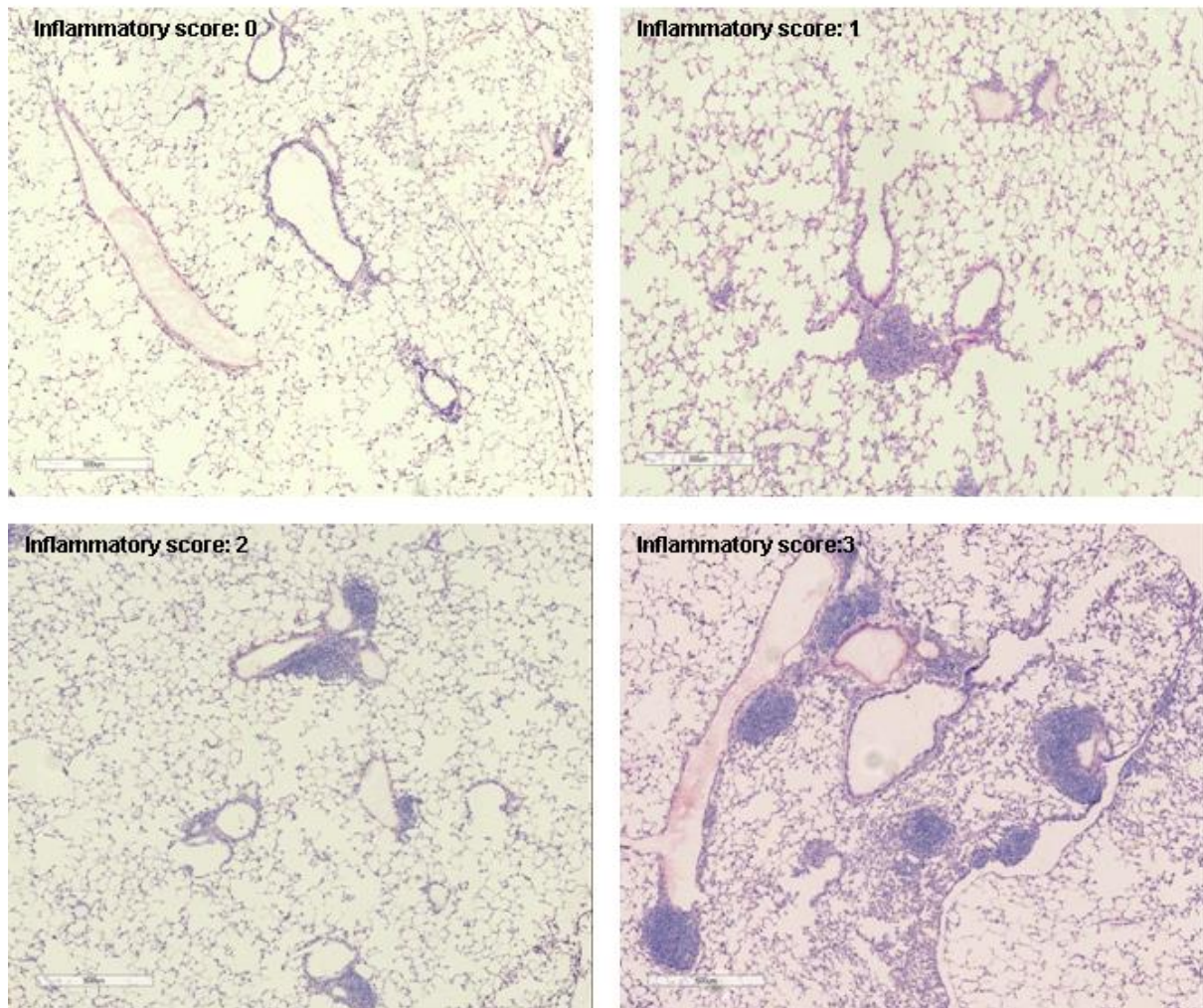


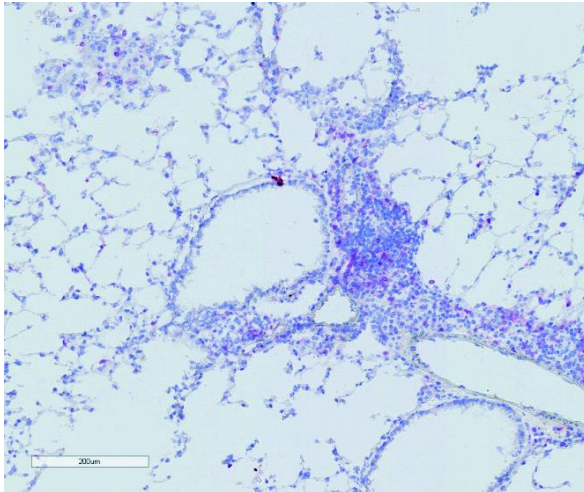
Figure S1 online supplement: Schematic overview of the experimental design

