

# COST-UTILITY ANALYSIS OF DIENOGEST VERSUS GnRH ANALOGUE IN THE TREATMENT OF ENDOMETRIOSIS-ASSOCIATED PELVIC PAIN IN SLOVAKIA

Lukáč M.<sup>1,2</sup>, Knight C.<sup>3</sup>, Bielik J.<sup>4</sup>, Tomek D.<sup>5</sup>, Foltán V.<sup>6</sup>, Bojnický M.<sup>2</sup>, Kováč A.<sup>2</sup>

<sup>1</sup>Bayer s.r.o., Bratislava, Slovak republic, <sup>2</sup>Slovak Medical University, Bratislava, Slovak republic, <sup>3</sup>RTI Health Solutions, Sheffield, UK, <sup>4</sup>Trencin University, Trencin, Slovak republic, <sup>5</sup>Slovak Society for Pharmacoeconomics, Bratislava, Slovak republic, <sup>6</sup>Comenius University, Bratislava, Slovak republic

## OBJECTIVES

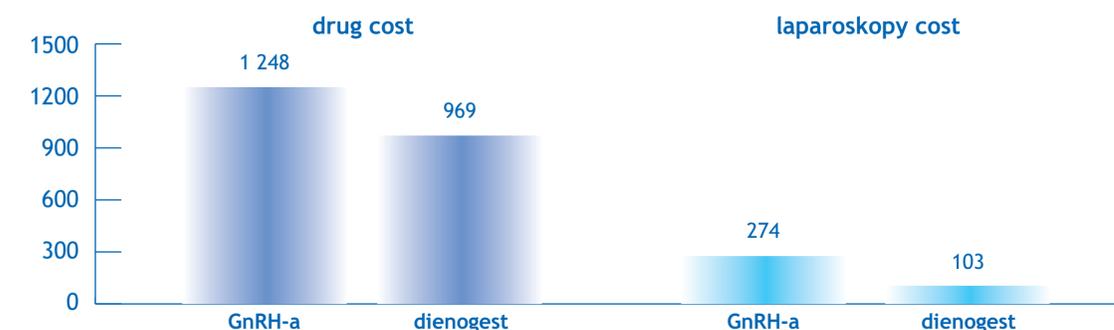
To estimate the cost effectiveness of dienogest versus GnRH analogue (GnRH-a) for the treatment of endometriosis-associated chronic pelvic pain in Slovakia from a payer perspective.

## METHODS

A cost-utility Markov model based on results of randomized controlled trial (AU19) was adapted to a Slovakian setting. The AU19 trial, which compared dienogest and GnRH-a (leuprolide) in the treatment of endometriosis-associated chronic pelvic pain over a 6 month period, showed no statistically significant differences in response rates. The dienogest annual relapse rate was derived from 52-weeks extension study, while relapse rates for the GnRH-a were derived from the literature. Local cost data was based on published price lists, clinical guidelines, product labels and expert opinion. QoL related utilities were derived from individual patient SF-36 scores from AU19 dataset. Effectiveness was measured in quality-adjusted life years (QALY). Time horizon was set at 2 years and a payers' perspective was adopted. Discount rate was 5% per year for both costs and effects according to valid Ministry of Health (MoH) guidelines for health economic evaluation. Both one-way and probabilistic sensitivity analyses were performed.

## RESULTS

Dienogest showed that it was cost-effective compared to a GnRH-a, with an overall cost reduction of 506 € and a QALY gain of 0.002 per patient. Cost reduction was due to both the differences in the average drug cost during the two year period (GnRH-a: 1 248 € and dienogest: 969 €) and the average laparoscopy cost (GnRH-a: 274 € and dienogest: 103 €). In probabilistic sensitivity analysis 69 % of simulations were below 18 000 €/QALY, which is the officially published threshold for willingness to pay in Slovakia.



## CONCLUSIONS

**Dienogest is a cost-effective alternative to GnRH analogue for the treatment of endometriosis-associated chronic pelvic pain in a Slovakian setting.**