SUPPLEMENTARY MATERIAL

Figure S1. CD34⁺-derived mast cells characterization. **A)** Fc ε RI and KIT expression of MCs after 7 weeks. **B)** May Grünwald Giemsa staining of huMCs. **C)** Degranulation measured by β -hexosaminidase assay. PMA and lonomycin were used as a positive control (n=3). Results are expressed as mean ± SD. Significance was determined using 1-way ANOVA with Dunkey's multiple comparison analysis. *P*<0.05 was considered significant. **P*<0.05; ***P*<0.01. Figure shows a representative example. STV= Streptavidin.



Figure S2. Correlation between degranulation by CD63⁺ and PGD₂ secretion. **A)** MCs from healthy volunteers. **B)** MCs from sensitized patients. **C)** MCs from anaphylaxis patients. Correlations were calculated by using Pearson R values. *P*<0.05 was considered significant.



Figure S3. Gating strategy for T_{FH} 13 cells. Representative flow pot of PBMCs from an LTPallergic patient stimulated with PMA and lonomycin.



Figure S4. Sera from anaphylaxis patients induce a higher cytokine secretion. Cytokine multiplex assay was performed in CD34⁺-derived mast cells from anaphylaxis (n=5) and sensitized patients (n=5). Results are expressed as mean \pm SD. Significance was determined using a T-test with Welch's correction. *P*<0.05 was considered significant. MC=Mast cells; A=Anaphylaxis; S=Sensitized.

