**Title: Vagus nerve stimulation promotes epithelial proliferation and controls colon monocyte infiltration during DSS-induced colitis**

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**Author contribution:** EM, NS, GM and GEB planned and designed experiments MS, JAL, MF, MS, VS, GDH, GG and GM performed or supervised the experiments. EM, NS and GEB reviewed data and wrote the manuscript. All other authors corrected and approved the final version of the manuscript.

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**Supplementary information**

**Supplementary Table1. Primer sequences used for qRT-PCR**

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| ***Gene*** | ***Sense*** | ***Antisense*** |
| ***Rpl32*** | 5’-AAGCGAAACTGGCGGAAAC-3’ | 5’-TAACCGATGTTGGGCATCAG-3’ |
| ***Il6*** | 5’-CCATAGCTACCTGGAGTACATG-3’ | 5’-TGGAAATTGGGGTAGGAAGGAC-3’ |
| ***Tnfα*** | 5’-TCTTCTCATTCCTGCTTGTGG-3’ | 5’-CACTTGGTGGTTTGCTACGA-3’ |
| ***Arg1*** | 5’-TCACCTGAGCTTTGATGTCG-3’ | 5’-TTATGGTTACCCTCCCGTTG-3’ |
| ***Ccl8*** | 5’-TCTACGCAGTGCTTCTTTGC-3’ | 5’-ATACCCTGCTTGGTCTGGAA-3’ |
| ***Cxcl1*** | 5’- GCTGGGATTCACCTCAAGAA-3’ | 5’-TCTCCGTTACTTGGGGACAC-3’ |



**Supplementary Figure 1. Gating strategy of the immune profile characterization of the inflammatory response during prophylactic VNS treatment.** (A) Representative expression of DAPI and CD11b (left column), Ly6G and CD11b (mid-left column), SiglecF and CD11b (mid column), Ly6C and MHCII (mid-right column) and MHCII and CD169 (right column) from colon of Sham- and VNS-treated mice 3 days post VNS.