

## Supplementary materials

**Supplementary Table 1.**

**ICD 9 codes defining dermatologic conditions in the study.**

| ICD9 Code | ICD 9 Diagnosis                     | Frequency (%) |
|-----------|-------------------------------------|---------------|
| 706       | Diseases of sebaceous glands        | 41366 (32.4)  |
| 691       | Atopic dermatitis                   | 34568 (27.1)  |
| 708       | Urticaria                           | 27515 (21.5)  |
| 708.0     | Allergic urticaria                  | 24836 (19.4)  |
| 690       | Erythematous squamous dermatosis    | 20212 (15.8)  |
| 690.1     | Seborrheic dermatitis               | 20208 (15.8)  |
| 216       | Benign neoplasm of skin             | 12629 (9.9)   |
| 696       | Psoriasis                           | 10000 (7.8)   |
| 692       | Contact dermatitis and other eczema | 8266 (6.5)    |
| 698       | Pruritus                            | 5375 (4.2)    |
| 702       | dermatoses                          | 4182 (3.3)    |
| 702.0     | Actinic keratosis                   | 4150 (3.2)    |
| 173       | Malignant neoplasm of skin          | 1489 (1.2)    |
| 708.1     | Idiopathic urticaria                | 1479 (1.2)    |
| 448.1     | Non-neoplastic Nevus                | 1144 (0.9)    |
| 110       | Dermatophytosis                     | 219 (0.1)     |
| 702.1     | Seborrheic keratosis                | 32 (0.03)     |
| 696.3     | Pityriasis rosea                    | 20 (0.02)     |