1 Supplementary figures

2 **Supplementary Figure 1:**



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Supplementary Figure 1: DC viability and expression of notch ligands in Zn
 treated DCs

A) Dot plots of DCs stained with 7AAD, values represent percent 7AAD⁺ cells 24 h post Zn treatment, bar graph of percent live DCs at 0 h and 24 h post culture. 1 experiment, data are mean \pm SEM; and **B**) Fold change in *Jag1*, *Jag2* and *Dll4* expression with 100 μ M ZnSO₄ normalized to DC control, 1 experiment.

11 Supplementary Figure 2:



13 Supplementary Figure 2: *Ido* expression in Zn treated DCs

A) Fold change in *Ido1* expression with 0.1, 10 and 100 µM ZnSO₄ in uninfected and infected states 1 experiment; **B)** Fold change in *Ido1* expression in MHCII^{hi} DCs (1 experiment) and MHCII^{lo} DCs (3 independent experiments) 24 h post ZnSO₄ treatment and infection normalized to control DC group; and C) Fold change in Ido1 expression in control and 100 µM FeSO₄ treated DCs with or without *H. capsulatum* infection for 24 h normalized to control DC group, 3 independent experiments, data presented as mean fold change in expression \pm SEM, NS, not significant by one-way ANOVA.

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31 Supplementary Figure 3:



35 Supplementary Figure 3: Effect of Zn on DC tolerogenicity and fungal burden

in vivo and Treg differentiation *in vitro*

A) Graphical representation of total % PD-L1⁺ and PD-L2⁺ DCs in lungs of DDI H₂O and ZnSO₄ treated mice on day 14 p.i. (n=6 mice per group); B) Percent of PD-L1⁺ and PD-L2⁺ DCs (gated on MHCII^{hi} CD11c⁺ and MHCII^{lo} CD11c⁺) in lung leukocytes of DDI H₂O and ZnSO₄ treated mice on day 14 *p.i.* (n=6 mice per group); **C)** Fungal burden in lungs and spleens on days 7 and 14 p.i. in DDI H₂O and ZnSO₄ treated mice, (n=8 mice per group); **D)** Dot plots of percent FoxP3⁺ Tregs gated on CD4⁺ cells in mediastinal lymph nodes, bar graph of percent FoxP3⁺ Tregs day 14 p.i. in MLN in DDI H_2O and ZnSO₄ treated mice, (n=8 mice per group); E) Percent $CD4^{+}FoxP3^{+}T$ cells in *in vitro* cultures left untreated, or treated with IL-2 + TGF β or with IL-2 + TGF β + 100 μ M ZnSO₄ and histogram showing MFI of FoxP3 in these groups; and F) IL-6 and IL-12 (p40), IL-10 and TGF^β protein levels in lung homogenates of DDI H₂O and ZnSO₄ treated mice on day 14 p.i., (n=4 mice per group), data expressed as mean \pm SEM, Student's t test, * p < 0.05; ** p < 0.01.

60 Supplementary Figure 4:



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Supplementary Figure 4: *In vivo* proportions of MHCII^{hi} and MHCII^{lo} DCs, Tregs,
 Th17 cells and fungal burden in lung leukocytes of Zn treated mice 21 days
 post infection

A) Dot plots and bar graph of percent CD11c⁺ MHCII⁺ DCs in lung leukocytes on day
21 *p.i.* DC gate subdivided into MHCII^{hi} and MHCII^{lo} populations; B) Histograms
showing MHCII MFI in DCs. Relative MHCII MFI of ZnSO₄ treated mice normalized
to average MHCII MFI of DDI H₂O control mice in lung leukocytes; C) Dot plots and

bar graph of percent FoxP3⁺Tregs in DDI H₂O and ZnSO₄ treated mice on day 21 p.i.; **D)** Dot plots and bar graph of percent Th17 cells in DDI H₂O and ZnSO₄ treated mice on day 21 p.i. (n=6 mice per group), Data expressed as mean ± SEM; and **E)** Fungal burden in lungs of DDI H₂O and ZnSO₄ treated mice on day 21 p.i. Data expressed as mean CFU ± SEM, (n=6 mice per group).

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