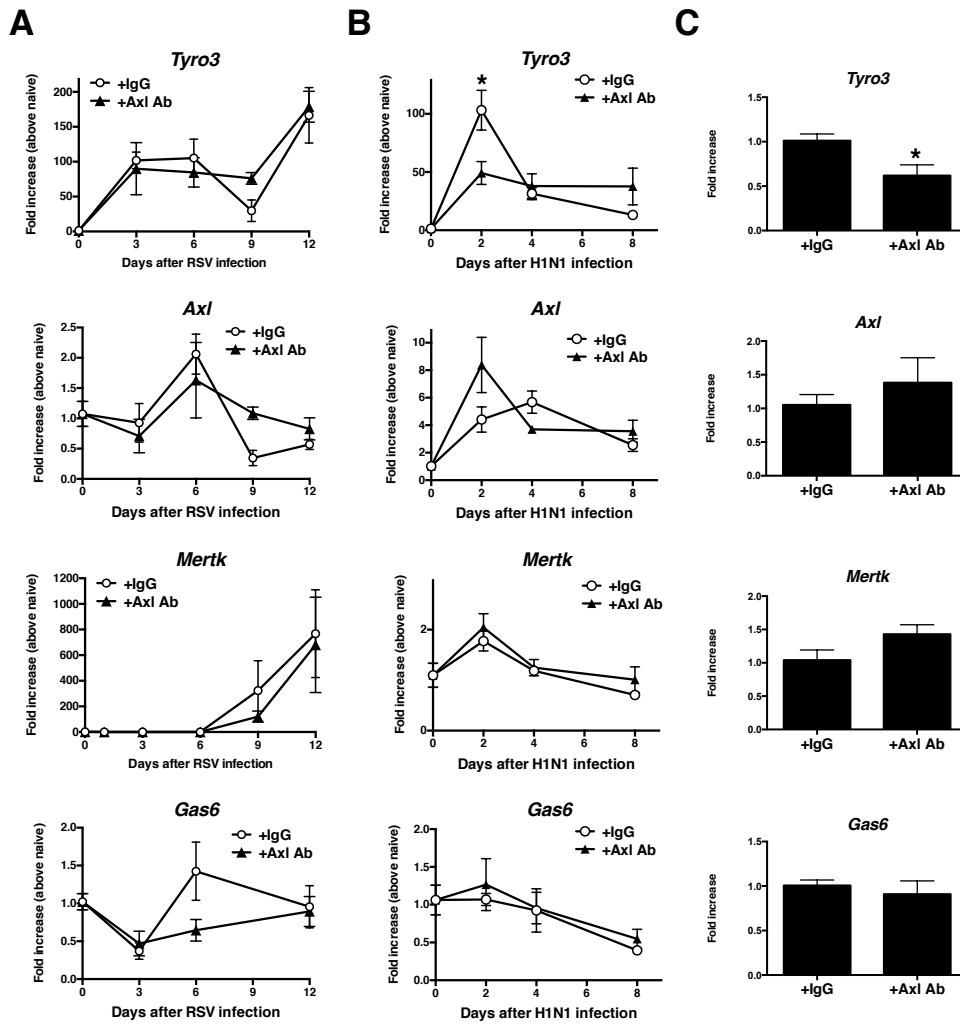
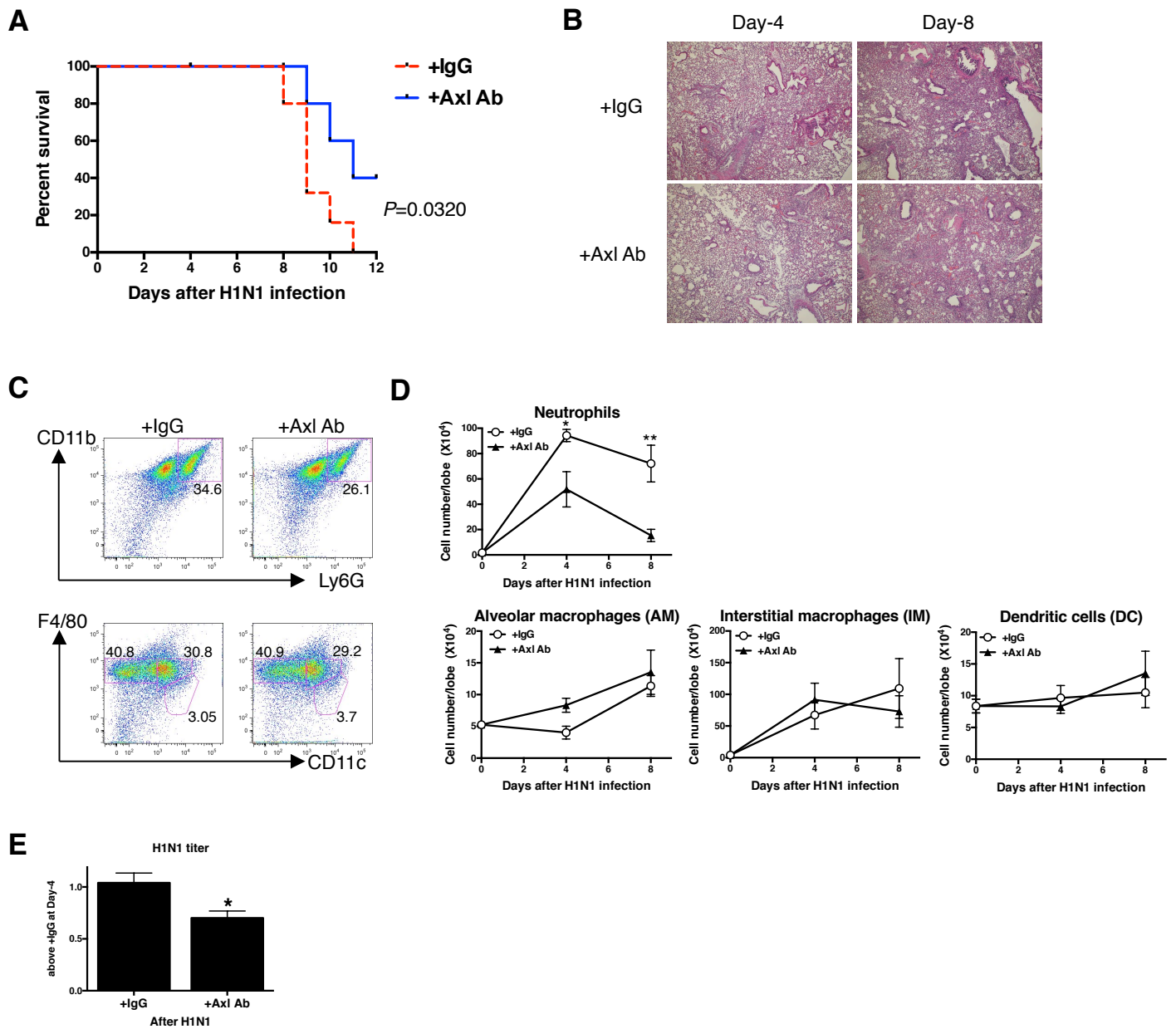


