Science Advances
AAAS

advances.sciencemag.org/cgi/content/full/5/8/eaax3387/DC1

Supplementary Materials for

Inhaled GM-CSF in neonatal mice provides durable protection against bacterial pneumonia

Elizabeth M. Todd, Rashmi Ramani, Taylor P. Szasz, S. Celeste Morley*

*Corresponding author. Email: morleys@wustl.edu

Published 14 August 2019, *Sci. Adv.* **5**, eaax3387 (2019)
DOI: 10.1126/sciadv.aax3387

This PDF file includes:

Supplementary Materials

Figure S1

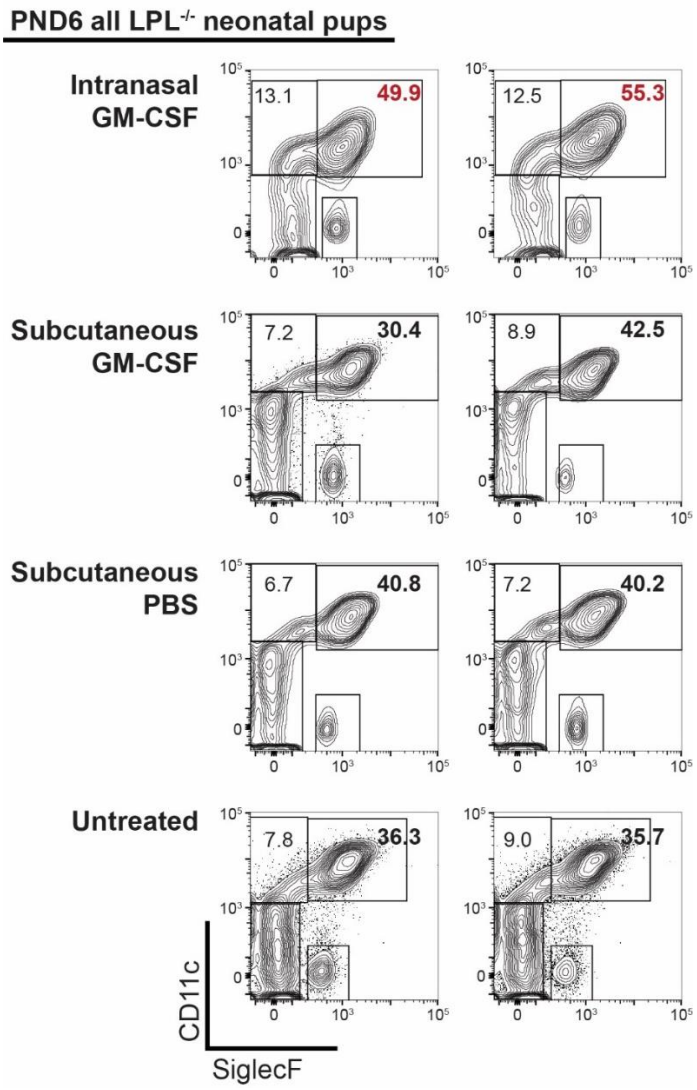

Fig. S1. No increase in mature AMs following the subcutaneous administration of rGM-CSF (20 ng) to LPL$^{-/-}$ neonatal pups on DOB, PND1, and PND2. Flow cytometry of whole lung homogenates from LPL$^{-/-}$ neonatal mice treated as indicated and sacrificed on PND6. Gated on CD45^{+}, F4/80^{+}/CD11b^{+} cells as shown in Fig. 1.

Figure S2

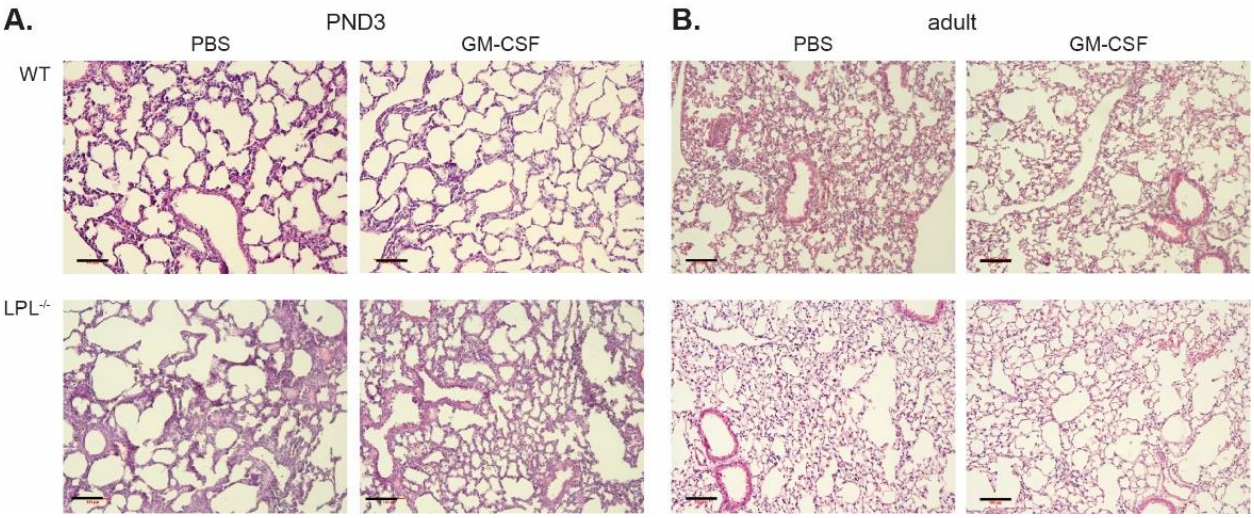

Fig. S2. No disruption of alveolarization observed after intranasal neonatal rGM-CSF therapy. Lungs were obtained from **(A)** PND3 or **(B)** adult animals, and sections were stained with hematoxylin and eosin. Sections were reviewed in a blinded fashion by a veterinary pathologist. Scale bars = 100 μM.

Figure S3

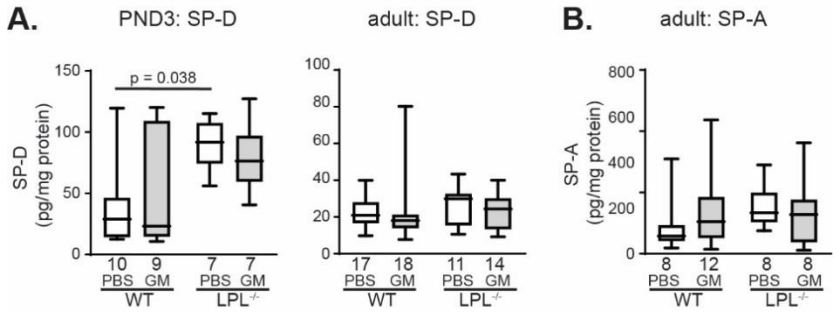

Fig. S3. Increased SP-D in LPL$^{-/-}$ PND3 neonatal pups. (A) SP-D or **(B)** SP-A concentrations (normalized to total protein in lysates of lung tissue) in WT and LPL$^{-/-}$ mice (PND3 pups or adult) after receiving *i.n.* neonatal therapy with rGM-CSF (GM; gray bars) or PBS (open bars). Line at median; p-value determined with Mann-Whitney; n of each group listed below x-axes; data combined from two independent cohorts of animals.