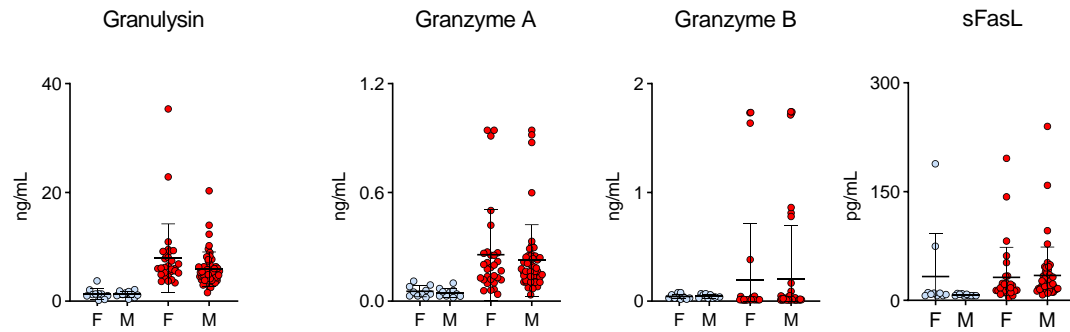
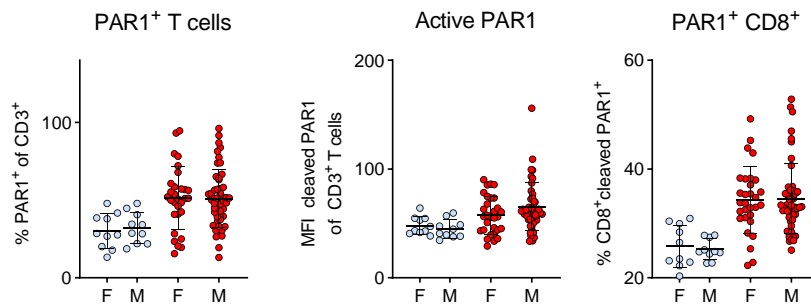
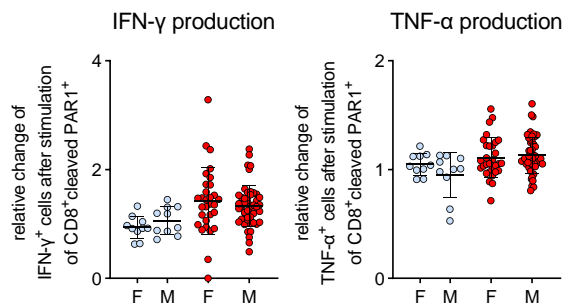


**A****B****C****D**

**Figure S1.** Consideration of gender-specific aspects. F, female; M, male. Patients with first-diagnosed AF vs. control group. (A,B) Activation of CD8<sup>+</sup> T cells in patients with first-diagnosed AF. (A) Phenotyping of circulating CD8<sup>+</sup> T cells (flow cytometry). Activated cytotoxic T cells (HLA-DR<sup>+</sup>). (B) Increased plasma levels of cytotoxic effector molecules associated with CD8<sup>+</sup> T cell function (ELISA). (C,D) CD8<sup>+</sup> T cell-mediated effector function in early AF is linked to PAR1 activation. (C) Phenotyping via flow cytometry of T cells in patients with first-diagnosed AF revealed a higher percentage of circulating cells that possess PAR1 (CD3<sup>+</sup>PAR1<sup>+</sup>), an increased expression of thrombin-activated PAR1 (as expressed by increased mean fluorescence intensity (MFI) of thrombin-cleaved PAR1) and a higher percentage of cytotoxic T cells that express PAR1, which was activated by thrombin (CD8<sup>+</sup> cleaved

PAR1<sup>+</sup>). **(D)** Enhanced pro-inflammatory effector function of thrombin-activated CD8<sup>+</sup>PAR1<sup>+</sup> T cells as expressed by staining for IFN- $\gamma$  and TNF- $\alpha$ . Results are expressed as single values ( $n = 10/10/30/50$ ), mean with SD.