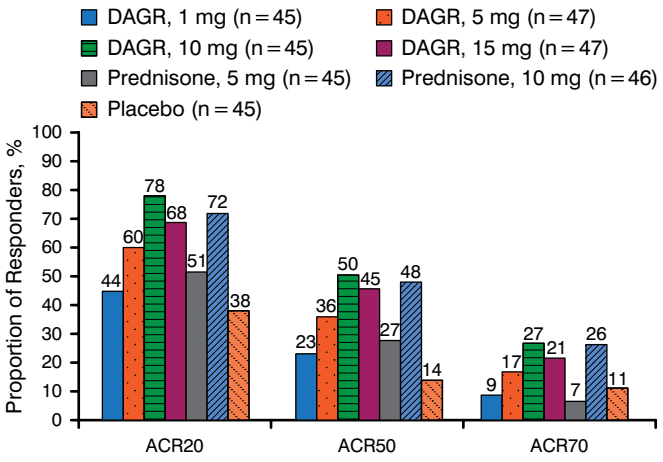
Figure 1. ACR20/50/70 Responses at Week 8 With DAGR, Prednisone, and Placebo



ACR20/50/70, American College of Rheumatology 20%/50%/70% improvement response criteria; DAGR, dissociated agonist of the glucocorticoid receptor.

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partial suppression with prednisone at 5 and 10 mg. No clinical symptoms of adrenal insufficiency were reported at any time. Prompt recovery of the hypothalamic-pituitary-adrenal axis was evident at week 13 in all patients.

The totality of the data demonstrates superior efficacy of DAGR 10 and 15 mg compared with placebo and comparable efficacy compared with prednisone 10 mg, concluded Dr Strand. All DAGR doses were noninferior to prednisone 5 mg on bone formation biomarkers.

Preventing GC-Induced Bone Loss in Women With RA

Written by Jill Shuman

Glucocorticoids (GCs) are a commonly prescribed treatment for patients with rheumatoid arthritis (RA). However, the long-term use of these agents in postmenopausal women is associated with an increased risk of osteoporosis and fracture. Therefore, the prevention of GC-induced osteoporosis has become an important goal in treating women with RA.

Kichul Shin, MD, PhD, Seoul Metropolitan Government–Seoul National University Boramae Medical Center, Seoul, South Korea, presented data from the now complete randomized, double-blind phase 4 clinical trial, Efficacy of Monthly Ibandronate in Women With RA and Reduced Bone Mineral Density Receiving Long-Term Steroids [NCT01287533]. Ibandronate is a bisphosphonate currently approved for the prevention and treatment of women with osteoporosis, but little is known about its potential to prevent GC-induced osteoporosis. Therefore, this study was designed to determine if administration of oral ibandronate once per month would be effective in preventing GC-induced osteoporosis in women with RA and reduced bone mineral density (BMD).

The study included 167 women with RA from 13 centers in South Korea who were randomized to receive either oral ibandronate 150 mg every 4 weeks (n = 86) or placebo (n = 81). All women had been taking GCs for at least 3 months prior to enrollment and had L1-4 T-scores of < –1.0 to –2.5 or higher as measured by dual-energy x-ray absorptiometry (DEXA). The women received 1500 mg of calcium carbonate daily as well as cholecalciferol 400 IU. The mean age of the women was 54.49 years in the ibandronate group and 55.11 years in the placebo group; the majority of women in either group did not smoke, drink alcohol, or have a family history of osteoporosis. The average duration of GC use was 2 years with an average cumulative dose of about 50 g.

The primary outcome measure was the percent change of the L1-4 T score at 48 weeks from baseline. Other outcome measures included L1-4 BMD changes at 48 weeks compared with baseline, incidence of fracture in both groups, and the presence of any safety signals. The primary outcome measure was assessed at 48 weeks as both a modified intention-to-treat (mITT) analysis (n = 149) and a per-protocol (PP) analysis (n = 116).

DEXA measurement showed a significant reduction in percentage of bone loss among the women who received ibandronate in both the mITT and the PP analyses ($P = .0001$, both). As well, there were significant L1-4 BMD reductions at 48 weeks compared with placebo in both the mITT and PP analyses ($P = .0001$, both). Importantly, there was no incidence of fracture in either the ibandronate or the placebo groups. Safety profiles, including adverse events such as gastrointestinal, cardiac, and vascular disorders, were comparable between the 2 groups.

In conclusion, monthly oral administration of the bisphosphonate ibandronate significantly reduced bone loss and increased BMD in women with RA on long-term GCs. These data suggest the need for longer follow-up studies to assess whether ibandronate is an appropriate long-term treatment for preventing GC-induced osteoporosis.