



## **Corticosteroid Therapy & Calcium and Vitamin D Supplementation**

Osteoporosis is a metabolic bone disorder in which the rate of bone resorption accelerates while the rate of bone formation slows down, causing a net loss of bone mass. It affects approximately 20 to 25 million people in the United States. A great deal of research has linked corticosteroid use with osteoporosis. When prednisone, a type of corticosteroid, exceeds 7.5 mg/day, bone loss will occur. Therefore, it is important for those individuals being treated with corticosteroids to include calcium and vitamin D supplements on a daily basis. The addition of these supplements can help prevent the development of osteoporosis. It is important to get an initial measurement of bone density, and a follow-up measurement every 1-2 years. A DEXA scan (Dual-energy x-ray absorptiometry) is considered the “gold standard” for measuring bone mass.

### **Risk Factors for Developing Osteoporosis During Corticosteroid Treatment**

- Age
- Previous osteoporotic fracture
- Family history of osteoporosis
- Hypogonadism
- Smoking
- Low body weight
- Poor health and/or frailty
- Inadequate calcium intake and/or vitamin D intake
- Inadequate exercise
- Alcohol intake > 2 drinks per day

### **Recommendations**

- Eat a well-balanced diet
- Smoking cessation
- Limit alcohol consumption
- Engage in weight-bearing exercises at least 2 to 3 times a week for 30 minutes. Examples of good weight bearing exercises include: walking, jogging, jump roping and strength training. It is important to consult your doctor before beginning any exercise program.
- Calcium supplement – 1500 mg daily\*
- Vitamin D<sub>3</sub> supplement – 400 to 800 IU daily \*

\*Based on normal renal function