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A PHARMACOECONOMIC EVALUATION TO MAKE DECISION: IS THE USE OF SIMVASTATIN 10 MG AS AN OTC MEDICATION COST-EFFECTIVE FOR THE PRIMARY PREVENTION OF STROKE AMONGST WOMEN IN IRAN?

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Background and aims: Cardiovascular disease (CVD) is one of the most important causes of death and disability in Iran. Stroke is a serious cardiovascular situation which poses many problems for both patients and societies. Considering the pleiotropic effects of statins and their safety, particularly in low doses, as well as the increasing trend of stroke in Iranian populations, the economic evaluation techniques were used in this study to support decision-making regarding the use of simvastatin 10mg as an OTC drug for the primary prevention of stroke among women with an average CVD risk in Iran.

Methods: A semi-Markov model was developed in this study to investigate both cost-utility (using QALY or Quality-Adjusted-

Life-Years) and cost-effectiveness (using LYG or Life-Years-Gained). Different discount rates (0%, 3% and 7.2%) used in various scenario analyses. The time horizon was life-long and the target population was women older than 55 years with average risk CVD (15% for 10 years). Two sensitivity analyses techniques (one-way and probabilistic sensitivity analysis), were applied to test robustness of the results.

Results: In the base-case scenario the intervention of getting OTC statin for primary prevention was \$9118 per QALY and \$19016 per LYG per person with annual discounting rate of 0%.

Conclusion: In Iran no threshold has been determined but the results were compared with the threshold that WHO recommended (GDP per capita for Iran is \$5442.9 for 2014 by World Bank). Considering this threshold, the evaluated intervention could be considered cost-effective.