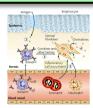
## **Emerging roles for basophils in health and disease**

Karasuyama et al.: Nature Rev. Immunol. 2009; Annu. Rev. Immunol. 2011; Trends Immunol. 2011; Curr. Opin. Immunol. 2014

## Allergic reactions

lgE-mediated chronic allergic inflammation



IgG-mediated systemic anaphylaxis



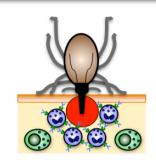
**Eosinophilic esophagitis** 

**Atopic dermatitis** 

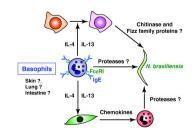
**Asthma** 

## Protective immunity

Protection against Ectoparasites



Protection against Endoparasites

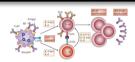


## Regulation of acquired & innate immunity

Promotion of Th2 cell differentiation



Enhancement of humoral memory response



Regulation of Mono/Mac differentiation



**Activation of ILC2** 

