

SUPPLEMENTAL FIGURE LEGENDS

Supplementary Figure S1: Short-term PM2.5 exposure does not significantly impact the body or tumor-bearing lung weights of EGFR^{L858R} mutant mice

(A) Body weights of EGFR^{L858R} mutant mice treated with PBS or PM2.5 for 3 weeks starting 3 days after oncogene induction. Weights were measured at 15 weeks. (n=8-9 per group). Results are shown as mean $\pm$ SD. p-values were calculated using Student t-test. Individual p-values are indicated in the figures.

(B) Tumor-bearing lung weights of EGFR^{L858R} mutant mice treated with PBS or PM2.5 for 3 weeks starting 3 days after oncogene induction. Weights were measured at 15 weeks. (n=9 per group). Results are shown as mean $\pm$ SD. p-values were calculated using Student t-test. Individual p-values are indicated in the figures.

Supplementary Figure S2: Flow cytometry gating strategy for ILC2, Th2 and CAFs in tumor bearing lungs

(A) Flow cytometry gating strategy of ILC2 cells in the tumor-bearing lungs (Live CD45⁺ Lineage⁻ (CD3, Ly-6G/Ly-6C, CD11b, CD45R/B220, TER-119/Erythroid cells) NK1.1⁻ CD90.2⁺ ST2⁺)

(B) Flow cytometry gating strategy of Th2 cells in the tumor-bearing lungs (Live CD45⁺ CD3⁺ CD4⁺ CCR4⁺ GATA3⁺)

(C) Flow cytometry gating strategy of CAFs (Live CD45⁻ EpCAM⁻ CD31⁻) and CD90.2⁺ CAFs (Live CD45⁻ EpCAM⁻ CD31⁻ CD90.2⁺) in the tumor-bearing lungs

Supplementary Figure S3: Delayed short-term PM2.5 exposure does not significantly impact the tumor-bearing lung weights of EGFR^{L858R} mutant mice

(A) Tumor-bearing lung weights of EGFR^{L858R} mutant mice treated with PBS or PM2.5 for 3 weeks starting 4 weeks after oncogene induction. Weights were measured at 10 weeks. (n=8 per group). Results are shown as mean $\pm$ SD. p-values were calculated using Student t-test. Individual p-values are indicated in the figures.

Supplementary Figure S4: Delayed short-term PM2.5 exposure does not significantly impact Kras^{G12D} and p53 mutant lung cancer

(A) Experimental design for the treatment of Kras^{G12D}; Trp53^{-/-} (AdCre;KP) mice for 3 weeks with PBS, PM2.5 (3 doses of PBS or 1 mg/mL PM2.5/week intranasally for 3 weeks) or bleomycin (single dose of 1 mg/kg bleomycin intranasally) starting 4 weeks after mutation initiation. Endpoint was at 10 weeks. Lungs were harvested for histology.

(B) Hematoxylin & Eosin-stained lung images of PBS, PM2.5 or bleomycin treated AdCre;KP mice 10 weeks post mutation initiation. Images are acquired at 4X magnification. Representative images are shown. (n=4 for PBS, n=5 for PM2.5, n=5 for Bleomycin). Scale bars, 200 μ m.

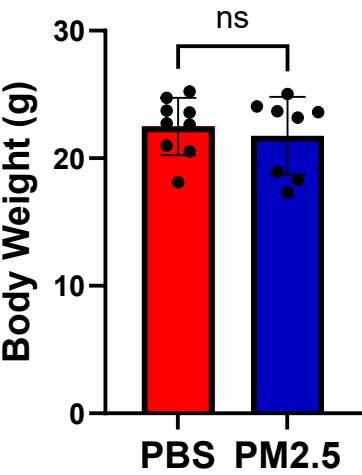
Quantification of (C) adenoma count and (D) lung tumor burden in PBS, PM2.5 or Bleomycin treated AdCre;KP mice 10 weeks post mutation initiation (n=4-5 per group). One-way ANOVA analysis.

