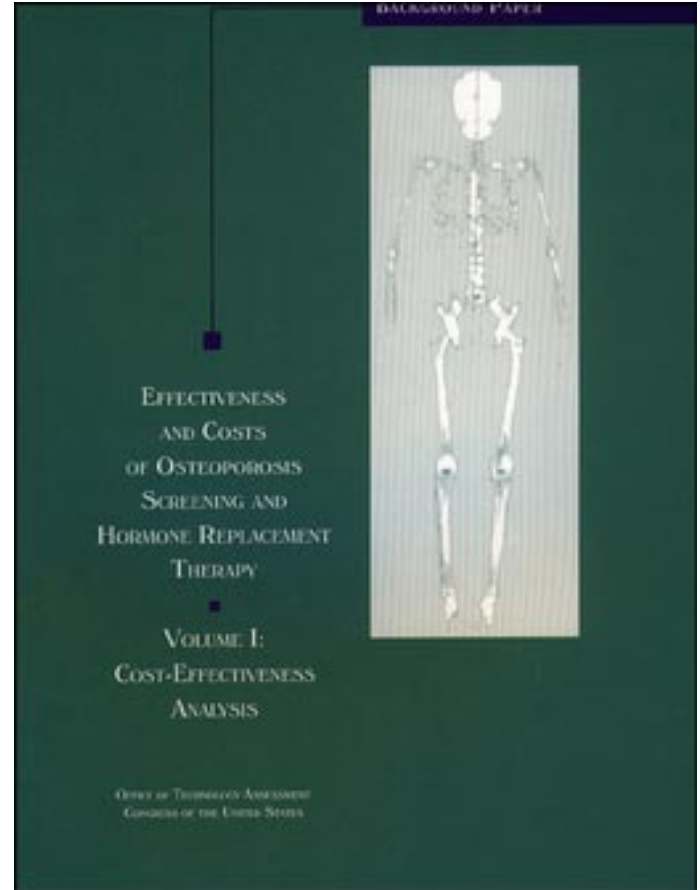


*Effectiveness and Costs of Osteoporosis  
Screening and Hormone Replacement  
Therapy, Vol. I: Cost-Effectiveness Analysis*

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# Foreword

**M**enopause typically occurs in women around age 50. Accompanying this life event is a decline in estrogen levels and an increase in the rate of decline in women's bone density. This rapid bone loss increases women's subsequent risk of developing osteoporosis, a disease characterized by low bone density and increased bone fragility. Among the most serious consequences of osteoporosis is fracture of the hip, which may result in substantial morbidity, prolonged hospitalization, and death. Estrogen can prevent bone loss after menopause by replacing the body's own estrogen. Given the serious consequences of osteoporosis, some osteoporosis experts have recommended that women have their bone mineral density measured at the time of menopause and those with the lowest bone mineral density be offered *hormone replacement therapy*, comprising estrogen given alone or in combination with the hormone progestin.

This background paper, *Effectiveness and Costs of Osteoporosis Screening and Hormone Replacement Therapy*, assesses the medical benefits and costs of both screening and hormone replacement therapy. It is divided into two volumes. The first volume, *Cost-Effectiveness Analysis*, presents the results of a model that estimates the cost per year of life gained from osteoporosis screening and hormone replacement therapy in postmenopausal women. The second volume, *Evidence on Benefits, Risks, and Costs*, provides the basis for the assumptions about the costs and effects of screening and hormonal replacement therapy used in the cost-effectiveness model.

This background paper is one of three documents resulting from OTA's assessment of policy issues in the prevention and treatment of osteoporosis. This assessment was requested by the Senate Special Committee on Aging, Senator Charles Grassley and Senator John Glenn, and the House Select Committee on Aging, Representative Olympia J. Snowe, Representative Benjamin A. Gilman, and former Representatives Brian J. Donnelly, Thomas J. Downey, and Patricia F. Saiki. Two background papers in this series have been issued, both in July 1994: *Public Information about Osteoporosis: What's Available, What's Needed?*, and *Hip Fracture Outcomes in People Age Fifty and Over*.



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