Figure S2 online supplement: Pictures of for Hematoxylin-eosin staining of lung tissue of mice exposed to PBS or DE representing the different degrees of inflammatory scores.

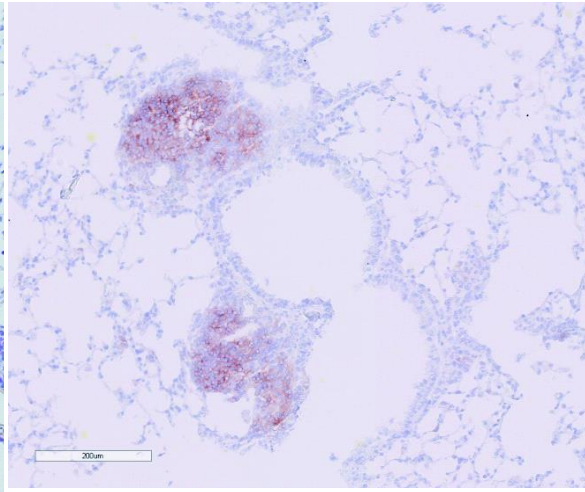


**Figure S3 online supplement: Representative pictures of immunohistological staining with anti-CD3 (T-cells), anti-CD19 (B-cells), anti-CD68 (macrophages) and anti-GR-1 (neutrophils) in lung tissue from mice exposed to DE from cattle farms.**

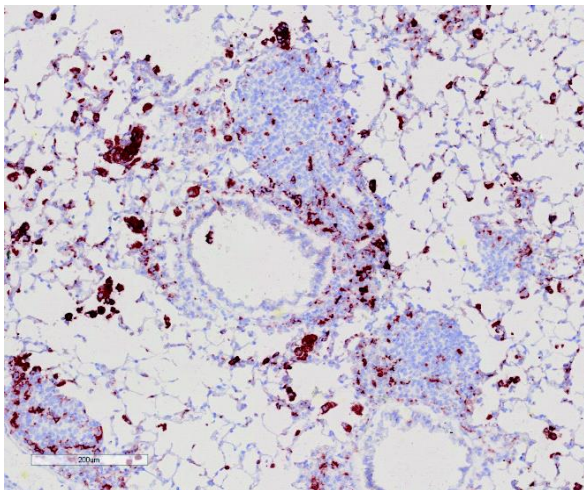
**T cells**



**B cells**



**Macrophages**



**Neutrophils**

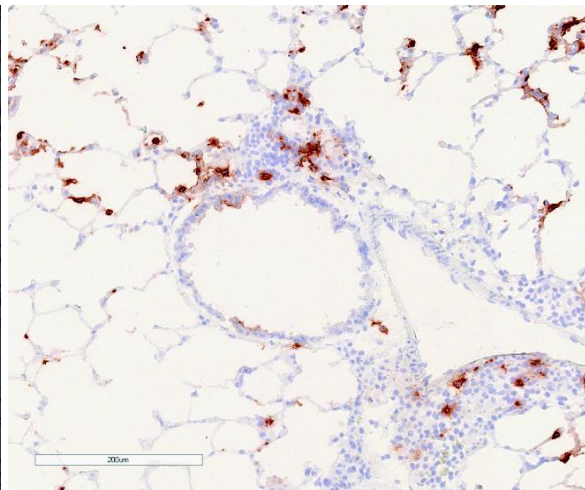


Figure S4 online supplement: Methacholine responsiveness from mice exposed to PBS or DE