Supplementary Figure S5: Long-term PM2.5 exposure does not significantly impact the tumor-bearing lung weights of EGFR^{L858R} mutant mice

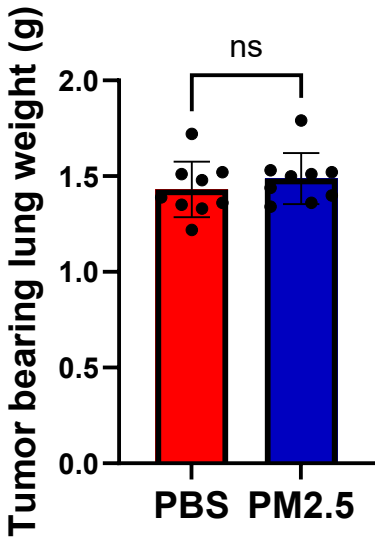
(A) Tumor-bearing lung weights of EGFR^{L858R} mutant mice treated with PBS or PM2.5 for 6 weeks starting 4 weeks after oncogene induction. Weights were measured at 10 weeks. (n=3 per group). Results are shown as mean $\pm$ SD. p-values were calculated using Student t-test. Individual p-values are indicated in the figures.

Supplementary Figure S1

A

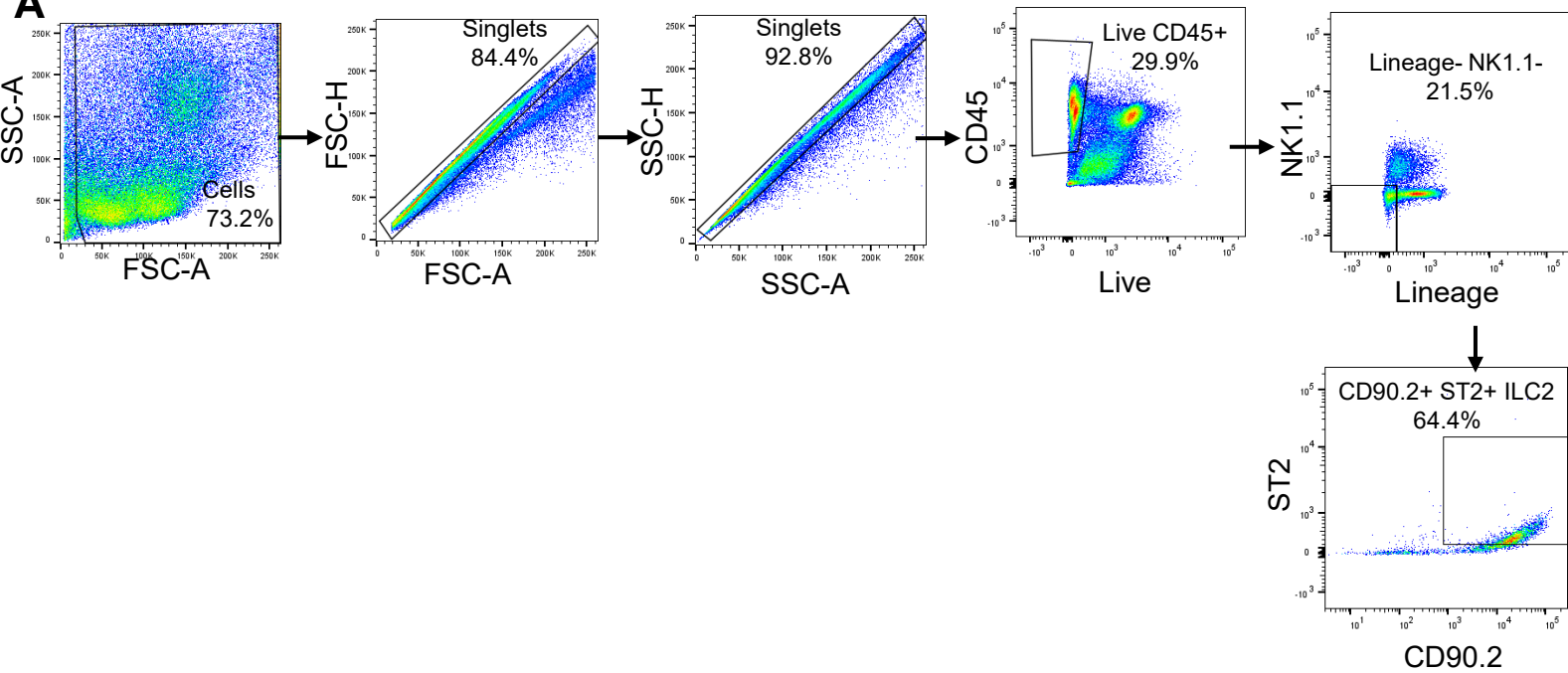


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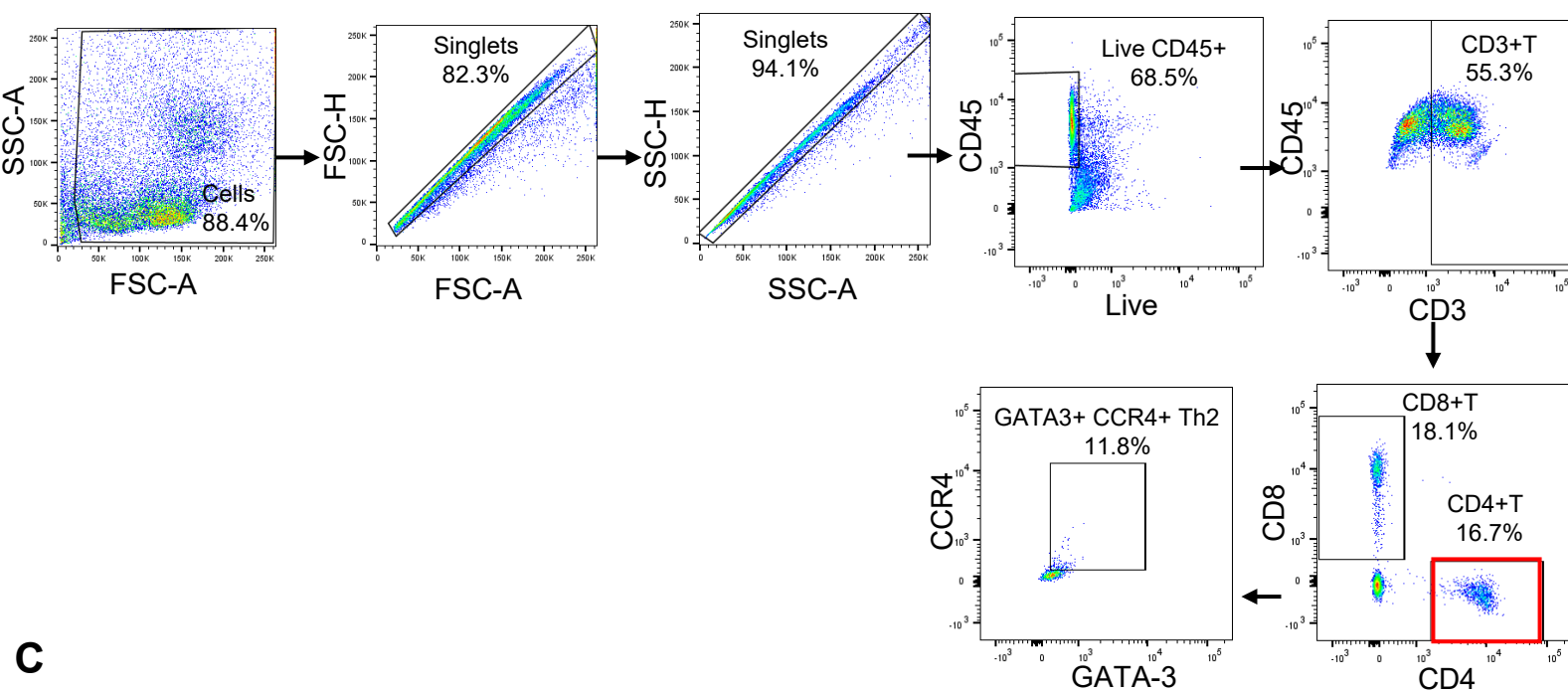


