Dear Editor,

Chen et al.\(^1\) used a Taiwan claims database (National Health Insurance Research Database (NHRD)) to demonstrate that patients with chronic obstructive pulmonary disease (COPD) was associated with a high risk of osteoporosis, regardless of whether the patients with COPD were corticosteroid users and irrespective of age and sex.

The authors used 1 million beneficiaries randomly sampled from 2000 and their medical claims from 2000 to 2010 in the NHRD. The definition of patients with COPD in the study was patients who had a diagnosis of COPD (International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes: 490–496) and were older than 20 years. According to the definition of ICD-9-CM codes, 493 should be asthma, not COPD. The age and inclusion criteria of study participants are less stringent than previous studies\(^2\)–\(^4\) and allow enrollment of patients without COPD.

In our study,\(^5\) there are 6341 patients who received a discharge diagnosis of COPD (ICD-9-CM codes: 490–492, 496) with a mean age of 73.89 (±12.01) years between 1 January 2005 and 31 December 2009, and the number of patients increased to 8640 between 1 January 2002 and 31 December 2011. It will overestimate patients with COPD by using hospital outpatient department diagnosis. Authors hypothesize that glucocorticoid reduce the inflammatory process and the risk of osteoporosis in patients with COPD. This may be partly due to under-diagnosed osteoporosis in database.

Otherwise, it is difficult to define reasons for COPD hospitalization due to acute exacerbation. The reasons for patients with COPD visit to the emergency room may be the trauma, coronary artery disease, congestive heart failure or stroke.

Besides the limitations mentioned earlier in the article, there are many endocrine disorders that can induce osteoporosis, such as Cushing’s syndrome, hyperparathyroidism, hypothyroidism, hyperthyroidism, diabetes mellitus and adrenal insufficiency. In Figure 1 of Liao et al., the \(N\) should be 1 million (\(N = 1 \ 000 \ 000\)).

Conflict of interest: None declared.

References