M373
Characteristics of Non-responders to 5-years of Hormone Replacement Therapy (HRT). The Danish Osteoporosis Prevention Study (DOPS). L. Jensen,1 P. Vestergaard,1 C. L. Tofteng,1 N. Kolthoff1, L. S. Sølberg1, K. B€a€en2, L. Moskilde1.1Dept of Endocrinology and Metabolism, University of Aarhus, Aarhus, Denmark. 2The Osteoporosis Research Centre, Hvidovre Hospital, Hvidovre, Denmark. The purpose of the present study was to evaluate the characteristics of non-responders to 5-years of hormone replacement therapy (HRT) in the Danish Osteoporosis Prevention Study (DOPS). 5,436 women were included and were randomized to 5-years of HRT or placebo. The primary endpoint was the occurrence of a spine fracture. Non-responder status was defined as no HRT uptake before 2 years or after 3 years. The study was followed for 4 years. The results showed that the non-responders were more likely to be older and have a lower bone density. The non-responders were also more likely to have a family history of osteoporosis. In conclusion, the characteristics of non-responders to 5-years of HRT were different from those of responders, and the identification of these characteristics could help in improving the treatment of osteoporosis.

M374
51. Osteoporosis Fracture Tracking Study: Medical Care is Often Delayed for Patients of Orthopaedic Surgeons. J. G. Skeetor, Utah Bone and Joint Center, Dept of Orthop Surg, U of Utah, Salt Lake City, UT, USA.

Patients with osteoporotic fractures typically do not receive subsequent medical treatment for osteoporosis. We hypothesized that even if patients with osteoporotic fractures were specifically referred to their primary care providers (PCPs), the majority would not be treated within 84 days (12 weeks) of fracture. We evaluated the effectiveness of PCP referrals in osteoporotic patients. Osteoporotic fractures were identified for each patient completing the study. Patients who qualified were 10-year old on average. In this study, 84% of the patients were referred to their PCP within 84 days of fracture. However, only 37% of the patients actually received treatment. The results of this study suggest that medical care is often delayed for patients of orthopaedic surgeons.

M375
Subsidizing Medications Does Not Ensure the Use of Potent Osteoporosis Drugs Following Low-Impact Fractures. Y. L. Y. H. Castilh, D. Y. Boneh1.1Endocrinology, Soroka Medical Center, Beer Sheva, Israel, 2Medicine, Soroka Medical Center, Beer Sheva, Israel.

Recently, potent anti-osteoporotic drugs (bisphosphonates, and SERMs) were introduced into the National Health Basket in Israel for the treatment of all osteoporotic women and men with severe osteoporosis. We carried out the present study to evaluate the effect of subsidizing osteoporotic drugs on the use of osteoporosis drugs in patients following low-impact fractures. Hospital charts of women and men aged 50 and older who sustained a fracture in the emergency department (mostly peripheral fractures) were reviewed. The review showed that the use of potent anti-osteoporotic drugs (bisphosphonates and SERMs) was significantly higher in the group of patients who were referred to their primary care providers. However, even in the post-baseline period, the use of potent anti-osteoporotic drugs was lower compared to the pre-baseline period. This suggests that the use of potent anti-osteoporotic drugs is not ensured even when they are subsidized.

M376
Phytoestrogen-Rich Herbal Formula For Prevention Of OVX Induced Bone Loss In Rats. L. Qin, F. Zhang, W. Y. Hong2, N. A. Dzubashnik3, P. C. Leung2.1Orthopaedics & Traumatology, Chinese University of Hong Kong, Hong Kong, China. 2Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong, Shatin, Hong Kong, China. 3Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong, Shatin, Hong Kong, China.

The purpose of this animal experimental study was to investigate a phytoestrogen-rich herbal formula (genistein and daidzein at 25mg/amp) and calcium supplementation for prevention of OVX induced bone loss. In this study, phytoestrogen-rich herbal formula was given to rats subjected to OVX. Results showed that the herbal formula was effective in preventing bone loss induced by OVX.

Table 1: Phytoestrogen-rich herbal formula and/or dietary calcium in prevention of OVX induced bone

<table>
<thead>
<tr>
<th>Group</th>
<th>BMDeasured by IMA (mg/cm2)</th>
</tr>
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<tbody>
<tr>
<td>Sham</td>
<td>191±10*</td>
</tr>
<tr>
<td>OVX</td>
<td>166±7</td>
</tr>
<tr>
<td>OVX+XLG</td>
<td>184±11**</td>
</tr>
<tr>
<td>OVX+Calcium</td>
<td>176±11*</td>
</tr>
<tr>
<td>OVX+XLG+Calcium</td>
<td>185±11**</td>
</tr>
</tbody>
</table>

Disclosures: L. Qin, Hong Kong BGC grant 2001/2.

M377
PremPro vs. FemHRT in Cynomolgus Monkeys. C. J. Lee, Pathology, Wake Forest University School of Medicine, Winston-Salem, NC, USA.

Women use FemHRT (estrogen, progestin and noradrenaline) and PremPro (estrogen, medroxyprogesterone). The effects of these two treatment modalities on bone were examined in ovx-ectomized cynomolgus monkeys (Macaca fascicularis). Sixty female cynomolgus monkeys were imported from Indonesia, ovx-ectomized and randomized into 3 groups: 1) placebo (O VX): 2) PremPro 3 (human equivalent of 1mg noradrenaline and 5 micrograms ethinyl estradiol) and 3) PremPro (human equivalent of 2mg medroxyprogesterone and 0.625 mg conjugated equine estrogen). Treatment lasted 1 year. Serum alkaline phosphatase (ALP) levels and fibular bone mineral density and cortical thickness (determined by pQCT) were measured at 12 months. Both PremPro and FemHRT groups had significantly lower ALP levels compared to OVX (OVX: 181±9, FemHRT: 171±9, PremPro: 97±0, p<0.0001). PremPro-treated monkeys had greater cortical density (CRITEND 1000±1.5±0.01 compared to OVX CRITEND 1000±1.2±0.02) and OVX CRITEND 1.5±0.01 (p<0.002). FemHRT-treated animals did not differ from either OVX or PremPro-treated animals in CRITEND (1000±12±0.01 CRITEND 1.5±0.01). PremPro had a positive effect on bone mass in monkeys. Although, FemHRT treatment suppressed ALP levels, FemHRT did not induce significant changes in bone mass.

Disclosures: C. J. Lee, Pfizer 2.