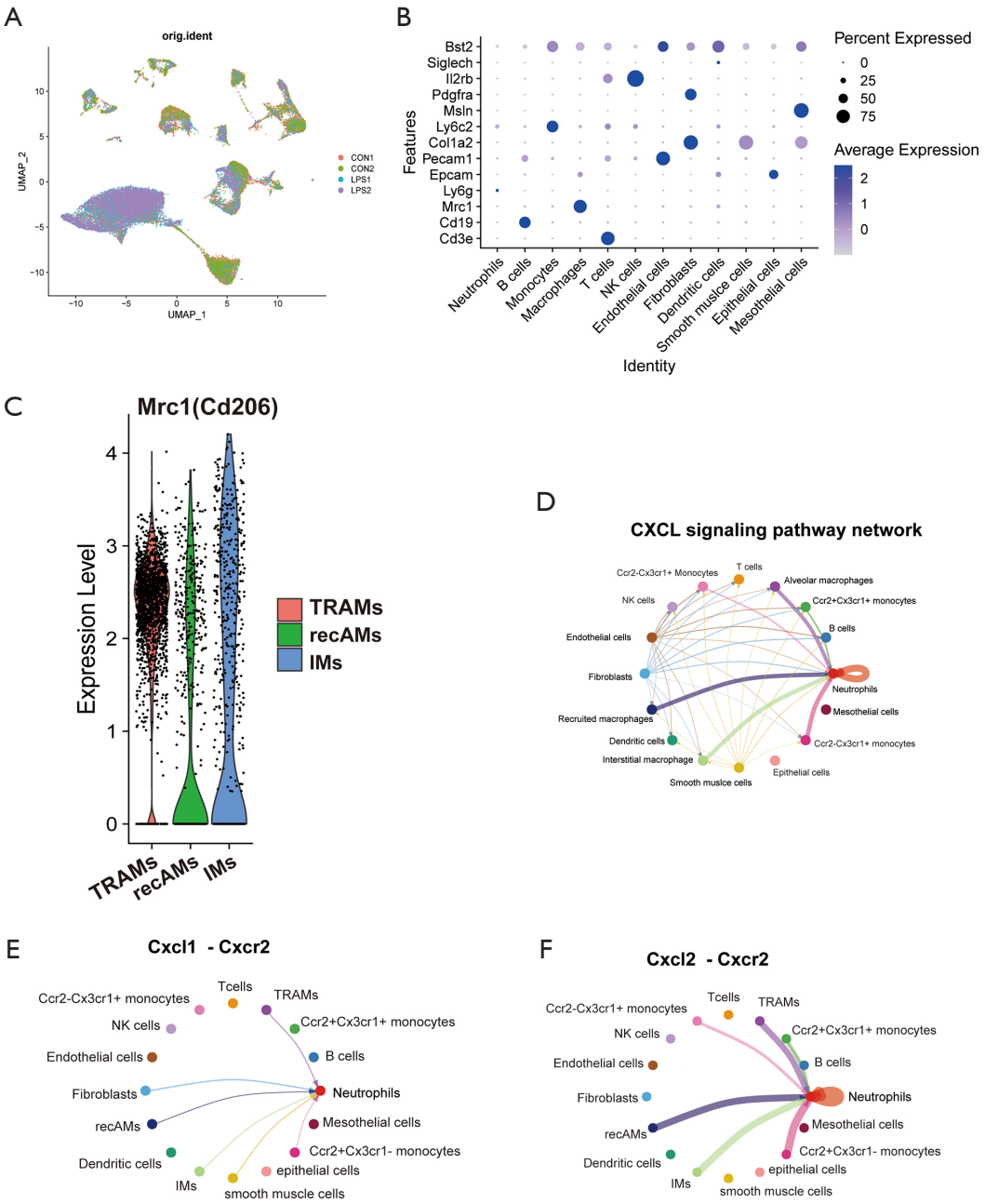

Figure S1 Determination of high-quality lung tissue cells from control (con) and LPS-induced ALI (LPS) mice using scRNA-seq. (A) Overlay of the con and LPS groups on UMAP clustering of murine lung cells. (B) Dot plot signature genes used to identify mouse lung cell populations. The following genes were used to identify the general populations of cells: neutrophils (*Ly6g*), B cells (*Cd19*), monocytes (*Ly6c2*), macrophages (*Mrc1*), T cells (*Cd3e*), NK cells (*Il2rb*), endothelial cells (*Pecam1*), fibroblasts (*Pdgfra*), dendritic cells (*Bst2*), smooth muscle cells (*Col1a2*), epithelial cells (*Epcam*), and mesothelial cells (*Msln*). (C) Violin plot for the expression of *Mrc1* in the macrophage subpopulation. (D) CXCL signaling pathway network. (E,F) recAMs could interact with neutrophils via the Cxcl1-Cxcr2 and Cxcl2-Cxcr2 ligand-receptor pairs. ALI, acute lung injury; CD206, mannose receptor; IM, interstitial macrophage; LPS, lipopolysaccharide; NK, natural killer; recAM, recruited alveolar macrophage; scRNA-seq, single-cell RNA sequencing; TRAM, tissue-resident alveolar macrophage; UMAP, uniform manifold approximation and projection.

