



Data Show Medication Adherence is an Important Factor in the Treatment of Postmenopausal Osteoporosis

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Poor Adherence Can Lead to Higher Fracture Risk, More Frequent Hospital Admissions and Higher Medical Costs

DENVER, Sept. 13 /PRNewswire-FirstCall/ -- Amgen Inc. (Nasdaq: AMGN) today announced the presentation of data highlighting the links between medication satisfaction, adherence to therapy and fracture risk reduction among women with postmenopausal osteoporosis. The data were presented at the 31st annual meeting of the American Society for Bone Mineral Research (ASBMR).

"These data enhance our understanding of why many women discontinue treatment with current osteoporosis therapies, suggesting that convenience, effectiveness and side effects are important factors," said David Macarios, executive director for Global Health Economics at Amgen. "This new research reinforces the view that poor adherence can lead to negative outcomes including fractures, more frequent hospital admissions and higher medical costs."

Impact of Treatment Satisfaction (Perceived Benefits, Convenience, Side Effects) on Persistence with Postmenopausal Osteoporosis Therapy (Abstract No. SA0317)

Data collected from the *Prospective Observational Scientific Study Investigating Bone Loss Experience (POSSIBLE US(TM))* study showed that women who were less satisfied with their osteoporosis therapy were more likely to discontinue or switch their therapy compared to women who were more satisfied. (i) The prospective registry study enrolled 5,015 patients, the majority of whom were using an oral bisphosphonate at the time of study entry, and used the self-administered Treatment Satisfaction Questionnaire for Medication every six months to measure patient satisfaction with convenience, perceived effectiveness and side effects of therapy.

In this study, in which women self-reported their adherence to therapy, 25 percent (n=2402) reported discontinuation of their initial therapy within the first study year and an additional 7 percent reported that they switched from their initial therapy to another therapy. Women who were less satisfied with the convenience of their treatment were approximately 39 percent (adjusted HR 0.72) more likely to discontinue or switch their initial therapy, and women who were less satisfied with the effectiveness of their treatment were approximately 25 percent (adjusted HR 0.80) more likely to discontinue or switch. Furthermore, among women reporting moderate or severe treatment side effects, those who were less satisfied with treatment were 61 percent (adjusted HR 0.62) more likely to discontinue or switch.

Comorbidities, Bone Loss and Concomitant Medication Use in European Postmenopausal Women: POSSIBLE EU((R)) (Abstract No. MO0339)

Amgen also reported preliminary findings from a similar longitudinal cohort study, the *Prospective Observational Scientific Study Investigating Bone Loss Experience in Europe (POSSIBLE EU((R)))*, designed to describe the characteristics and management of postmenopausal women (N = 3,403) receiving bone loss medication in 5 countries in the European Union (France, Germany, Italy, Spain and the UK). Data were collected via physician-completed questionnaires at study entry and at 3-month intervals for 1 year.

Interim analysis showed that at study enrollment, the majority (84 percent) of patients were receiving oral bisphosphonate therapy and the largest proportion (31 percent) of patients received 5 or more concomitant medications. Upper gastrointestinal (GI) problems were common in this population, particularly in patients who switched bone loss medication at baseline. In this European population, comorbid conditions and the use of multiple medications were common. POSSIBLE EU analyses are ongoing exploring the association between patient characteristics, treatment satisfaction and adherence.

Impact of Adherence to Osteoporosis Medication on Risk of Fracture (Abstract No. SA0368) and Association Between Adherence to Osteoporosis Medication and Inpatient Stays and Medical Services Costs (Abstract No. SU0387)

Two retrospective analyses were conducted from a study that examined the impact of medication adherence on risk of fracture, hospitalization and healthcare costs among women initiating osteoporosis medication. The two analyses used medical and pharmacy claims from 32,573 women who initiated treatment on alendronate, risedronate, teriparatide, ibandronate or raloxifene in a large U.S. health plan. One analysis showed that patients with low adherence had a 20.4 percent higher risk of fracture than did patients with high adherence (p