

Jean Logsdon Epidemiology Grant

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Antihistamines and Adult Gliomas

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Abstract:

The goal of this project is to better understand the relationship and potential mechanism between antihistamine use and risk for adult glioma. Several epidemiologic studies suggest that a history of asthma or allergy is protective against the development of gliomas, and other studies suggest that the common drugs used to treat allergic symptoms, antihistamines, can cause cancer in experimental animals. We propose to examine these links further utilizing epidemiologic data from two large population-based case-control studies. We also propose to utilize tissue from glioma patients and astrocyte cell lines to examine the potential mechanism of antihistamine use in genetic damage and chromosomal instability. This one-year study will build upon our preliminary analyses suggesting a link between antihistamine use and gliomas in adults, and will provide important insights into the potential mechanism.