High-dose ibandronic acid prevents fractures in osteoporosis

Both the marketed once-monthly dose and quarterly IV injection regimens of ibandronic acid appear to be effective for the prevention of nonvertebral and clinical fractures in postmenopausal women with osteoporosis, according to US-based researchers.

In their meta-analysis,* individual patient data were evaluated from four large, randomised phase III clinical trials involving a total of 8710 such women aged 55–80 years with ≥ 2 years of follow-up. The analysis evaluated ibandronic acid according to annual cumulative exposure (ACE), and grouped data into the following cohorts:

- high-dose group; ACE ≥ 10.8mg (included the oral 150mg once-monthly and IV 3mg quarterly FDA-approved marketed regimens; n = 1290)
- mid-dose group; ACE 5.5–7.2mg (3585)
- low-dose group; ACE 2–4mg (1911)
- placebo group; ACE 0mg.

For models of all-year data, the risks of key nonvertebral fractures,** all nonvertebral fractures and all clinical fractures were significantly reduced in the high-dose group, compared with placebo (34.4%, 29.9% and 28.8% reductions, respectively). Furthermore, the time to fracture was significantly longer in the high-dose group than in the placebo group for key nonvertebral fractures, all nonvertebral fractures and all clinical fractures, at 2 years.

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** clavicle, humerus, wrist, pelvis, hip and leg

Harris ST, et al. Ibandronate and the risk of non-vertebral and clinical fractures in women with postmenopausal osteoporosis: results of a meta-analysis of phase III studies. Current Medical Research and Opinion 24: 237-245, No. 1, Jan 2008

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