Supplemental Figure 1



Supplemental Fig. 1. Anti-Axl mAb treatment did not alter TAM receptor expression. Quantitative PCR transcript analysis of *Tyro3*, *Axl*, *Mertk*, and *Gas6* in whole lung samples during primary RSV infection (A), primary influenza virus infection (B), and fungal asthma (C) are indicated.

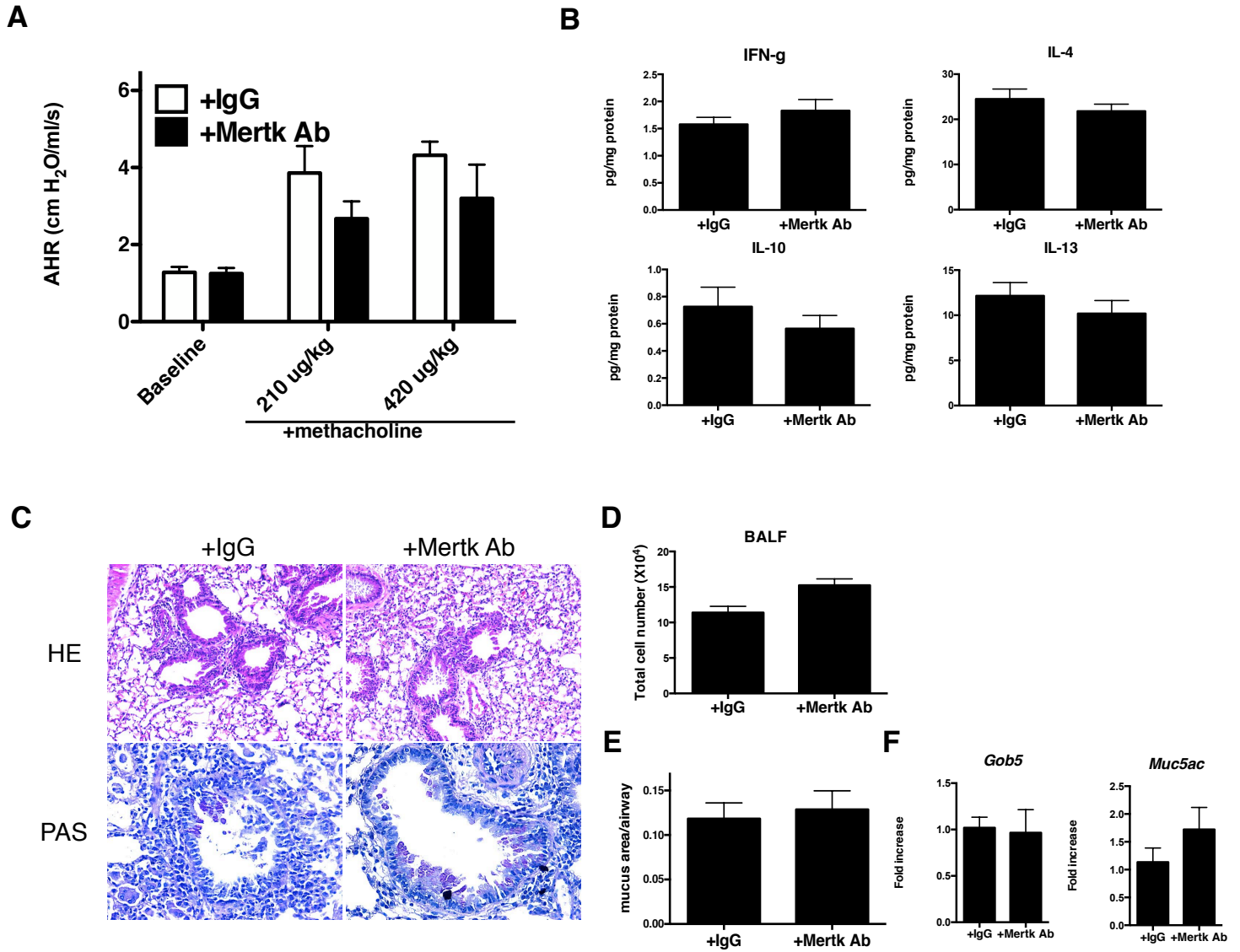
Supplemental Figure 2



Supplemental Fig. 2. Anti-Axl mAb treatment after influenza infection significantly inhibited lethality.

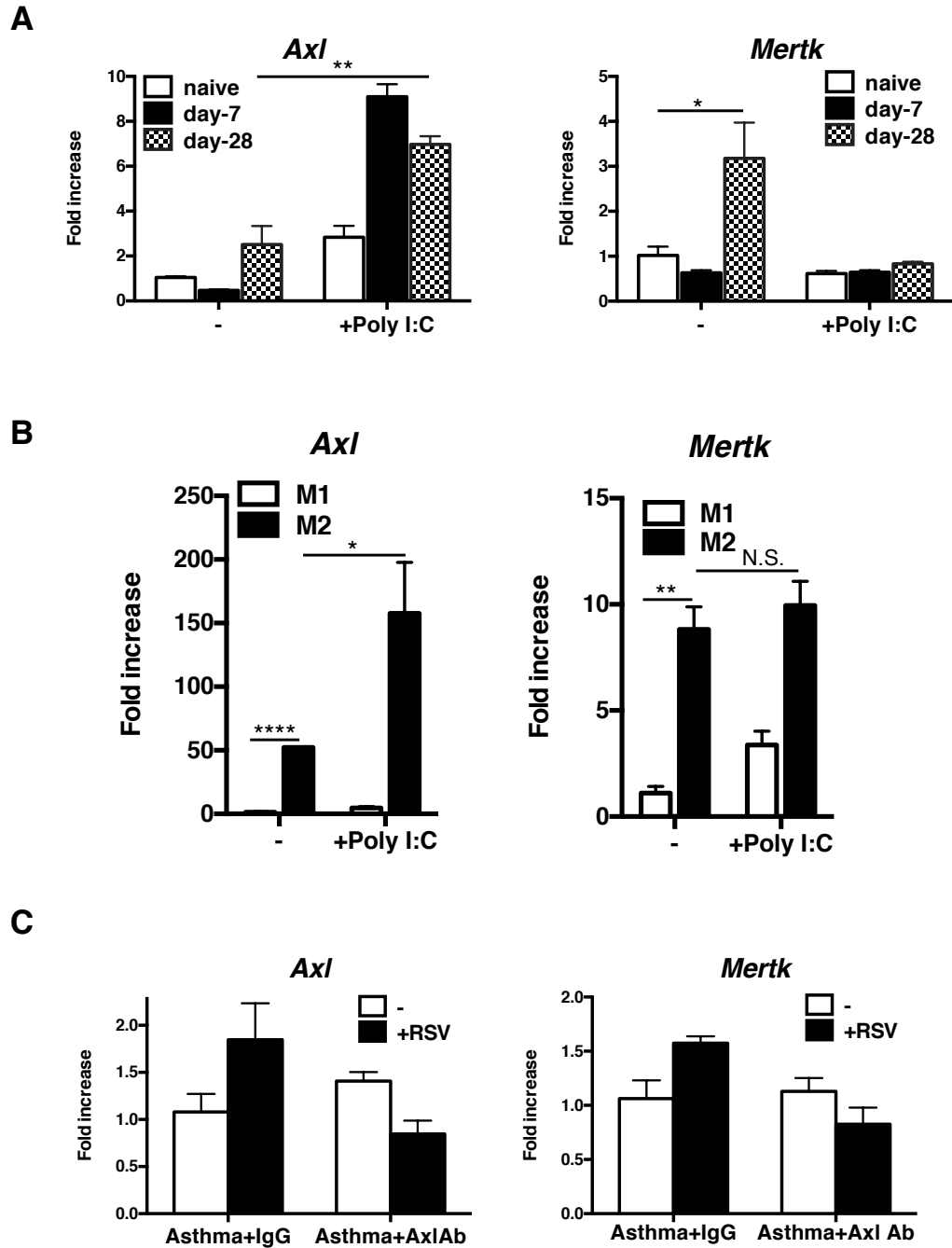
Naïve mice were treated with IgG1 or anti-Axl mAb during H1N1 infection at days 2, 4, 8 after intrapulmonary infection with H1N1 influenza virus. Kaplan Meier survival analysis of IgG1-treated group (red) and anti-Axl mAb-treated (blue) mice during H1N1 (1×10^4 PFU) infection (**A**). Results are expressed as the percent survival of a starting cohort of 10 mice per group. Representative hematoxylin and eosin (H&E)-stained lung tissue sections from IgG1- (upper) and anti-Axl mAb-treated (lower) mice at days 2, 4, and 8 post-infection with influenza virus (**B**). Representative flow cytometry analysis of neutrophils (upper panels, $CD45^+CD11b^{high}Ly6G^{high}$), interstitial macrophages (lower panels, $CD45^+F4/80^+CD11c^-$), alveolar macrophages ($CD45^+F4/80^+CD11c^+$), and dendritic cells ($CD45^+F4/80^-CD11c^+$) in IgG1- and anti-Axl mAb-treated lung samples from naïve mice at day 4 after H1N1 inoculation (**C**). Quantification of neutrophils, interstitial and alveolar macrophages, and dendritic cells in IgG1- and anti-Axl mAb-treated lung after H1N1 inoculation (**D**). Lung viral titers in IgG1- and anti-Axl mAb-treated mice at day 4 after H1N1 infection (**E**). * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ compared with control IgG-treated group.

