OBJECTIVES: Azithromycin has an attractive safety profile in treating or preventing certain serious infections. However, it is growing concerns that azithromycin use may be associated with increased cardiovascular risk and lead to cardiovascular death in high-risk patients. We therefore conducted a meta-analysis of randomized Controlled trials to describe the cardiovascular risk profile of those patients receiving azithromycin or placebo and have reported cardiovascular outcomes. Abstracts from major scientific meetings were also reviewed in the analysis. Methods based on odds ratios (ORs) was used.

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In the analysis, the pooled odds ratio (OR) was calculated using a random-effects model (because we assume that the treatment effect varies across studies). Statistical heterogeneity among studies was assessed using the I² test. Sensitivity analyses were performed by restricting the analysis to recalculation by power to determine ORs for public and private payers over a 10-year horizon. Methods: A Markov model was used to simulate vaccination and pneumococcal disease events and their related costs with PCV13 from 2010 to 2015. The PCV13 strategy included a 1-year period with 2.5 million children vaccinated at the beginning of the strategy. The model assumed that 3-year-old children would receive PCV13 as part of routine childhood vaccination. The model simulated vaccination and pneumococcal disease events and their related costs each year. The model was used to calculate the public and private payer costs of PCV13 vaccination and pneumococcal disease events and their related costs.

RESULTS: In the simulation, 40.3 million children participated in routine vaccination while 2.5 million received a catch-up dose in the PCV13 strategy. The Model assumed that 3-year-old children would receive PCV13 as part of routine childhood vaccination. The model simulated vaccination and pneumococcal disease events and their related costs each year. The model was used to calculate the public and private payer costs of PCV13 vaccination and pneumococcal disease events and their related costs.

PUBLIC AND PRIVATE PAYER PERSPECTIVES ON THE NET COST OF IMPLEMENTATION OF 13-VALENT PNEUMOCOCCAL CONJUGATE VACCINE (PCV13) COMPARED TO 2-VALENT PNEUMOCOCCAL CONJUGATE VACCINE (PCV2) TO THE UNITED STATES

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OBJECTIVES: In 2010, the US Advisory Committee on Immunization Practices recommended 13-valent pneumococcal conjugate vaccine (PCV13) be replaced by 13-valent vaccine (PCV15) in routine use in a five-dose series at 2, 4, 6, and 12-15 months of age. Published analyses estimated that PCV13 implementation would be cost-saving in aggregate, but the net economic impact on particular payers is unknown. We discussed the changes in payer costs by public and private payers over the next year.

METHODS: A Markov model was used to simulate vaccination and pneumococcal disease events and their related costs with PCV13 from 2010 to 2015. The PCV13 strategy included a 1-year period with 2.5 million children vaccinated at the beginning of the strategy. The model assumed that 3-year-old children would receive PCV13 as part of routine childhood vaccination. The model simulated vaccination and pneumococcal disease events and their related costs each year. The model was used to calculate the public and private payer costs of PCV13 vaccination and pneumococcal disease events and their related costs.

RESULTS: In the simulation, 40.3 million children participated in routine vaccination while 2.5 million received a catch-up dose in the PCV13 strategy. The model assumed that 3-year-old children would receive PCV13 as part of routine childhood vaccination. The model simulated vaccination and pneumococcal disease events and their related costs each year. The model was used to calculate the public and private payer costs of PCV13 vaccination and pneumococcal disease events and their related costs.

BUDGET IMPACT ANALYSIS OF DOLOUTEGRAVIR IN THE TREATMENT OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) IN ONTARIO, CANADA

McPhail CH1,2, Cui Q1, Maschio M3, Buchacz K1,2, Brogan Database were used to estimate the proportion of patients who were treated and covered by the ODDB, proportions of patients remaining on their first regimen after ART initiation over time, comparators and historical market share. ART drug costs were calculated based on the dosage of each regimen component from the respective product monographs and unit costs from the ODDB. The budget impact was calculated for the whole HIV population and separately for each population. Sensitivity analyses were conducted on five key input parameters.

RESULTS: Our model estimates that dolutegravir is cost-saving for both public and private payers. Net savings were greater for public payers, despite higher private costs.