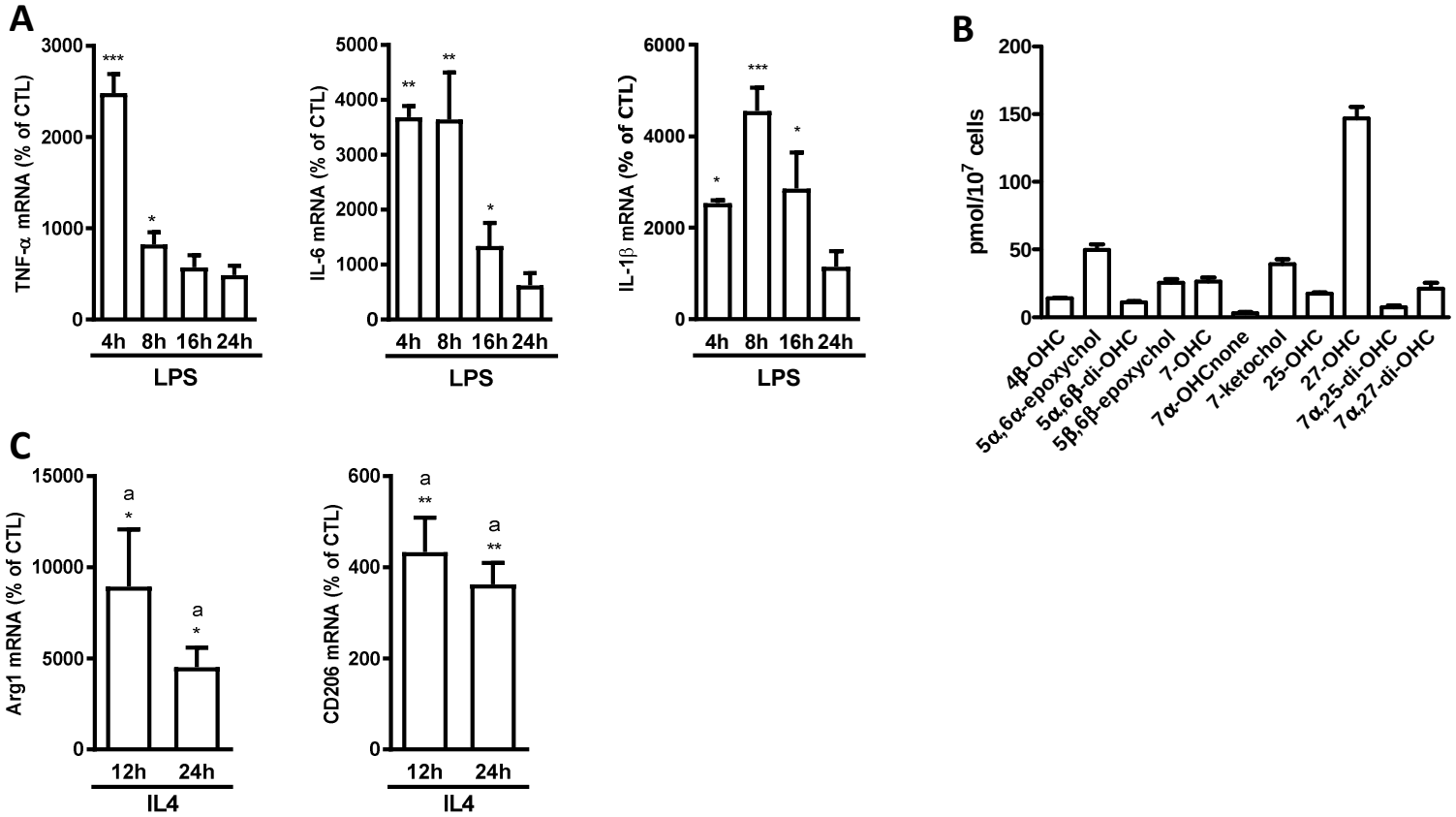
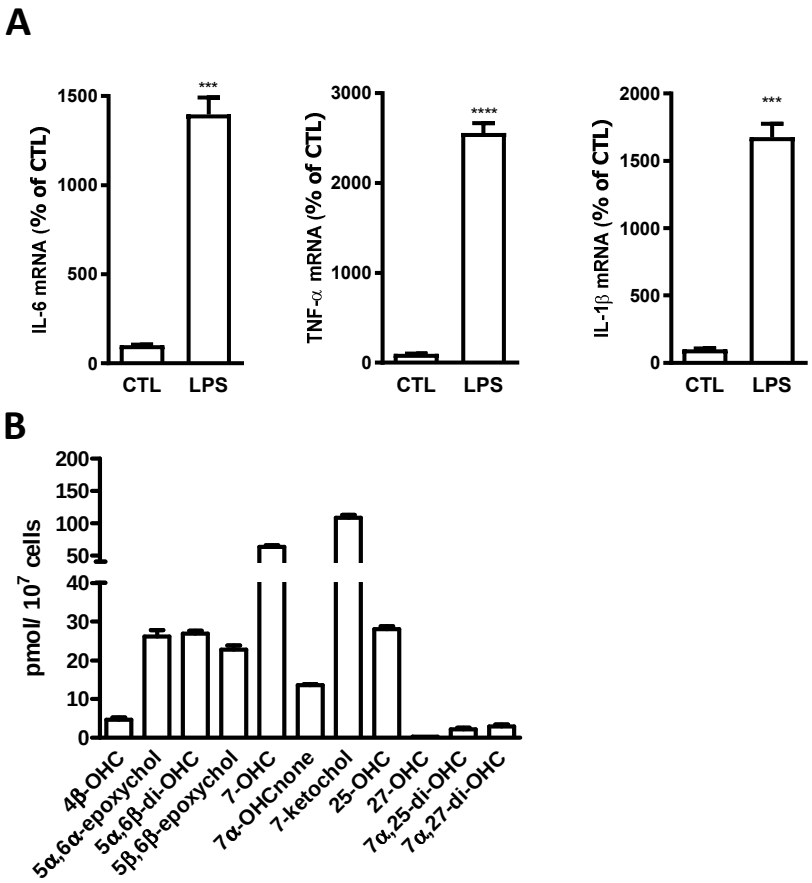
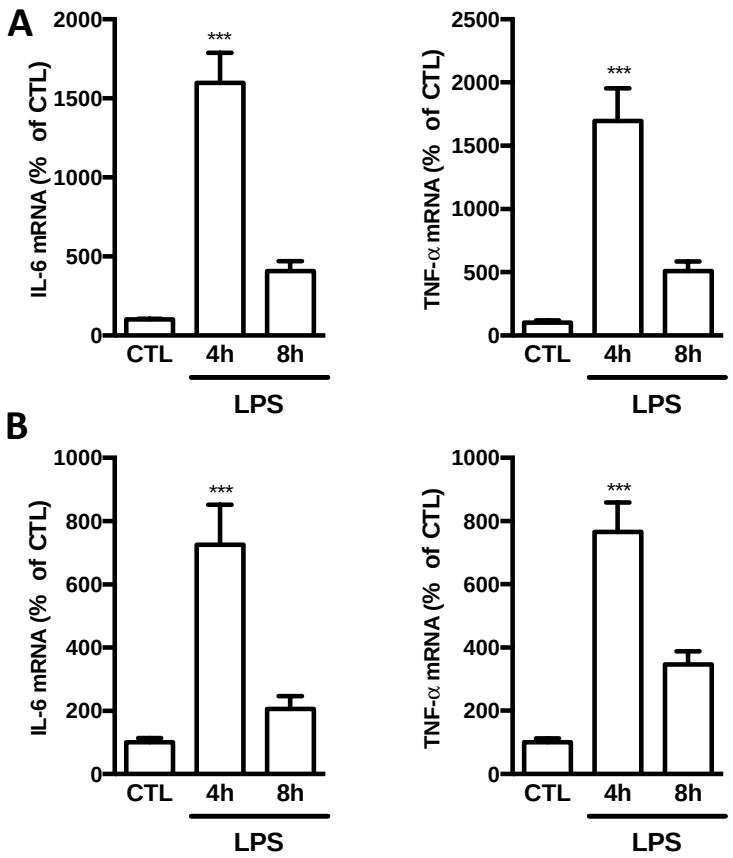


Supplementary figure 1: **Activation of BV2 cells and oxysterol levels in control BV2 cells**

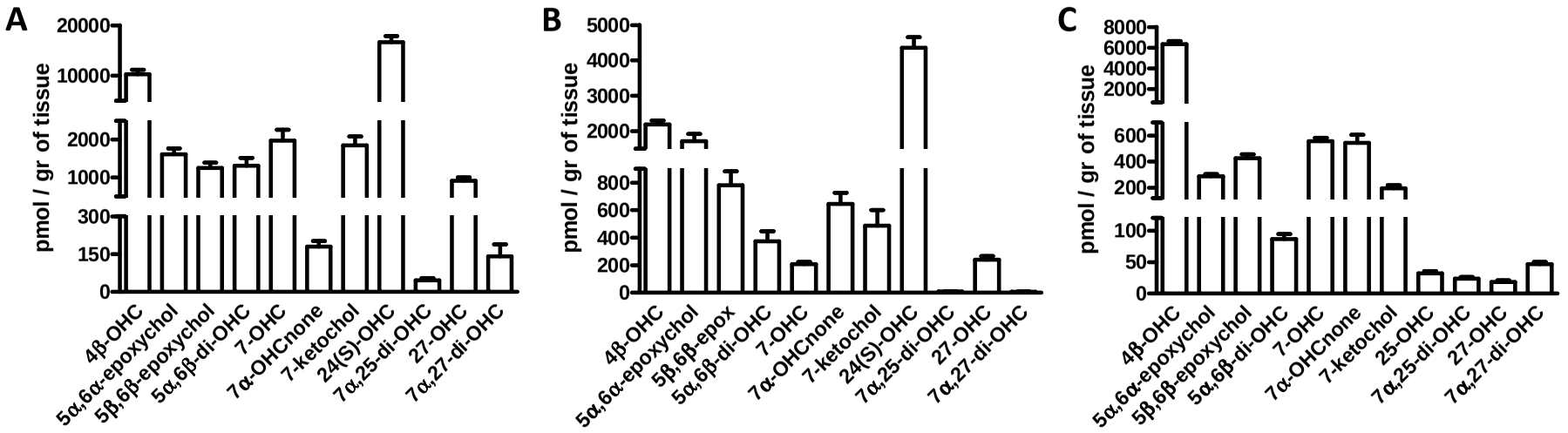
(A) 2,5 * 10^5 cells were incubated with vehicle (CTL) or LPS (100 ng/mL) for the indicated time points. mRNA was extracted and RT-qPCR performed for IL-1β, IL-6 and TNF-1α. Data are expressed as the mean ± S.E.M in % of the respective CTL. *** $p < 0,001$; ** $p < 0,01$; * $p < 0,05$ vs CTL. **(B)** Oxysterols were quantified in BV2 cells incubated without LPS. Data