SUPPLEMENTAL FIGURES

IL-33 and Thymic Stromal Lymphopoietin Mediate Immune Pathology in Response to Chronic Airborne Allergen Exposure

Running Title: IL-33 and TSLP in chronic airway inflammation

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Supplemental Figure 1

Supplemental Figure 1. OVA is unnecessary for robust type 2 immune responses and airway eosinophilia. (A) Naïve mice were exposed to combinations of allergens (*Alternaria*, *Aspergillus*, HDM) with (OAAH) or without OVA antigen (AAH) for 4 weeks. BAL fluids were analyzed for the number of inflammatory cells. (B) The levels of plasma antibodies and BAL IL-13 were analyzed. Results are the mean \pm SEM (n=5). *: p<0.05, **: p<0.01, compared to mice exposed to PBS.



Supplemental Figure 2

Supplemental Figure 2. *Alternaria* alone or HDM alone induce type 2 immune responses at a high dose. Naïve mice were exposed to each allergen ($30 \mu g/dose$) for 4 weeks; ALT, *Alternaria*; ASP, *Aspergillus*; HDM, house dust mite. (A) BAL fluids were analyzed for the number of inflammatory cells. (B) The levels of IL-13 in BAL fluids were analyzed. (C) The levels of IgG1 antibodies to Alt a 1, Asp r 1 (Asp f 1 homologue) and Der p 1 in the plasma were analyzed. Results are the mean \pm SEM (n=5). *: p<0.05, **: p<0.01, compared to mice exposed to PBS.



Supplemental Figure 3

Supplemental Figure 3. Airway reactivity to methacholine in allergen-exposed animals is dependent on IL-33 and TSLP. Wild-type Balb/c or C57BL/6 mice or mice deficient in cytokine receptors were exposed to PBS or allergens (OAAH) for 4 weeks. Airway reactivity to methacholine was examined by whole body plethysmography as described in the Materials and Methods. Results are the mean \pm SEM (n=6 in each group) and are representative of two (panels A, B, and C) or one experiment (panel D). *: p<0.05, compared to PBS-exposed animals in the same strain, #: p<0.05, compared to allergen-exposed wild-type mice.