



**Supplementary Figure 1.** Example of subject data collection process. Subject A underwent the 66-year-old national life-transition examination in 2012, and data on bone mineral density test results and fall history were collected. Subject A underwent five health examinations between 2009 and 2019. Fracture history and fracture outcome data were collected using each health examination date as the index date. Because only data after the 66-year-old national life-transition examination is extracted, three cases can be collected from subject A after 2012. BMI, body mass index; BMD, bone mineral density; Hx, history; Fx, fracture; MOF, major osteoporotic fracture.