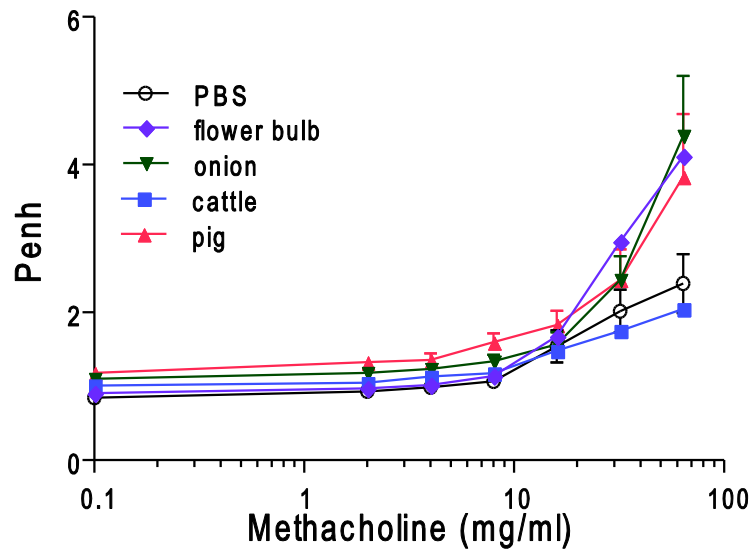
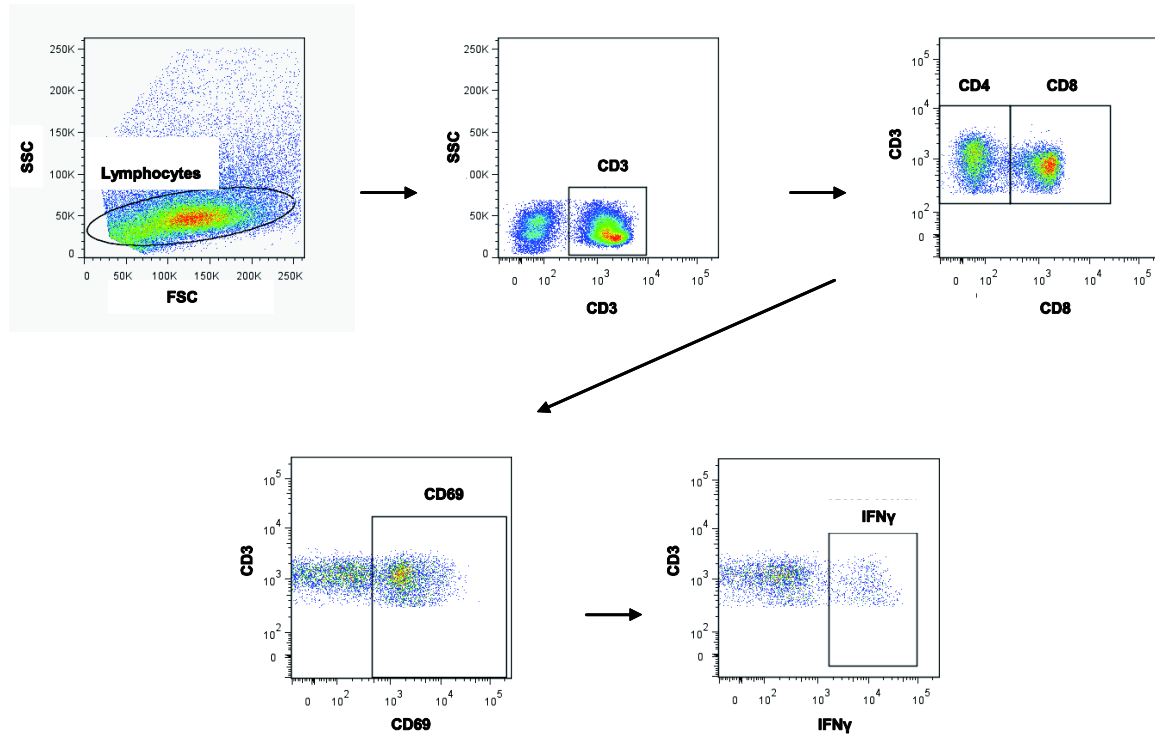


Figure S5 online supplement: Gating strategies to distinguish T-cell populations. FSc-SSc profile was used to distinguish lymphocytes. Within the lymphocyte population, T lymphocytes were identified using the membrane marker CD3, and within the CD3 population, Tc cells were identified using the marker CD8. The CD3<sup>+</sup> cells which were negative for CD8 were considered as being CD4<sup>+</sup> cells. Within the CD8<sup>+</sup> population, a CD69<sup>+</sup> population was selected and in this population the expression of the cytokines (IL-4, IL-17 and IFN $\gamma$ ) was analysed.



