Denosumab May Suppress Bone Turnover in Ca

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

SAN ANTONIO — Monthly denosumab may prove to suppress bone turnover when patients with cancer metastatic to bone do not respond adequately to bisphosphonate therapy, Dr. Allan Lipton said at the Sixth International Meeting on Cancer-Induced Bone Disease.

The drug is a fully human monoclonal antibody to RANK ligand, inhibiting the differentiation and proliferation of osteoclasts, and thus reducing bone turnover. It is also being investigated for the treatment of postmenopausal osteoporosis.

Dr. Lipton presented the interim results of a phase II study in patients in whom zoledronic acid or pamidronate failed to adequately suppress urinary markers of bone turnover.

Adequate suppression is important in these patients not only because it helps prevent fractures, but because it delays tumor progression and improves survival.

The interim analysis included 49 patients who have finished the 25-week trial. Eventually the study will enroll 135 patients.

Of initial patients, 40% had metastatic breast cancer, 40% had metastatic prostate cancer, 10% had multiple myeloma, and the rest had other solid tumors. Most (60%) had been treated with zoledronic acid; the rest had been on pamidronate. All patients still had urinary N-telopeptide (NTx) levels of more than 50 nmol/mmol creatinine.

Overall, more patients on denosumab than on bisphosphonates experienced a decrease in their urinary NTx levels to less than 50 nmol/mmol creatinine (76% vs. 38%). The difference was still significant when the groups were divided according to baseline NTx levels.

Among those who started with a level of 51-100 nmol/mmol creatinine, 87% of those on denosumab achieved the target compared with 50% of those taking bisphosphonates.

Denosumab is not yet approved for use in the United States or Europe. The sponsor is Amgen Inc. Dr. Lipton, of the Penn State Milton S. Hershey Medical Center, Hershey, Pa., is a consultant for the company.

Low BMD Linked To Myocardial Ischemia Risk

CHICAGO — Low bone mineral density was associated with exercise-induced myocardial ischemia in a retrospective analysis of more than 1,000 patients.

These are the first study results to show a link between bone mineral density (BMD) and exercise-induced ischemia using exercise echocardiography, Dr. Aaron M. From, of the Mayo Clinic in Rochester, Minn., and his associates said in a poster presented at the annual scientific sessions of the American Heart Association.

The analysis included all patients who underwent dual-energy x-ray absorptiometry of the femoral neck at the Mayo Clinic during August 1998-October 2003 who also had an exercise echocardiography examination soon after the bone scan.

Of 1,142 patients who fulfilled these criteria, the group included a total of 643 patients with low BMD, including 126 with osteoporosis and 517 with osteopenia. The remaining 499 patients had BMDs in the normal range.

The analysis showed that patients with the lowest BMD (a T score of –4 to –3) had the shortest exercise duration, 5.8 minutes, while patients with the highest T scores (+1 to +2) had the longest exercise duration, 8.9 minutes.

In a multivariate analysis, the risk of having exercise-induced ischemia rose by 22% for every one-point decrease in T score, a statistically significant difference, Dr. From and his associates reported in the poster.