

Immunotherapy efficacy up with Gal-1/SIT co-administration

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(HealthDay)—Galectin-1 (Gal-1), allergen-specific immunotherapy

(SIT) co-administration may suppress allergic responses in the intestine more than use of SIT or Gal-1 alone, according to an experimental study published online July 18 in *Allergy*.

Li-Tao Yang, Ph.D., from the Shenzhen University School of Medicine in China, and colleagues developed an intestinal allergy mouse model to examine whether Gal-1 administration promotes and prolongs the efficacy of SIT. In sensitized mice, the authors assessed the impact of co-administration of SIT and Gal-1 on suppression of allergic responses, prevention of mast cell activation, and generation of antigen-specific regulatory T [cells](#) (Tregs).

The researchers found that, compared with use of SIT or Gal-1 alone, co-administration markedly suppressed the allergic responses in the mouse intestine. Gal-1 bound to immunoglobulin E/FcεRI complexes on the mast cell surface to prevent mast cell activation during SIT. The SIT-generated allergen-specific Tregs were promoted by Gal-1 in the intestine of the sensitized mice. The efficacy of immunotherapy for suppressing allergic responses in the [intestine](#) was enhanced significantly by co-administration of Gal-1 and SIT, which lasted for at least 12 months.

"Long term effects of specific immunotherapy on intestinal allergy can be achieved with Gal-1/SIT therapy by inhibiting mast cell activation and facilitating Treg development," the authors write.

More information: [Abstract](#)
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