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(54) Title: COMBINATION FOR INHIBITING BONE RESORPTION COMPRISING A BISPHOSPHONATE (ALENDRONA)
AND A VITAMIN D (CHOLECALCIFEROL)

(57) Abstract: Disclosed are compositions and methods for preventing, inhibiting, reducing and treating conditions and diseases associated with abnormal bone resorption in mammals, including for example osteoporosis. Embodiments of compositions of the invention comprise a pharmaceutically effective amount of alendronate and vitamin D₃ suitable for once-weekly dosing. Compositions and methods of the invention provide vitamin D nutrition during bisphosphonate treatment to facilitate normal bone formation and mineralization while minimizing the occurrence of or potential for the complications associated with vitamin D insufficiency, such as hypocalcaemia and osteomalacia. Also disclosed are methods for manufacturing compositions of the present invention, for measuring stability and degradation of those compositions, and for measuring blood plasma levels of vitamin D.

WO 2005/117906 A1