

USD1,543. The average LOS for both moderate and severe disease was 21 days, and the cumulative hospital costs were USD23,527 and USD26,731 respectively. The total costs incurred for COVID-19 were estimated at USD19,259,153.

**Conclusions:** COVID-19 has considerable economic implications. This study provided information as part of a health technology assessment in the hospital to inform evidence-based healthcare decisions.

## OP38 Evaluation Of A High-Cost Medicine For A Rare Disease: 16-Year Cohort Of Imiglucerase Use For Gaucher Disease In Brazil

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**Introduction:** Gaucher disease is a lysosomal storage disease of autosomal recessive inheritance that is caused by a deficiency of the enzyme glucocerebrosidase. This deficiency results in accumulation of the enzyme's main substrate in the lysosomes of macrophages, mainly in the spleen, liver, and bone marrow. In more severe cases it can affect the lung, kidneys, and central nervous system. There are two main treatments available for patients with Gaucher disease: enzyme replacement therapy and inhibition of substrate synthesis. The main enzyme replacement therapy used in Brazil is imiglucerase, an analog of the human  $\beta$ -glucocerebrosidase enzyme. Imiglucerase is produced by recombinant DNA technology using a cell culture derived from the Chinese hamster ovary. It has 497 amino acids and differs from the endogenous enzyme by an amino acid at position 495, where histidine is replaced by arginine. The objective of the study was to analyze the survival of patients treated for Gaucher disease with imiglucerase in Brazil from 2000 to 2015.

**Methods:** We constructed a retrospective cohort study of patients with Gaucher disease who received imiglucerase through the Brazilian National Health System from 2000 to 2015 using a national database created from the linkage of administrative databases.

**Results:** A total of 1,241 patients who received imiglucerase were included. The overall survival rates at one, ten, and 15 years were 98.7 percent (95% confidence interval [CI]: 98.1, 99.4), 92.3 percent (95% CI: 90.2, 94.4), and 89.4 percent (95% CI: 85.6, 93.3), respectively.

**Conclusions:** Our findings advance the understanding of the profile, survival, and risk factors of people with Gaucher disease, adding new data to the discussion regarding pharmaceutical therapies and patient care, and providing data for the development of new public health policies for the use of advanced, high-cost drugs for rare diseases.

## OP39 Real-World Evidence Of Post-Incorporation Use Of Monoclonal Antibodies For Psoriasis In The Brazilian Public Health System

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**Introduction:** Psoriasis is an immune-mediated chronic inflammatory disease that can affect the skin, joints, and nails. The treatment of the disease is offered by the Brazilian Public Health System (SUS) in accordance with the guidelines of the Ministry of Health. The aim of this study was to analyze real-world data (RWD) on the implementation and use of monoclonal antibodies (mAbs) for the treatment of psoriasis in the SUS.

**Methods:** This is a descriptive study that used national administrative data on drug dispensing from the Open Room for Health Intelligence Situation (SABEIS-SUS) from October 2019 to December 2021. Adult individuals ( $\geq 18$  years) with vulgar (L40.0), generalized pustular (L40.1), gutata (L40.4) and other (L40.8) psoriasis who used the mAbs adalimumab, etanercept, risankizumab, secukinumab and ustekinumab were included.

**Results:** The year of implementation of mAbs for the treatment of psoriasis in the SUS was October 2019 (adalimumab, etanercept and secukinumab) and May 2020 (ustekinumab). Risankizumab was implemented in April 2022. The number of individuals using mAb grew from 366 in 2019 to 10,146 in 2021. In 2019, 2020 and 2021, the proportion of individuals using each mAbs was 62.3 percent, 46.2 percent and 35.4 percent (adalimumab), 7.9 percent, 3.3 percent and 2.7 percent (etanercept), 29.8 percent, 33.8 percent and 30.5 percent (secukinumab), 0 percent, 16.7 percent and 31.4 percent (ustekinumab), respectively.

**Conclusions:** The number of mAbs users has greatly increased from 2019 to 2021, which may indicate a successful implementation of the psoriasis treatment in SUS. Most individuals used adalimumab in the year of the first implementation. However, the proportion of users of this mAb has greatly decreased after the implementation of ustekinumab. This reduction should not be so expressive since adalimumab and ustekinumab are recommended in different lines of treatment. The low proportion of etanercept use may be due the fact the medication is indicated for individuals up 18 years of age. This study provides important real-world evidence for monitoring the implementation of mAbs for psoriasis treatment in Brazil.