

**EAR/EYE—Health Care Use & Policy Studies**

PEY12

**IMPACT OF PNEUMOCOCCAL CONJUGATE VACCINE ON ACUTE OTITIS MEDIA IN YOUNG CHILDREN IN THE UNITED STATES, 1997–2004**Zhou F<sup>1</sup>, Shefer A<sup>1</sup>, Kong Y<sup>2</sup>, Nuorti P<sup>1</sup><sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA, USA,<sup>2</sup>SAIC, Atlanta, GA, USA

**OBJECTIVES:** To quantify the potential impact of PCV7 on rates of acute otitis media-related ambulatory visits and antibiotic prescriptions in children aged <2 years enrolled in private insurance plans. **METHODS:** We performed a retrospective cohort study of the 1997–2004 MarketScan databases. Analysis included more than 500,000 person-years of observations for children aged <2 years. Trends in rates of ICD-9 coded ambulatory visits and antibiotic prescriptions due to acute otitis media were evaluated and the national direct medical expenditures for these outcomes in young children were estimated. **RESULTS:** Comparing 2004 to the baseline period 1997–1999, before vaccine introduction, rates of ambulatory visits and antibiotic prescriptions due to acute otitis media declined from 2173 to 1244 per 1000 person-years (42.7%,  $P < 0.001$ ) and from 1237 to 721 per 1000 (41.7%  $P < 0.001$ ), respectively. Total estimated national direct medical expenditures for acute otitis media-related ambulatory visits and antibiotic prescriptions in young children declined from an average of \$1.40 billion during 1997–1999 to \$0.95 billion in 2004 (32.2%). **CONCLUSION:** Following PCV7 introduction, acute otitis media-related ambulatory visits and associated antibiotic prescriptions in children aged < 2 years declined more than expected on the basis of prelicensure clinical trials. Although other factors such as the rational antibiotic use guidelines may have contributed to the trend, our results suggest that PCV7 may play an important role in reducing the burden of acute otitis media resulting in a major savings in medical care cost.

**EAR/EYE—Methods & Concepts**

PEY13

**ADJUNCTIVE THERAPY USE BY GLAUCOMA PATIENTS ON ORAL ANTIHYPERTENSIVES**Iskedjian M<sup>1</sup>, Walker JH<sup>2</sup>, Desjardins O<sup>1</sup>, Einarson TR<sup>3</sup>, Covert D<sup>4</sup><sup>1</sup>PharmIdeas Research and Consulting Inc, Oakville, ON, Canada,<sup>2</sup>Brock University, Faculty of Business, St. Catharines, ON, Canada,<sup>3</sup>University of Toronto, Toronto, ON, Canada, <sup>4</sup>Alcon Research Ltd,

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**OBJECTIVES:** Using intraocular pressure lowering agents (IOPAs) is the major treatment approach for glaucoma. Prostaglandin analogs (PAs) are commonly used as first-line treatment; Patients on PAs may receive other IOPAs as adjunctive therapy (AT). Treatment of systemic hypertension with oral antihypertensives (AHs) may affect intraocular pressure. We quantified the use of AT and AH in association with PAs. **METHODS:** We conducted a cohort study using claims data from Québec, Canada. We identified all patients with a first claim for PAs (bimatoprost, latanoprost or travoprost) between 05-24-03 and 02-28-05. AT and AH utilization were identified by at least two claims in the 12-month follow-up period from their first PA prescription. Statistical and descriptive analyses were performed using SAS 9.1. **RESULTS:** We included 10,618 patients (average age =  $74 \pm 10$ , 60% females). PA users naïve to IOPLA treatment comprised 60% of the cohort. Of that cohort, we identified 3813 patients who were not on statin therapy. Of those 3813 patients, 1135 were on PA only, 706 were

on PA+AT, 1291 were on PA+AH, and 681 were on PA+AT+AH. Of the PA and non-AH users, 38% were on AT, and of the PA+AH users, 35% were on AT. There were significant differences among these groups ( $\chi^2 = 5.988$ ,  $p = 0.014$ ). The time to adjunct therapy for the PA+AT users was 165 days for the non-AH and 198 days for the AH groups, respectively, with statistically significant differences (Kruskal-Wallis Test,  $\chi^2 = 14.93$ ,  $p < 0.001$ ). It was also determined that the PA+AT+AH users were significantly older than the PA+AT users (Kruskal-Wallis Test,  $\chi^2 = 101.47$ ,  $p < 0.001$ ). **CONCLUSION:** Patients on PA using AHs required less AT therapy in the first 12 months of PA use, and started AT later than non-AH users. Further research is warranted for incident vs. prevalent analyses, to fully evaluate the impact of AH therapy on the ability to control IOP.

PEY14

