Cost-effectiveness of growth hormone therapy in children in Russia

Authors: Maria V. Vorontsova1, Elena V. Nagaeva1, Nelli B. Naygovzina2
1Endocrinology Research Centre, Department of Paediatric Endocrinology, Moscow, Russia
2Moscow State University of Medicine and Dentistry, Department of Public Health, Moscow, Russia

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.

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"