) | 4505 (67.9) | NA |
| 1 | 1279 (19.3) | 1279 (19.3) |
| 2+ | 852 (12.8) | 852 (12.8) |
| ICS dose at date of step-up (index date), median (IQR)j | | 500 (250, 1000) | 400 (200, 400) | <0.001 |
| Average ICS daily dose (µg), median (IQR)j | | 115 (55, 219) | 110 (55, 219) | 0.007 |
|
| Blood eosinophil level (μ/L) | <400 | 1296 (71.2) | 1637 (75.6) | 0.031 |
| >400 | 523 (28.8) | 529 (24.4) |

Data are n (%) unless otherwise stated.

BMI: body mass index; COPD: chronic obstructive pulmonary disease; GERD: gastroesophageal reflux disease; ICS: inhaled corticosteroids; IQR: interquartile range; PEF: percentage of forced expiratory volume; NA: not applicable.

aConditional logistic regression.

bMatching variable.

cRead code at any time and/or prescription for nasal spray during baseline or outcome analysis period.

dRead code and/or drugs for GERD (BNF 1.3.5) at any time.

eRead code at any time.

fPneumonia coding defined as a Read code for pneumonia, at any time.

gPneumonia coding confirmed by x-ray or hospitalization.

hAcute oral corticosteroid courses were defined as all courses that are definitely not maintenance therapy, and/or all courses where dosing instructions suggest exacerbation treatment (e.g. 6,5,4,3,2,1 reducing, or 30µg as directed), and/or all courses with no dosing instructions, but unlikely to be maintenance therapy with a code for asthma or a lower respiratory event, where “maintenance therapy” is defined as: daily dosing instructions of <10µg prednisolone or prescriptions for 1mg prednisolone tablets.

iLower respiratory consultationsconsist of the following: a) lower respiratory Read codes (including asthma, COPD and LRTI Read codes); b) asthma/COPD review codes excl. any monitoring letter codes; c) lung function and/or asthma monitoring; d) any additional respiratory examinations, referrals, chest x-rays or events.

jFluticasone propionate (FP) equivalents.