Poster 09

Title: Extension of the United Kingdom Influenza Immunisation Programme 2013/2014 to Children and the Implications for High-Risk Group Uptake

Authors: Betina Blak[1]; Sankarasubramanian Rajaram[1]; Amy Steffey[2]; Herve Caspard[2]

Institutions: [1]AstraZeneca, London, UK; [2]AstraZeneca, Gaithersburg, USA

[Description]

Background: The Departments of Health of the United Kingdom (UK) extended the 2013/2014 influenza immunisation programme to children with a routine offer of vaccination to all 2- and 3-year-olds as well as geographical pilots for 4- to 11-year-olds. Children with high-risk conditions are part of the targeted groups in the schedule historically, but rates of vaccination in this population have been well below the elderly uptake rate until now. The aim of this study was to evaluate the impact of the influenza immunisation programme on vaccination rates in children with high-risk conditions.

Methods: All children aged 2 to 17 years on September 1, 2012 (for season 2012/2013) or September 1, 2013 (for season 2013/2014), with at least 12 months of prior medical history documented in the observational UK Clinical Practice Research Datalink (CPRD), were retained in this analysis. Administration of influenza vaccine was retrieved from immunisation, clinical, and therapy records between September 1 and December 31. High-risk conditions were defined prior to September 1 using operational definitions adapted from the specifications published by PRIMIS at the University of Nottingham. Vaccination rates were analyzed for each season using time to event methods.

Results: A total of 807,551 and 747,847 children aged 2 to 17 years were retained in the analysis for seasons 2012/2013 and 2013/2014, respectively. During season 2013/2014, 6.4% of all children presented with at least one high risk condition. The most frequent high risk conditions were asthma/chronic respiratory diseases (4.8%), followed by chronic heart diseases (0.9%), chronic neurological diseases (0.5%), and diabetes (<0.3%). These figures were similar for the 2012/2013 season, with 6.6% of all children presented with at least one high risk condition. Vaccination rates by age category as of December 31, 2012 and December 31, 2013, in children with and without high-risk conditions are presented in the table below:

	High-risk condition		No high-risk condition	
Age (years)	**Season 2012/2013, %**	**Season 2013/2014, %**	**Season 2012/2013, %**	**Season 2013/2014, %**
2 to 3	39.2	59.2	1.0	42.1
4 to 8	40.4	43.5	1.1	3.0
9 to 17	39.7	40.8	1.3	2.5

Conclusions: Extension of the 2013/2014 influenza immunisation programme to children sharply increased (40 percentage points) the vaccination rate for 2- to 3-year-olds without high-risk conditions. Vaccination rates also increased for children with high-risk conditions in all age categories, with the most profound increase (20 percentage points) in 2- to 3-year-olds.

These results are consistent with those supported by ImmForm surveys and published by the UK public health agencies.

This study was sponsored by MedImmune, biologicals arm of AstraZeneca.

These data were previously presented at the fifth European Scientific Working group on Influenza (ESWI) conference 14-17 September 2014, in Riga, Latvia.

Presenter

Name: Sankarasubramanian Rajaram

E-mail: Raja.Rajaram@astrazeneca.com

Institution AstraZeneca, London, UK