https://dx.doi.org/10.21037/jtd-24-680

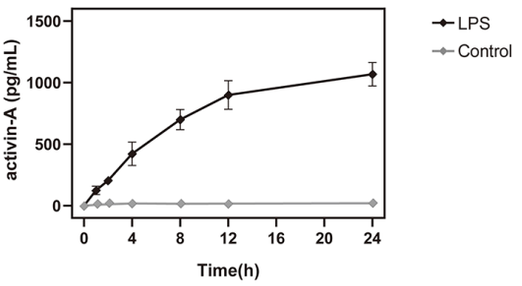

Figure S2 Activin-A levels at different time points after LPS stimulation in BMDMs. BMDM, bone marrow-derived macrophage; LPS, lipopolysaccharide.

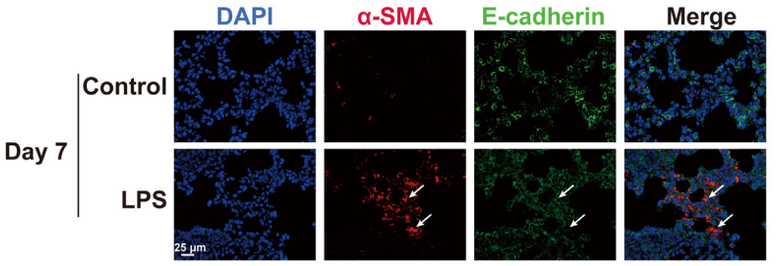

Figure S3 Representative images of coimmunostaining (400×) for E-cadherin (green) and α-SMA (red) (white arrows) in lung tissue slides from each group of mice. Control: mice on day 7 after phosphate-buffered saline treatment; LPS treatment: mice on day 7 after LPS treatment. White arrows: epithelial cells co-expressing E-cadherin and α-SMA. α-SMA, alpha smooth muscle actin; LPS, lipopolysaccharide.

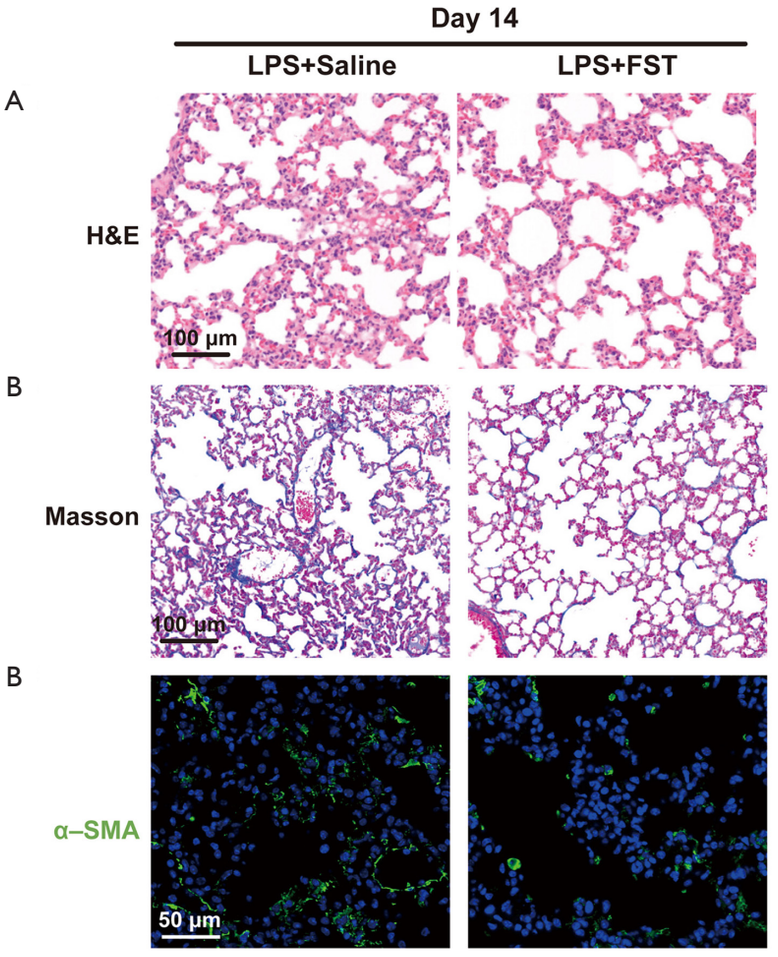

Figure S4 ALI mice generated more collagen deposition at 14 days post-LPS challenge compared with the FST-treated group. (A) Representative images of H&E staining (100×) lung tissue sections at day 14 post-LPS challenge. (B) Collagen deposition was detected via Masson staining (100×). (C) Abundance of α-SMA was detected by IF staining (400×). α-SMA, alpha smooth muscle actin; FST, follistatin; H&E, hematoxylin and eosin; LPS, lipopolysaccharide.

https://dx.doi.org/10.21037/jtd-24-680