[2008] [SAT0338] SIMILAR NON-VERTEBRAL ANTIFRACTURE EFFICACY DEMONSTRATED WITH MONTHLY IBANDRONATE VERSUS WEEKLY BISPHOSPHONATE THERAPY: A RETROSPECTIVE COHORT STUDY

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Background: Bisphosphonates have been used for many years to effectively treat postmenopausal osteoporosis. This has led to the availability of extensive patient database information and retrospective analyses of those claims databases can provide additional data about the antifracture efficacy of different bisphosphonates. Here we present results from the analysis of monthly ibandronate and weekly bisphosphonates from two databases.

Methods: This 12-month study of the US-based databases, i3 research and i3 Innovus IMPACT, compared the rates of clinical osteoporotic fractures in patients prescribed monthly oral ibandronate (n=7,345) with those in patients prescribed the weekly bisphosphonates, alendronate and risedronate (n=56,837). Women with osteoporosis or osteopenia, aged ≥45 years were enrolled between 1 April and 31 December 2005. Patients were bisphosphonate-naïve for 6 months prior to study commencement and remained in the database for ≥3 months following enrolment. Only new or incident fractures were included in the analysis. Persistent (remaining on therapy for ≥90 days) patients were included in the primary analysis population. Patients were followed for 12 months until the first fracture, non-persistence (refill gap of 45 days for monthly ibandronate, 30 days for weekly bisphosphonates) or they switched therapy. Patients who were diagnosed with malignant neoplasm or Paget's disease of bone were excluded from the analysis. A Cox regression model was used to calculate relative risk (RR) for fracture, comparing ibandronate with weekly bisphosphonates (adjusting for potential confounding variables). Secondary analyses including all patients (non-adherent and adherent) were performed.

Results: At 12 months, a similar risk of non-vertebral and hip fractures was observed with monthly ibandronate and the weekly bisphosphonates (RR=0.88, p=0.08; RR=1.06, p=0.84, respectively). Comparing monthly ibandronate with alendronate and risedronate individually found the same results. Similar results were seen in the secondary analyses, thus confirming results for hip and non-vertebral fractures in the primary analysis population.

Conclusion: These results suggest that the non-vertebral and hip anti-fracture efficacy of monthly oral ibandronate (150mg) is consistent with that for weekly alendronate and risedronate.

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