ABSTRACT

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Title: Overview of the ex-factory prices development of medicinal products in the Czech Republic

INTRODUCTION:

This work focuses on the current ex-factory prices of medicinal products and their changes within a defined timeframe in the Czech Republic. The first objective was to analyze the ex-factory prices of medicinal products listed in the "List of Prices and Reimbursements for Medicinal Products and Foods for Special Medical Purposes" as of April 1, 2023, which was current at the time of working on the thesis.

The second objective was to analyze the changes in the ex-factory prices of medicinal products from 2012 to 2022.

METHODOLOGY:

For a detailed analysis of the current ex-factory prices, the dataset "SCAU230401v15.xls" from the "List of Prices and Reimbursements for Medicinal Products and Foods for Special Medical Purposes" as of April 1, 2023, was used. The analysis of included medicinal products involves tracking the type of ex-factory price determination, ATC group classification, price range of medicinal products, and the number of medicinal products within specific price ranges.

The analyzed medicinal products are further divided into 50 products with the lowest ex-factory prices and 50 products with the highest ex-factory prices, with a focus on the representation of ATC groups, ex-factory price determination types, and year of registration.

To address the second objective, data from the State Institute for Drug Control for individual months between 2012 and 2022 were used, employing the "Maximal Ex-factory Prices" dataset in xls format. For each month, the number of price increases and decreases of medicinal products compared to the origin ex-factory price is presented, highlighting the highest price decrease and increase in both absolute and relative values.

RESULTS:

The "List of Prices and Reimbursements for Medicinal Products and Foods for Special Medical Purposes" as of April 1, 2023, encompassed 8,229 medicinal products. The ATC group N (nervous system) was the most represented, with an average ex-factory price of 1220.88 CZK. The lowest average ex-factory price was observed in ATC group P (antiparasitic products, insecticides, and repellents) at 152.77 CZK. Medicinal products expressed in ATC group L (cytostatics and immunomodulatory agents) had the highest average ex-factory price of 28,909.32 CZK.

The lowest ex-factory price was associated with the medicinal product Agen 5mg 30 tbl nob at 13.47 CZK (Agen, 0002945, amlodipine, ex-factory price determination type: administrative procedure, year of registration: 2001). The highest ex-factory price was linked to the product Spinraza ith 12mg inj sol 1x5ml at 1,849,784.25 CZK (Spinraza, 0222208, nusinersen, ex-factory price determination type: administrative procedure, year of registration: 2017). Administrative procedure was the most common legal basis for determining ex-factory prices.

The development of maximum ex-factory prices from 2012 to 2022 was presented through the highest decreases and increases in absolute and relative values for each month within the defined timeframe. The greatest price decrease was noted for the medicinal product Zepatier 50mg/100mg 28 tbl at 205,286.6 CZK. In relative terms, the most significant price decrease was seen with the medicinal product Zalasta 20mg 28 dis at 94.56 %. The highest price increase was expressed by the medicinal product Stivarga 40mg 84 tbl at 53,161.11 CZK. In relative terms, the highest price increase was recorded for the radiographic contrast agent Lipiodol Ultra Fluide 1x10ml at 1,394.38% of the original price. The year 2016 witnessed the most price decreases of medicinal products, totaling 1,993 products, while the year 2012 had the highest number of price increases, encompassing 1,449 medicinal products.

CONCLUSION:

In the Czech Republic, ex-factory prices are determined through the system of maximum ex-factory price determination via administrative procedure, price announcement, or establishment based on extraordinary measures by the Ministry of Health. Administrative procedure is the most prevalent legal basis for ex-factory price determination. Changes in ex-factory prices are documented on a monthly basis by the national authority. The pricing framework for medicinal products in the Czech Republic is a crucial component of ensuring safe, high-quality, and effective medicinal products.

KEY WORDS:

prices, health insurance, regulation, State Institute of Drug Control