

# Cost-effectiveness of growth hormone therapy in children in Russia

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## OBJECTIVES

**to determine the cost-effectiveness of GHT for GHD children in Russia as part of the 7HED federal program**

## METHODS

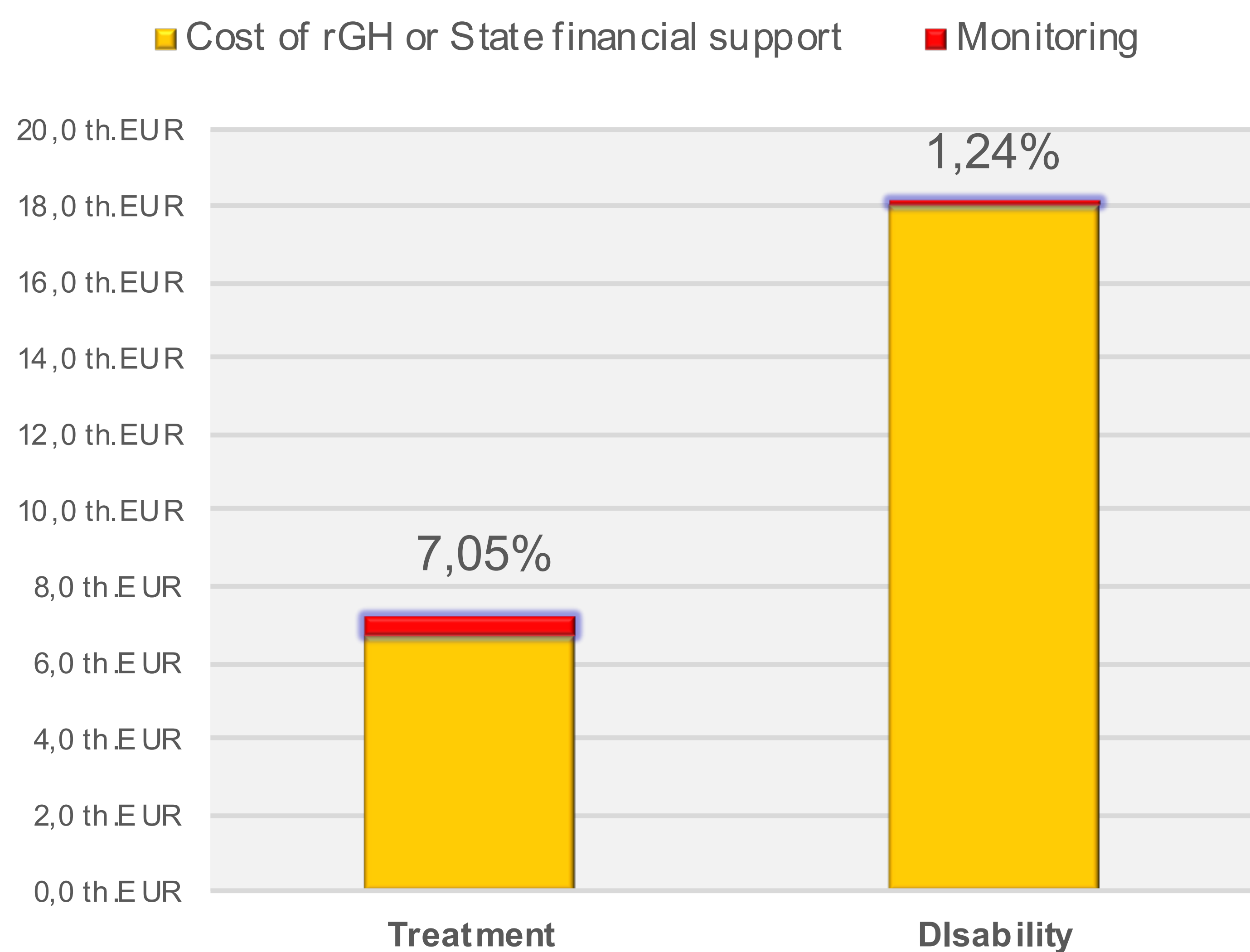
Data of 50 GHD children from four different regions of Russia was analyzed. All children were treated with GH within the 7HED program. Treatment duration of at least 6 years was an inclusion criterion.

- The amount of GH used and treatment costs (GH therapy and monitoring) were studied.
- Incremental costs were determined between GHT of a GHD child and a program with no pathogenic treatment, but a state-funded financial and medical support instead.

### Incremental costs

rGH costs	6760,0 Euro	↔	State financial support	17950,0 Euro
Medical monitoring	500 Euro		Medical monitoring	215,4 Euro
<b>Total</b>	<b>7260,0 Euro</b>		<b>Total</b>	<b>18 165,4 Euro</b>

**1590,0 Euro/ child/ year**  
**11110,0 Euro/ child per 6,95 years**



## RESULTS

The median treatment costs of a GHD child (dosage 0,033 mg/kg/day) during a period of 6,95 years were

- 6,26 [4,91; 7,87] thousand (th.) Euro or
- 0,91 th. Euro per child per year

With monitoring included the costs were calculated to be

- 6,76 th Euro per child during 6,95 years or
- 0,99 th. Euro per child/year of which
- 7,05% were monitoring costs

An analysis of the alternative program showed that the total costs of financial and medical support amounted to

- 17,95 th. Euro per child per 6,95 years or
- 2,58 th. Euro per child/year, of which
- 1,2% were monitoring costs

Therefore, the incremental costs between a standard GH treatment program with medical monitoring included and a program with no GH treatment, but financial support and medical monitoring are

- 11,11 th. Euro per child per 6,95 years or
- 1,59 th. Euro per child/year

## CONCLUSIONS

**This work has shown that the Russian federal "Seven high expenditure diseases" program is cost-effective for GH treatment of GHD children.**

## REFERENCES:

Vorontsova M.V. Thesis "Treatment of GHD children with recombinant GH: medical and economical aspects"

Vorontsova M.V., Nagaeva E.V., Naygovzina N.B. Economic and social aspects of pituitary dwarfism treatment with recombinant growth hormone // Problems of Endocrinology. 2017. 63. № 2. C. 82-91.