are expressed as the mean ± S.E.M in pmol/10*10^6 cells. **(C)** 2,5 * 10^5 cells were incubated with vehicle (CTL) or 10 U/mL of IL-4 for the indicated time points. mRNA was extracted and RT-qPCR performed for Arg1 and CD206. Data are expressed as the mean ± S.E.M in % of the respective CTL.



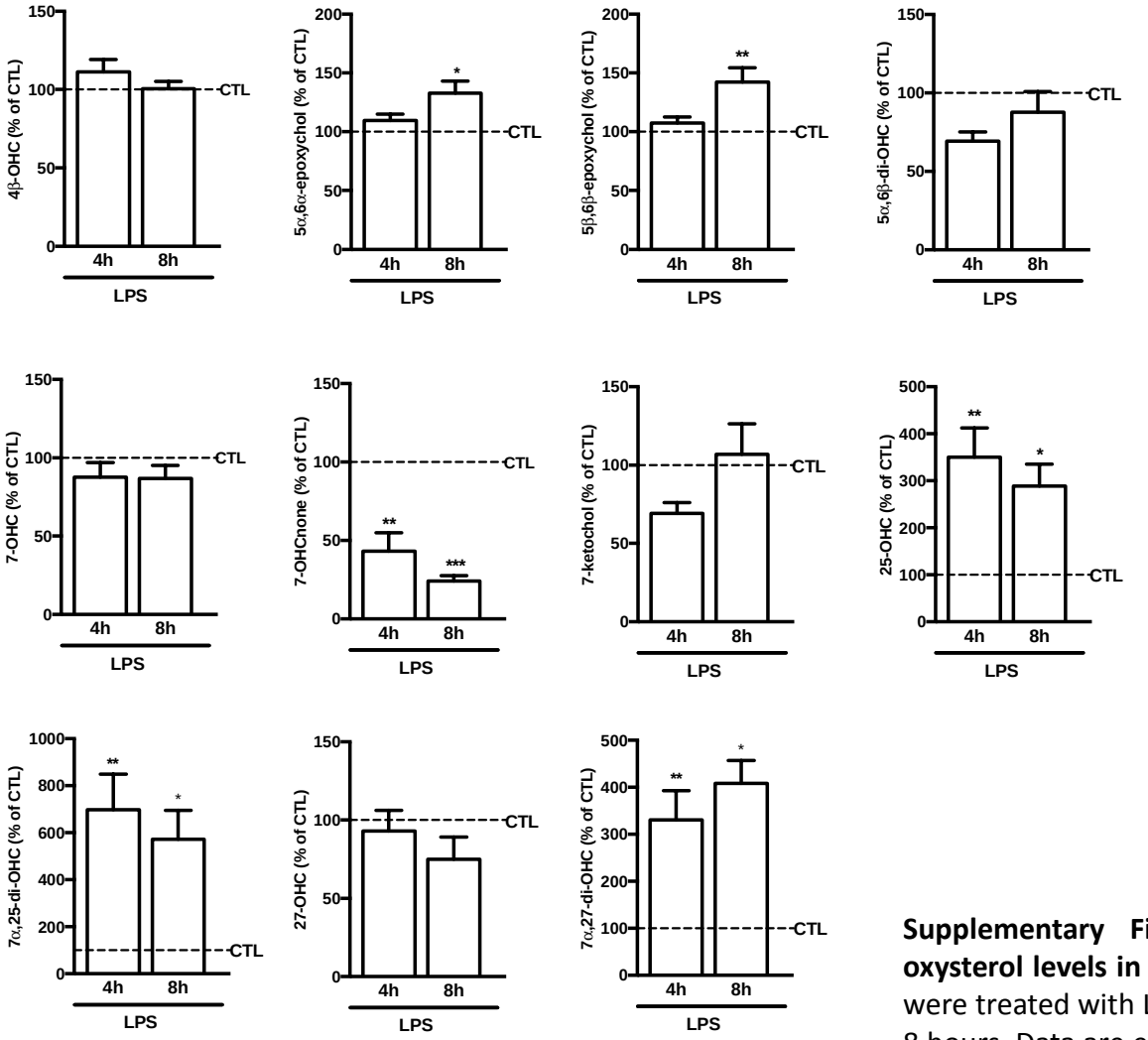
Supplementary Figure 2: **LPS-induced activation of primary co-culture of astrocytes and microglia and oxysterol levels in control cells** **(A)** 2,5* 10^5 cells were incubated with LPS (100 ng/mL) or vehicle (CTL) for 8 hours. mRNA was extracted and RT-qPCR performed for IL-1β, IL-6 and