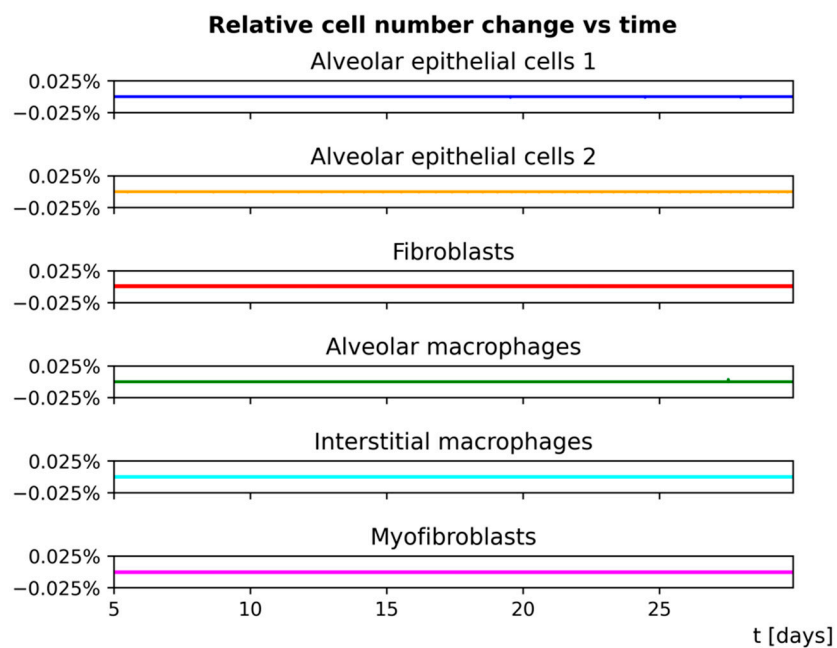
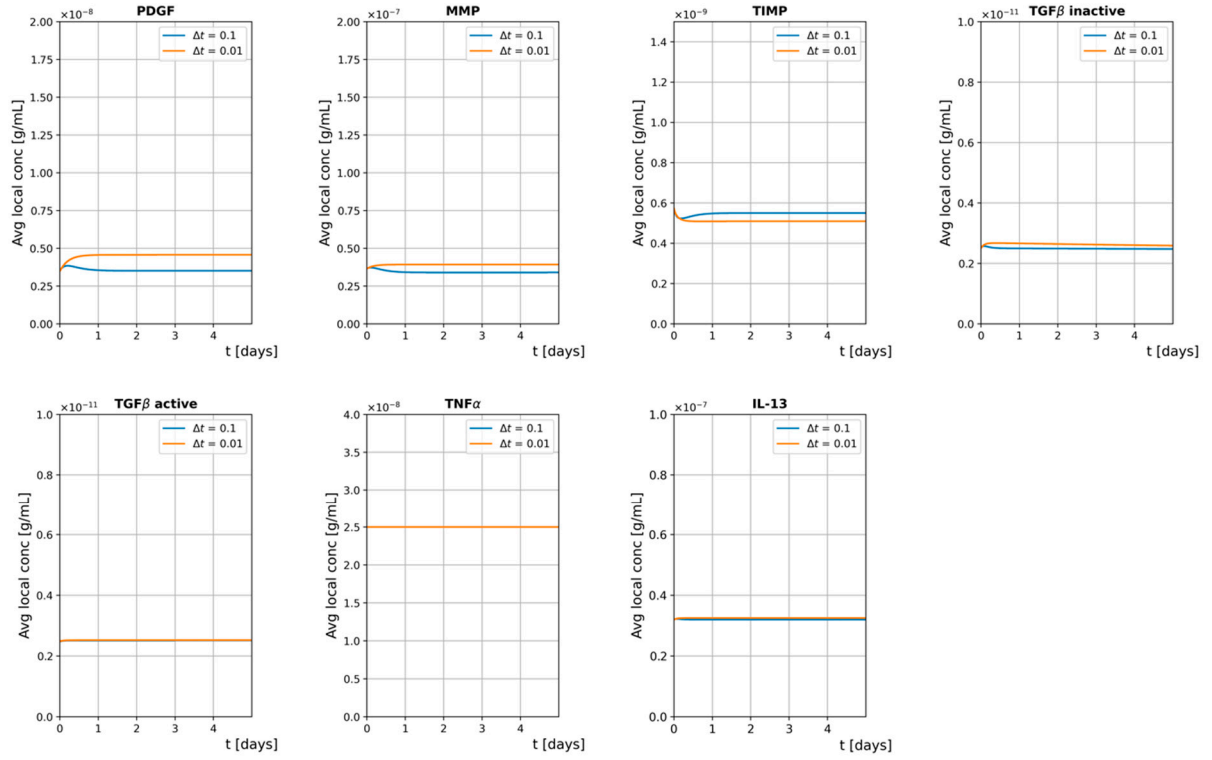


(a)



(b)

**Supplementary Figure S1.** Time evolution of the relative change of the extracellular mediators' average local concentration **(a)** and cell numbers per alveolus **(b)**



**Supplementary Figure S2.** Extracellular mediators' average local concentration for  $\Delta t = 0.1$ s and  $\Delta t = 0.01$ s in homeostatic conditions. We don't include MCP-1 and FGF-2 (since they are secreted by activated AEC2) and ECM (which does not diffuse). Numerical solutions are stable for both  $\Delta t$  values.