**Figure S6 online supplement: Histograms of samples stained for IL-17, IFN $\gamma$ , and IL-4 (right column) and the respective isotypes (left column).**

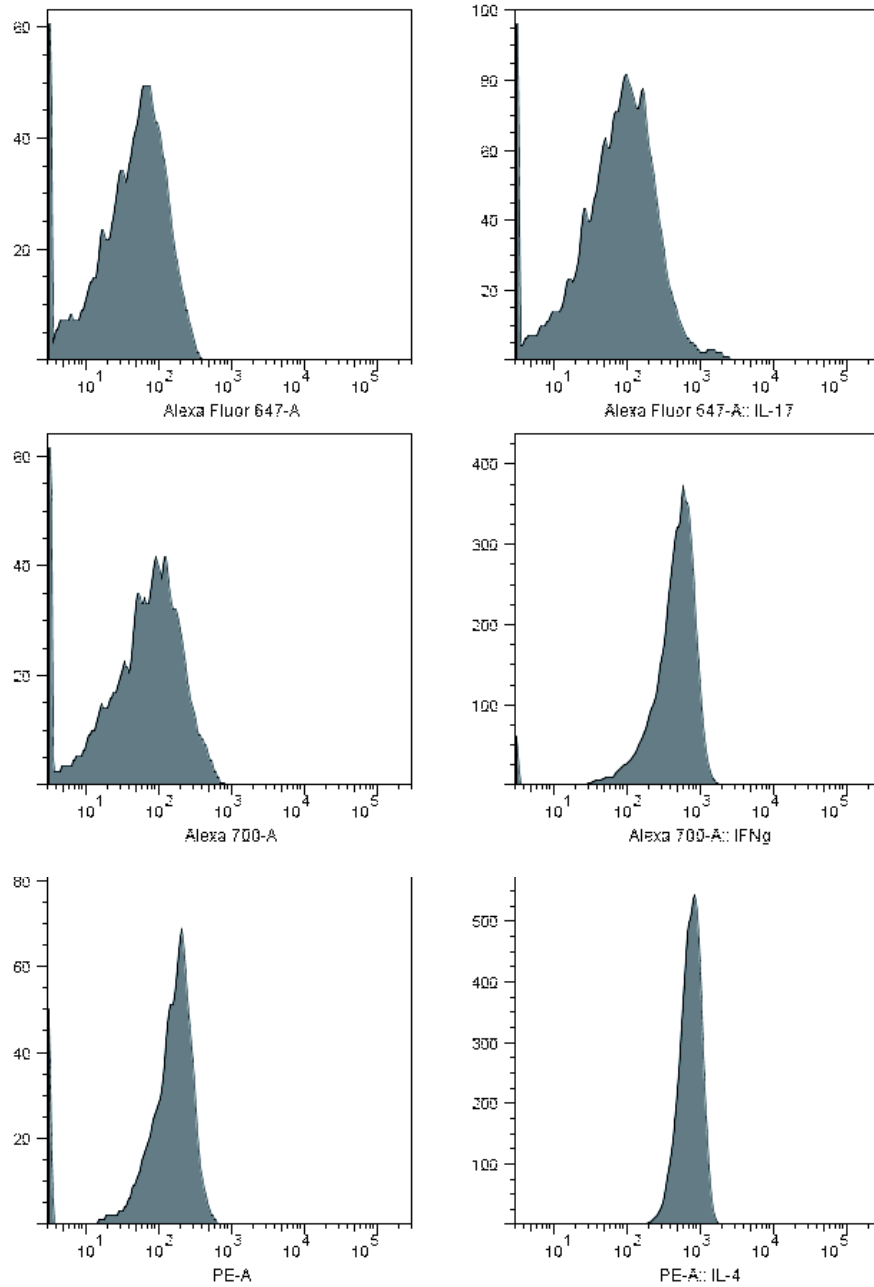


Figure S7 online supplement: Percentages of A) IL-17- and B) IFN $\gamma$ -producing T-helper and C) IL-17- and D) IFN $\gamma$ -producing T-cytotoxic cells with and without stimulation with PMA/Io. in controls and AW.

