

COST OF ILLNESS OF ACROMEGALY IN BULGARIA - A REAL-WORLD DATA ANALYSIS

Kamusheva M¹, Rusenova Y¹, Vandeva S², Pesheva M¹, Ganov N¹, Elenkova A², Petrova G¹

¹ Department of Organization and economics of pharmacy, Faculty of Pharmacy, Medical University – Sofia, Bulgaria

² Department of Endocrinology, USHATE "Acad. Ivan Penchev", Medical University-Sofia, Sofia, Bulgaria

INTRODUCTION AND OBJECTIVES:

- Acromegaly is a rare disease related to significant clinical, social and economic burden for the patients and society as a whole [1].
- The aim is to evaluate the financial burden of acromegaly in Bulgaria and to compare it with previously published national based analyses.

METHODS:

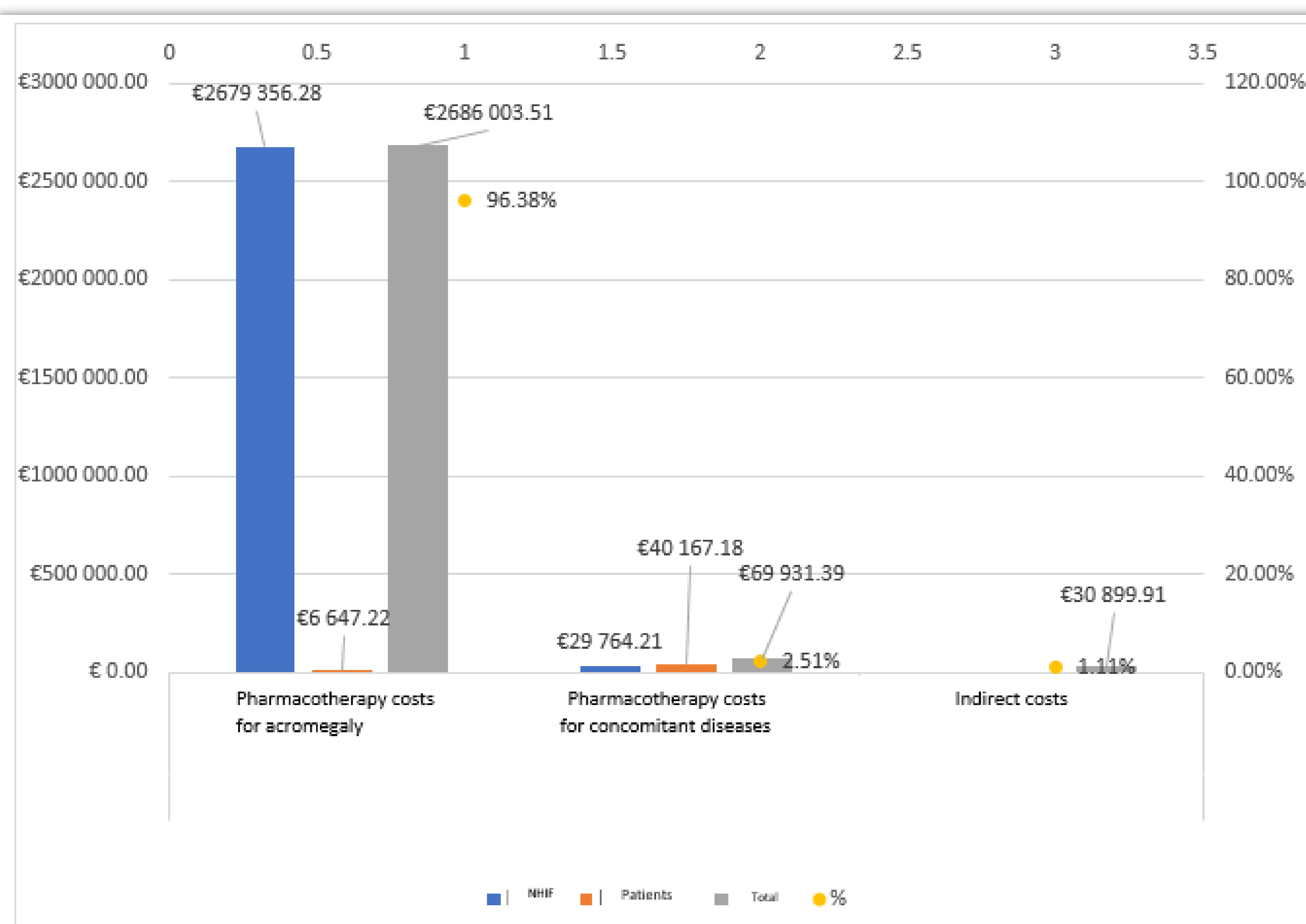
- Nationwide, retrospective, population-based study
- Participants: hospitalized patients with acromegaly in Bulgaria
- The analysis was based on real-world data for 179 patients collected in 2021.
- Direct (DC) (for medicines for acromegaly and treatment of concomitant diseases) and indirect (IDC) (days out of work due to illness) costs were calculated on the basis of a bottom-up approach.
- Having the number of hospital days for every patient the IDC due to absenteeism were calculated applying the human capital approach.

$$\text{Indirect costs} = \frac{\text{days out of work} \times \frac{\text{GDP}}{\text{capita}}(2021)}{\text{number of working days in 2021}}$$

- The total annual costs (TC) were presented as the sum of DC paid by the National Health Insurance Fund (NHIF) and the patients and IDC for all patients.

RESULTS:

- 62% female;
- Mean age: 54.64 years (SD = 13.07)
- 87% have prescribed concomitant medications;
- The TC were estimated to € 2 786 834.81 as the share of DC and IDC were 98.89 % and 1.11%, respectively;
- DC related to acromegaly therapy represented the highest financial impact (€2 686 003.51 or 96.38%) followed by the concomitant diseases' costs (€69 931.39 or 2.51%);
- The annual level of co-payment for acromegaly therapy was significantly lower than the reimbursed costs (€ 6 647.22 vs. €2 679 356.28 or 0.25% vs. 99.75%, respectively);
- In contrast, the financial burden for concomitant diseases' therapy was higher for the patients (€40 167.18 vs. €29 764.21 or 57.44% vs. 42.56%, respectively);
- The average annual per-patient DC and IDC were €15 568.91 which was slightly higher than a previous national based study conducted in 2018 [1].



CONCLUSIONS:

- This real-world evidence study is the first one which evaluates the financial burden of concomitant diseases for acromegaly patients in Bulgaria.
- Despite the pharmacotherapy costs for acromegaly outline the other costs, the Bulgarian patients have an adequate financial access to therapy provided through the existing reimbursement system in the country.

Table 1. Direct and indirect costs for acromegaly treatment in Bulgaria