



Reply to Letter to the Editor

Authors reply “*Streptococcus pneumoniae* serotype 19A in Latin America and the Caribbean 2010–2015: A systematic review and a time series analysis”


Dear Dr. Poland

We appreciate the opportunity to reply to the comments from De Almeida et al. pertaining to our updated systematic review to summarize the epidemiology of *Streptococcus pneumoniae* 19A (*Spn19A*) disease in Latin America and the Caribbean (LAC) region [1].

We agree with De Almeida and colleagues that it is important to strengthen the epidemiological surveillance systems in the LAC region, improve PCV vaccination coverage and measure the impact of immunization programs against invasive pneumococcal disease (IPD).

In their letter, De Almeida et al. state that we did not consider data from PCV10 countries for the period 2010–2016. As described, in the methods section of our paper, we followed PRISMA guidelines for systematic reviews with defined inclusion and exclusion criteria in the study search for data published between January 2010 and February 2016 [2]. The studies in Chile and Colombia mentioned by De Almeida et al. are outside the scope of our search as they were published after February 2018. The surveillance data from Brazil and Colombia referred by them were not available at the time we conducted the search. By the time of the analysis, we made every effort to retrieve updated data by direct contact with the country personnel in charge of pneumococcal surveillance activities (2014–2015), but Brazil data was not provided. However, it is important to mention that even timeliness is a desirable characteristic for surveillance systems, in the case of SIREVA network some delays are observed in making available the latest data.

Regarding limitations of SIREVA data, we discussed extensively the methodological issues of analyzing the SIREVA data at population level. We proposed to use time trends analysis in order to standardize data across countries to compare and to identify differences in reporting process of IPD through this network. Since this is passive surveillance system, not all cases are identified resulting in underreporting and lack of a population denominator. The latter aspect is critical when data for low reporting events are analyzed and when differences in surveillance strategies and time of reporting may vary by country [3].

Lastly, De Almeida et al. challenged our analysis for combining surveillance data of countries that use PCV10 with those that use PCV13 since *Spn19A* is included only in the formulation of the latter. However, as reported in our paper, evidence of vaccine effec-

tiveness linked to cross-protection is well documented and this is reflected on recommendations made by technical advisory groups of experts. Additionally, *Spn19A* continues to be a prevalent serotype even in countries where PCV13 is part of the national immunization program as has been reported in Mexico [4], and Argentina [5]. The increase in *Spn19A* prevalence might be linked with the emergence of multidrug resistant clones.

In consequence, as discussed in our manuscript, our analysis could not conclude any differences between PCV vaccines in the *Spn19A* trends with current data available at the time of this review.

Declaration of interest statement

Rodrigo DeAntonio was employee of the GSK group of companies and report ownership of stock/ restricted shares/ shares in the GSK group of companies. Elizabeth Castañeda and Clara Inés Agudelo have no potential conflict of interest.

References

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