

1096-62-2558

Mingfei Li* (mli@bentley.edu), 175 Forest Street, Waltham, MA 02451. *A Primary Study of Bisphosphonate Medications on Osteopathic Fractures for Male Patients in VA Healthcare System.* Preliminary report.

Among the male patients treated in the VA healthcare system from FY2005 to 2009, over 97,000 have been diagnosed with osteoporosis and /or osteopathic fractures and prescribed with bisphosphonate (BP) therapy. In total, 85,212 subjects met the inclusion criteria with a mean age of 72 years, 33.2% not married, and on average there are 3 medical comorbidities. Of the mental health co-morbidities, 13.8% had depression, 3.7% alcohol problems. Results are reported using multivariate logistic regression models. By using national VA claims data, we found that in males with osteoporosis and/or osteoporotic fracture(s), adherence (medication possession ratio) to BP therapy was lowest in those who had the diagnoses of both depression and alcohol problems ($P < 0.0001$, OR (1.40 1.77)), with lower adherence to BP therapy. Results also indicate that prior fractures lead to a higher risk of fracture in those with lower adherence (P -value < 0.0001 , OR (1.37, 1.54)). The results indicate the importance of adherence in reducing the risk of fracture and demonstrate the usefulness of large administrative claims data bases in addressing important clinical questions. (Received September 17, 2013)