TNF-α. Data are expressed as mean ± S.E.M in % of CTL. **** $p < 0,0001$; *** $p < 0,001$ vs CTL. **(B)** Oxysterols were quantified in co-culture of primary microglia and astrocytes incubated without LPS. Data are expressed as the mean ± S.E.M in pmol/10*10^6 cells.



Supplementary Figure 3: **mRNA expression of pro-inflammatory markers in (A) the brain and (B) spinal cord of mice with LPS-induced inflammation in comparison to control mice**. Mice (7 per group) were treated with LPS (300 µg/kg) or vehicle (CTL) and sacrificed after 4 or 8 hours. mRNA was extracted and RT-qPCR was performed for IL-6 and TNF-α. Data are expressed as the mean ± S.E.M in % of CTL set at 100. *** $p < 0,001$ vs CTL.



Supplementary Figure 4: **Oxysterol levels in CTL mice**. Oxysterols were analysed in 7 control mice, in the brain (**A**), the spinal cord (**B**) and the liver (**C**). Data are expressed as the mean ± S.E.M in pmol / gram of tissue.



Supplementary Figure 5: **Effect of LPS-induced inflammation on oxysterol levels in the liver in comparison to CTL mice**. 7 mice per group were treated with LPS (300 µg/kg) or vehicle (CTL) and sacrificed after 4 or 8 hours. Data are expressed as mean ± S.E.M in % of CTL. ** $p < 0,01$ * $p < 0,05$ vs CTL.