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**Title:** Radioallergosorbant testing – A Southern Saskatchewan experience

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**Body:** Background: To our knowledge, no absolute indications for Radioallergosorbant (RAST) testing have been established. Patients' reported symptomatology and the association with specific IgE levels is equivocal. This audit aims to assess the utility of standard RAST testing for symptomatic patients in a respiratory clinic. Methods: Data were collected in an outpatient respirology clinic in Saskatchewan over a six month period. RAST testing was ordered in patients with a history of asthma, chronic cough, and a positive response to bronchodilator in pulmonary function testing. The inhalant screen panel included dog, cat, and horse dander, c. herbarum, d. pteronyssius, d. farina, timothy grass, dandelion, and box elder tree. Results: 10 of 45 patients (22.2%) had elevated IgE levels for common allergens. There was no significant correlation between FEV1 and total serum IgE levels, Spearman's  $\rho = -0.48$  ( $P = 0.23$ , 95% CI -1.00 to 0.54). Of the specific inhalant IgE values, only dust mites were positively correlated with total serum IgE, d. farina  $\rho = 0.64$  ( $P = 0.044$ , 95% CI -0.081 to 0.90) and d. pteronyssinus  $\rho = 0.75$  ( $P = 0.012$ , 95% CI -.021 to 0.84), respectively.

**Conclusion:** There is no correlation between total serum IgE, pulmonary function, and most of the RAST for common allergens except dust mites. This implies that indications for RAST testing need to be more thoroughly investigated to optimize cost efficiency and utility.