Supplementary Figure S2

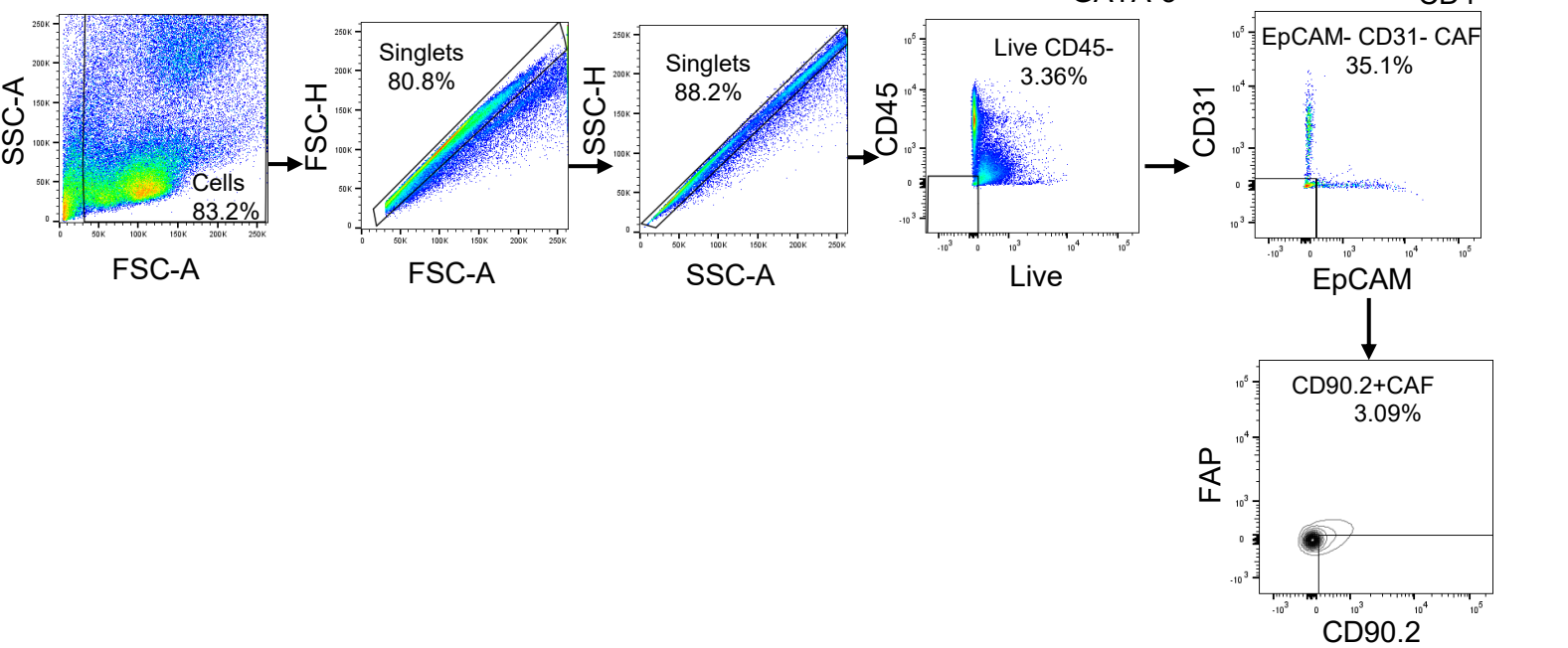
A



B

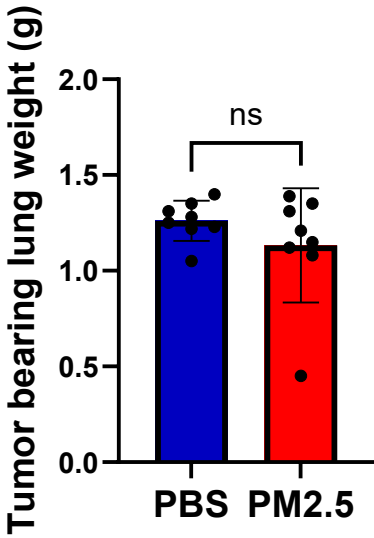


C

