

Abstracts

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A Markov model, based on data from randomised trials, was developed to compare the 5 alternative interventions: chlorthalidone, propranolol, amlodipine, silazapril and losartan. A cost-effectiveness analysis was performed, based on numbers-needed-to-treat (NNT) derived from a published metaanalysis. The primary outcome measure was the NNT to prevent one fatal cardiovascular disease event and the secondary outcome measure was the NNT to prevent one stroke (fatal and nonfatal). Cost data were derived from public sources. Only direct costs were considered in the analysis. All costs were calculated from the perspective of the public insurance system organisations, in 2003 Euros. Future costs and clinical benefits were discounted at 5%. The time horizon was 5 years. Sensitivity analyses tested the effect of modifying the input parameters on the economic endpoints. **RESULTS:** No significant differences in efficacy presented among drug groups in mild to moderate hypertension. The NNT for 5 years to prevent one fatal cardiovascular disease event was 135.27 patients and to prevent one stroke was just 64.05 patients. The estimated total cost to prevent one fatal cardiovascular disease event was 78,121.40€, 84,040.63€, 118,825.36€, 103,098.82€, and 168,485.60€ for chlorthalidone, propranolol, amlodipine, silazapril and losartan respectively. The estimated total cost to prevent one stroke was 36,990.28€, 39,793.02€, 56,263.50€, 48,817.03€ and 79,777.50€ respectively. Sensitivity analysis confirmed the superiority of chlorthalidone against the other antihypertensive agents. **CONCLUSIONS:** In mild to moderate hypertension, chlorthalidone is more cost-effective than propranolol, amlodipine, silazapril and losartan and should be considered as the first choice of antihypertensive therapy.

PCV20

COST EFFECTIVENESS OF ANTIHYPERTENSIVE MONOTHERAPY WITH PERINDOPRIL OR ENALAPRIL IN ELDERLY PATIENTS FROM THE THIRD PARTY PAYER PERSPECTIVE
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OBJECTIVE: To assess the economic consequences of antihypertensive treatment with perindopril and enalapril in the elderly, from the third-party payer perspective. **METHODS:** The clinical, epidemiological and economic data were derived from a scientific project conducted among GPs' in the whole of Poland, and concerned 159 patients over 65, treated in mono-therapy within the last year. Calculations were made from the third-party payer perspective. The retrospective approach was applied. The direct medical costs of: drug reimbursement, physicians' consultations, hospitalisation, laboratory and diagnostic tests were identified and calculated. Effectiveness was measured by the percentage of the patients with appropriately controlled blood pressure (BP < 140/90 mmHg) in accordance with JNC VII guidelines. **RESULTS:** The measured effectiveness of the mono-therapy was 43% in the perindopril group and 24% in the enalapril group. Cost of the hospitalisation in the perindopril group was 54.95% lower than in the enalapril group, which is equivalent to 89.52€ saved per patient per year. Physicians' consultations cost reduction in the perindopril group amounted to 15.18€ (21.59%) per patient per year. There was no significant difference in the costs of laboratory and diagnostic tests between the compared treatments (30.93€ and 27.28€ respectively). Treatment with perindopril requires additional payer's expenditure of 18.95€ per patient per year. Total costs measured from the third-party payer perspective in the perindopril group, were 30.08% lower than in the enalapril group which equalled 82.10€ saved per each patient per year. **CONCLUSION:** Taking third-

party payer perspective into consideration, mono-therapy with perindopril is superior to treatment with enalapril in elderly patients due to better blood pressure control and essential savings resulting mainly from the reduction of both hospitalisation and physicians' consultation costs.

PCV21

ECONOMIC EVALUATION OF VARIOUS ANTIHYPERTENSIVE MONOTHERAPIES IN GREECE

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OBJECTIVE: The purpose of this study was to compare the costs associated with the prescription of various initial monotherapies for mild to moderate hypertension in Greece, when following 2003 European Society of Hypertension—European Society of Cardiology guidelines. In these guidelines, it is concluded that the 5 major classes of antihypertensive agents are suitable for the initiation and maintenance of antihypertensive therapy because of their similar protection against total and cardiovascular mortality. **METHODS:** A cost-minimization analysis was performed, based on numbers-needed-to-treat (NNT) derived from a published metaanalysis. An economic model was developed to compare the 5 alternative interventions: diuretics (chlorthalidone), β -blockers (propranolol), calcium-channel blockers (amlodipine), angiotensin-converting enzyme inhibitors (silazapril) and angiotensin receptor blockers (losartan). Cost data were derived from public sources. Only direct costs were considered in the analysis including the cost of drug therapy, monitoring, treating side-effects, poor compliance and switching. All costs were calculated from a third-party payer perspective, in 2003 Euros. Future costs were discounted at 5%. The time horizon was 5 years. **RESULTS:** The total cost to achieve and maintain hypertension control was 666.21€, 716.69€, 1013.32€, 879.21€, and 1436.82€ for chlorthalidone, propranolol, amlodipine, silazapril and losartan respectively. The drug acquisition cost was 20.85%, 29.98%, 53.30%, 45.65%, and 68.22% respectively. Drug acquisition cost and cost of laboratory monitoring were more than 85% of the total treatment cost for all the antihypertensive agents. Sensitivity analysis tested the effect of modifying the prices of the antihypertensive agents and laboratory monitoring, the doses of the alternative drugs and the compliance rate on the economic endpoints and confirmed the superiority of chlorthalidone. **CONCLUSIONS:** In mild to moderate hypertension, the 5 major classes of antihypertensive agents provide similar protection against total and cardiovascular mortality, but diuretics are cheaper than the others. Diuretics should be considered as the first choice of antihypertensive treatment.

PCV22

THE COST EFFECTIVENESS OF HORMONE REPLACEMENT THERAPY (HRT) FOR WOMEN WITH MENOPASUAL SYMPTOMS IN SWEDEN

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OBJECTIVES: Recent randomised studies have indicated that Hormone Replacement Therapy (HRT) does not reduce the risk of cardiovascular events neither in secondary nor in primary prevention. Evidence of the effect of HRT on breast cancer has been inconclusive, but now the general belief is that the risk of breast cancer increases. In line with the results found in the Women's Health Initiative (WHI) the cost-effectiveness of HRT therapy,