The potential for allergies to have a promoting or protective role in cancer has been an interesting research topic in recent times. Several studies have suggested that a dysregulation of immune function in patients with histories of allergies may be associated with increased risk of cancer.1,6 Over the past several decades, epidemiologic and clinical data have shown an association between allergic diseases and cancer.1-8 A few epidemiologic studies, in particular, have examined the association between allergic diseases and gastric cancer, suggesting that asthma may be associated with reduced risk of gastric cancer.9,10

Recently, Jo et al.11 reported an association between allergic diseases and risk of gastric cancer via the Korea National Health and Nutrition Examination Survey (KNHANES), which is a large nationwide population-based dataset. The survey collected detailed information about the participants’ demographics, anthropometric measures, socioeconomic status, health behaviors, medical histories, healthcare utilization, biochemical laboratory test results, radiography test results, food intakes, and dietary behaviors.12 They investigated the association between the risk of gastric cancer and allergic diseases, including atopic dermatitis, asthma, allergic rhinitis, and any allergic diseases. Allergic diseases showed a tendency to be associated with reduced risks of gastric cancer, but without statistical significance. Multivariable analysis showed that a history of atopic dermatitis was associated with reduced risk of gastric cancer in men (odds ratio, 0.16; 95% confidence interval, 0.03-0.75). Although this study involved a large number of subjects, the diagnosis of allergic disease and gastric cancer was self-reported via a questionnaire survey, resulting in recall or misclassification biases. Cross-sectional design caused difficulties with respect to inferring causations based on the observed associations. Additionally, the data of Helicobacter pylori (H. pylori) was lacking in the study. H. pylori, one of the most powerful risk factors in gastric carcinogenesis, can interact with allergic diseases. With this considered, there will likely be an inverse relationship be-
tween them.13

However, this study suggested that certain types of allergies may be associated with reduced risk of gastric cancer. Further longitudinal cohort study may be necessary to reveal a more concrete answer regarding this topic. The mechanism of *H. pylori* eradication treatment with respect to the risk of both gastric cancer and allergic diseases will be an interesting topic to study.

REFERENCES