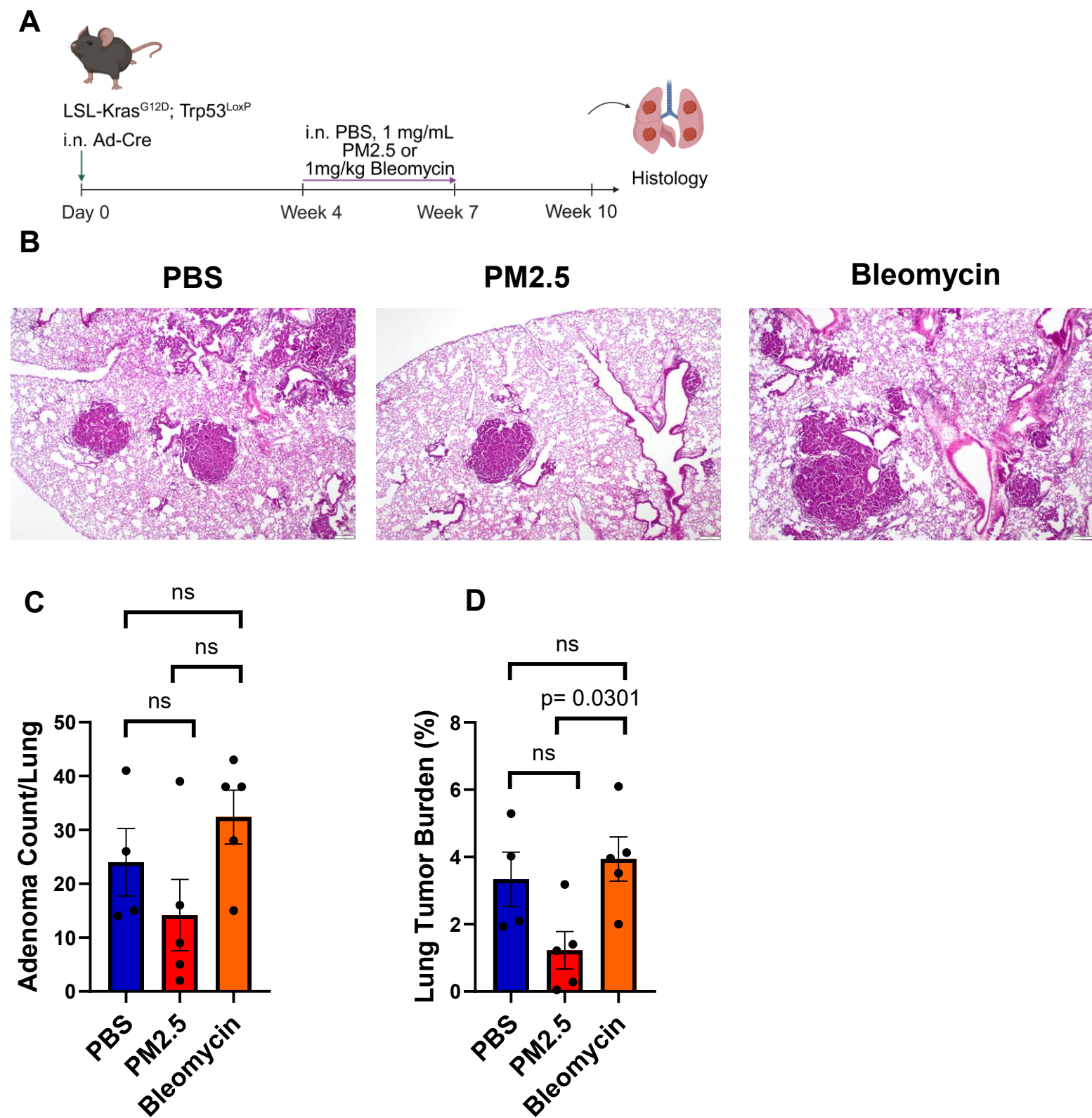


Supplementary Figure S3A

A



Supplementary Figure S4



Supplementary Figure S5

A