Supplemental Figure 3



Supplemental Fig. 3. Anti-Mertk mAb therapy did not inhibit any airway feature in a fungal asthma model. Airway hyperresponsiveness to a dose of 210 $\mu\text{g}/\text{kg}$ or 420 $\mu\text{g}/\text{kg}$ of methacholine in IgG1-treated (+IgG1) or anti-Mertk mAb-treated (+Mertk mAb; 5 $\mu\text{g}/\text{dose}$ i.p. x 7 doses; **A**) at day 28 after conidia. Whole lung protein levels of IFN-g, IL-4, IL-10, and IL-13 in asthmatic mice treated with IgG1 or anti-Mertk mAb at day 28 after conidia (**B**). Representative H&E- and PAS-stained lung tissue sections from both treatment groups at day 28 after conidia (**C**). Quantification of cells present in BALF from IgG1- and anti-Mertk mAb-treated asthmatic mice (**D**). Quantitative analysis of mucus area in airway from IgG1- and anti-Mertk Ab-treated groups at day 28 after conidia (**E**). Quantitative PCR analysis of *Muc5ac* and *Gob5* in the IgG1 and anti-Mertk mAb groups at day 28 after conidia (**F**). Results are expressed as the mean \pm SEM for $n=5/\text{group}$.

Supplemental Figure 4



Supplemental Fig. 4. Synthetic double stranded RNA (Poly I:C) significantly enhanced *Axl* expression in macrophages from asthmatic mice. Bone marrow-derived macrophages (BMDM) from naïve mice and asthmatic mice prior to and at 7 and 28 days after conidia challenge were exposed to poly I:C (10 µg/ml for 6 h and *Axl* and *Mertk* transcript expression were determined using q-PCR (A). *, $P < 0.05$, **, $P < 0.01$. BMDM from naïve mice were stimulated with LPS/IFN-g to induce M1 macrophages (M1) and IL-4/IL-13 to induce M2 macrophages (M2) for 24 h. M1 and M2 macrophages were then exposed to poly I:C for 6 h, and *Axl* and *Mertk* transcript expression were analyzed using q-PCR (B). *, $P < 0.05$, **, $P < 0.01$ ****, $P < 0.0001$ versus the naïve group. Quantitative PCR analysis of *Axl* and *Mertk* in IgG1- and anti-*Axl* mAb-treated asthmatic mice at day 42 after conidia with mock (-) or RSV infection (+) (C).