

## **PALAVIZUMAB (SYNAGIS) USE AND OUTCOMES AMONG MEDICAID BENEFICIARIES**

**Objectives:** Palavizumab (Synagis) is used in the prevention of seasonal respiratory syncytial virus (RSV) infections. The purpose of this study was to assess the impact of palavizumab use on pneumonia, bronchiolitis and all-cause costs among children.

**Methods:** Mississippi Medicaid data for RSV seasons October 1 - March 31 of 2009-2010 and 2010-2011 were used. For each season, pre-term children age 2 years or less at the end of the season were classified as receiving palavizumab or not. Users and non-users were matched (1:1) on age, gender, race and presence of chronic lung disease with non-users assigned the index date for the corresponding palavizumab user. Outcomes included diagnoses of pneumonia or bronchiolitis within 30 days after the index date and all-cause costs. Costs were compared using paired t-tests. Conditional logistic regression was used to assess the impact of palavizumab on prevention of pneumonia and bronchiolitis when controlling for pre-term stage.

**Results:** In the 2009-2010 season, 337 palavizumab users and 337 non-users were identified. Palavizumab users had lower likelihood of diagnoses of pneumonia (OR: 0.480; 95% CI: 0.213-1.081; p=0.08) and bronchiolitis (OR: 0.596; 95% CI: 0.333-1.068; p=0.07) which approached significance. Also, palavizumab users incurred significantly lower all-cause costs compared to non-users (\$6,206 vs. \$7,238; p<0.0001). In the 2010-2011 season, 317 palavizumab users and 317 non-users were identified. Palavizumab user had a similar effect on the likelihood of diagnoses of pneumonia (OR: 0.595; 95% CI: 0.278-1.272; p=0.18) and bronchiolitis (OR: 0.621; 95% CI: 0.346-1.112; p=0.108). Also, palavizumab users incurred significantly lower all-cause costs compared to non-users (\$5,761 vs. \$6,562; p<0.0001).

**Conclusions:** When used in accordance with the 2009 American Academy of Pediatrics Policy Statement, palavizumab appeared to reduce episodes of pneumonia and bronchiolitis among children enough to reduce total program costs even though the reductions were not statistically significant.

**AUTHORS:** Datar M<sup>1</sup>, Banahan BF III<sup>2,1</sup>, Null KD<sup>2</sup>, Hardwick SP<sup>3</sup>, Clark JP<sup>3</sup>

<sup>1</sup>Department of Pharmacy Administration, School of Pharmacy, University of Mississippi.

<sup>2</sup>Center for Pharmaceutical Marketing and Management, University of Mississippi.

<sup>3</sup>Mississippi Division of Medicaid.

*Statement to be included on poster*

**Acknowledgement:** The work reported was conducted by the MS-DUR program in the Center for Pharmaceutical Marketing and Management as part of the retrospective drug use analysis activities conducted under contract with the Mississippi Division of Medicaid. The views expressed are those of the authors and do not necessarily reflect those of Mississippi Division of Medicaid or the University of Mississippi.