Abstract

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Title of Doctoral Thesis	**Health Economy and Outcomes Research in the Health Technology Assessment in the Czech Republic**

The aim of PhD thesis was to present on practical examples of cost-of-illness (COI), cost-effectiveness (CEA), cost-utility (CUA) and outcomes research analyses their application within current HTA (Health Technology Assessment) process of drug technologies in the Czech Republic.

HTA cover complex assessment of medicinal technologies/ interventions in terms of relative effectiveness, safety, health economic aspects (cost-effectiveness and budget impact) and ethical, social and legal aspects.

It was presented a methodology of COI studies and their practical application (as the inputs) into CEA, CUA analyses within selected diseases – rheumatoid arthritis (RA) and ankylosing spondylitis (AS). Moreover, it was presented concept of Markov cohort models used in CEA, CUA analyses in area of cardiovascular diseases, post-transplantation care, intensive care medicine and therapy of dementia. Within the CUA, it was interpreted a Probabilistic Sensitivity Analysis in relation to the variable Willingness to Pay (WTP) threshold.

Studies focused on measuring productivity loss and valuation of indirect costs, in concrete productivity costs in selected rheumatic diseases (RA, AS, Psoriasis and Psoriatic arthritis) were presented, too. It was also discussed the issue of indirect costs and their relevancy within HTA process in other countries.

The case of a drug technology, demonstrating the importance of clinical and patient reported outcomes (PRO) data collection in the setting of real clinical practice, was presented. Since, all of these data could be subsequently used as a tool for value demonstration for managed entry of the drug. This approach could be used for technologies, which reveal some uncertainty in outcomes (evidence) or costs from regulator or payer perspective.

Basic aspects and issues of health economics of cystic fibrosis as the rare disease were discussed together with the whole HTA concept of technologies for treatment of rare diseases.

It was concluded that further development and cultivation of the HTA environment, in particular comparative/ relative effectiveness, COI, CEA, CUA analyses and health related quality of life aspects and other PRO are essential in terms of efficient, fair and economical health care system.