

**Supplemental Table S2.** Risk of Vertebral Fracture Stratified by the Use of Osteoporosis Treatment during the Follow-up in Subjects with Osteopenia or Osteoporosis versus Subjects with Normal BMD

| Stratification  | No. of subjects | No. of events | PY at risk | 10-Year cumulative incidence, % | Incidence rate per 100 PY (95% CI) <sup>a</sup> | Crude HR (95% CI) | Adjusted HR (95% CI) <sup>b</sup> |
|---|-----------------|---------------|------------|---------------------------------|---|-------------------|-----------------------------------|
| With any osteoporosis treatment use during follow-up <sup>c</sup> |                 |               |            |                                 |   |                   |                                   |
| Normal  | 8,067           | 345           | 49,277     | 7.2                             | 0.70 (0.63–0.78)                                | Ref (1.00)        | Ref (1.00)                        |
| Osteopenia  | 33,657          | 1,816         | 192,971    | 9.7                             | 0.94 (0.9–0.99)                                 | 1.38 (1.23–1.55)  | 1.46 (1.30–1.63)                  |
| Osteoporosis  | 57,120          | 4,465         | 296,020    | 14.9                            | 1.51 (1.46–1.55)                                | 2.30 (2.06–2.57)  | 2.59 (2.32–2.89)                  |
| Without any osteoporosis treatment use during follow-up           |                 |               |            |                                 |   |                   |                                   |
| Normal  | 48,122          | 1,474         | 238,109    | 5.8                             | 0.62 (0.59–0.65)                                | Ref (1.00)        | Ref (1.00)                        |
| Osteopenia  | 85,801          | 4,586         | 417,352    | 10.0                            | 1.10 (1.07–1.13)                                | 1.78 (1.68–1.88)  | 1.85 (1.74–1.96)                  |
| Osteoporosis  | 38,430          | 4,281         | 185,308    | 19.2                            | 2.31 (2.24–2.38)                                | 3.73 (3.51–3.96)  | 4.05 (3.81–4.30)                  |

BMD, bone mineral density; PY, person-years; CI, confidence interval; HR, hazard ratio.

<sup>a</sup>Incidence rate per 100 person-years=(number of incident fracture events/person-years at risk)×100; <sup>b</sup>Adjusted for income, smoking, alcohol consumption, body mass index, comorbidities (thyroid dysfunction, asthma, chronic obstructive pulmonary disease, rheumatoid arthritis, hypertension, myocardial infarction, heart failure, diabetes mellitus, dyslipidemia, stroke, chronic kidney disease, and gastrointestinal disorders) and comedications (thyroid hormones, calcium and vitamin D, anticonvulsants, proton pump inhibitors, selective serotonin reuptake inhibitors, and benzodiazepines); <sup>c</sup>Osteoporosis treatment status was ascertained between the index BMD screening date and end of follow-up (fracture occurrence, censoring event, or study end date).