Mepolizumab cuts exacerbations in children with severe asthma

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Asthma exacerbations are reduced for children and adolescents with

exacerbation-prone eosinophilic asthma who are living in socioeconomically disadvantaged urban neighborhoods and receive mepolizumab therapy, according to a study published in the Aug. 13 issue of *The Lancet*.

Daniel J. Jackson, M.D., from the University of Wisconsin School of Medicine and Public Health in Madison, and colleagues conducted a randomized trial at nine urban medical centers in the United States involving children and adolescents aged 6 to 17 years who lived in socioeconomically disadvantaged neighborhoods and had exacerbation-prone asthma and blood eosinophils of at least 150 cells/μL. A total of 290 participants were randomly assigned to either mepolizumab or placebo injections once every four weeks plus guideline-based care for 52 weeks (146 and 144 patients, respectively).

The researchers found that within the 52-week study period, the mean number of asthma exacerbations was 0.96 and 1.30 with mepolizumab and placebo, respectively (rate ratio, 0.73). Treatment-emergent adverse events occurred in 29 and 11 percent of participants in the mepolizumab and placebo groups, respectively. There were no deaths attributed to mepolizumab.

"In urban children and adolescents with exacerbation-prone eosinophilic asthma, adjunctive therapy with mepolizumab reduced asthma exacerbations, but did not affect other asthma outcomes," the authors write.

Several authors disclosed financial ties to pharmaceutical companies, including GlaxoSmithKline, which manufactures mepolizumab and partially funded the study.

More information: Daniel J Jackson et al, Mepolizumab for urban children with exacerbation-prone eosinophilic asthma in the USA

(MUPPITS-2): a randomised, double-blind, placebo-controlled, parallel-group trial, *The Lancet* (2022). DOI: 10.1016/S0140-6736(22)01198-9

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