

Supplementary table 1. Questionnaires survey in three groups.

Questionnaires survey	HAS	KNHANES	OAI
CVA	Q. Have you ever been diagnosed with a stroke?	Q. Have you ever been diagnosed with a stroke by a doctor?	Q. had stroke, cerebrovascular accident, blood clot or bleeding in brain, or transient ischemic attack (TIA)?
Myocardial infarction	Q. Have you ever been diagnosed with an angina or myocardial infarction?	Q. Have you ever been diagnosed with an angina or myocardial infarction by a doctor?	Q. ever had heart attack
Diabetes mellitus	Q. Have you ever been diagnosed with diabetes mellitus?	Q. Have you ever been diagnosed with diabetes mellitus by a doctor?	Q. had diabetes (high blood sugar)
Hyperlipidemia	Q. Have you ever been diagnosed with hyperlipidemia?	Q. Have you ever been diagnosed with hyperlipidemia by a doctor?	NA

Osteoporosis	Q. Have you ever been diagnosed with osteoporosis?	Q. Have you ever been diagnosed with osteoporosis by a doctor?	Q1. taken bisphosphonate medication(includes alendronate, risedronate) to treat osteoporosis or paget disease past 5 years Q2. Used parathyroid hormone or PTH (includes Forteo, or teriparatide, given by injection) to treat osteoporosis past 6 months.
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HAS: Hallym Aging Study, KNHANES: the Korean National Health and Nutrition Examination Survey, OAI: Osteoarthritis Initiative, CVA: cerebrovascular accident