Exploratory Analysis of the Economically Justifiable Price of Nirsevimab for Healthy Late-Preterm and Term Infants in Colombia

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Abstract

Introduction. Respiratory syncytial virus infection is the leading cause of lower respiratory infection globally. Recently, nirsevimab has been approved to prevent RSV infection. This study explores the economically justifiable price of nirsevimab for preventing RSV infection in Colombia's children under one year of age. Materials and methods. A static model was developed using the decision tree microsimulation to estimate the quality-adjusted costs and life years of two interventions: a single intramuscular dose of nirsevimab versus not applying nirsevimab. This analysis was made during a time horizon of 1 year and from a societal perspective. Results The annual savings in Colombia associated with this cost per dose ranged from U\$ 2.5 to 4.1 million. Based on thresholds of U\$4828, U\$ 5128, and U\$19 992 per QALY evaluated in this study, we established economically justifiable drug acquisition prices of U\$ 21.88, U\$ 25.04, and U\$ 44.02 per dose of nirsevimab. Conclusion the economically justifiable cost for nirsevimab in Colombia is between U\$21 to U\$44 per dose, depending on the WTP used to decide its implementation. This result should encourage more studies in the region that optimize decision-making processes when incorporating this drug into the health plans of each country.

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