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Title:	COST-EFFECTIVENESS COMPARISON OF TENSION-FREE MESH REPAIR VS. TENSION SUTURE REPAIR METHODS OF INGUINAL HERNIA IN SLOVAKIA
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OBJECTIVES:The objective of this study was to compare the cost-effectiveness of tension-free mesh and tension suture methods of inguinal hernia repair in Slovakia, from hospital and the payer perspective.

METHODS: Cost effectiveness of open mesh vs open non mesh was modeled with a Cohort Markov model. Model simulation runs in yearly cycles up to 15 years. Transition probabilities were derived from systematic review and other published sources. Costs were collected from two hospitals and from the payer in Slovakia. Utility values were extracted from the published sources. Both costs and outcomes were discounted annually at 5%. In probabilistic sensitive analysis simulations were repeated 10000 times. CEAC curves were generated as a result of simulation for all scenarios.

RESULTS:Over a 5 and 15 year period open mesh provides greater benefits in terms of more QALYs and fewer recurrences than open non-mesh. When the costs from a payer's perspective are used the open mesh option is the dominant technology over open non mesh option (equal payment for open mesh and open non mesh options). The cost per one additional QALY is 1230 in a 5 years time horizon and the open mesh is the cost effective option in a 15 years time horizon from a hospital perspective. Cost per one recurrence avoided is 82 in the 5 years time horizon and the open mesh is the dominant option in the 15 years time horizon from a hospital perspective. Results in the probability sensitivity analysis are very similar to deterministic analysis.

CONCLUSION: Findings suggest open mesh hernia repair method as a very cost effective therapy from both hospitals and payers perspectives for the inguinal hernia treatment in Slovakia.