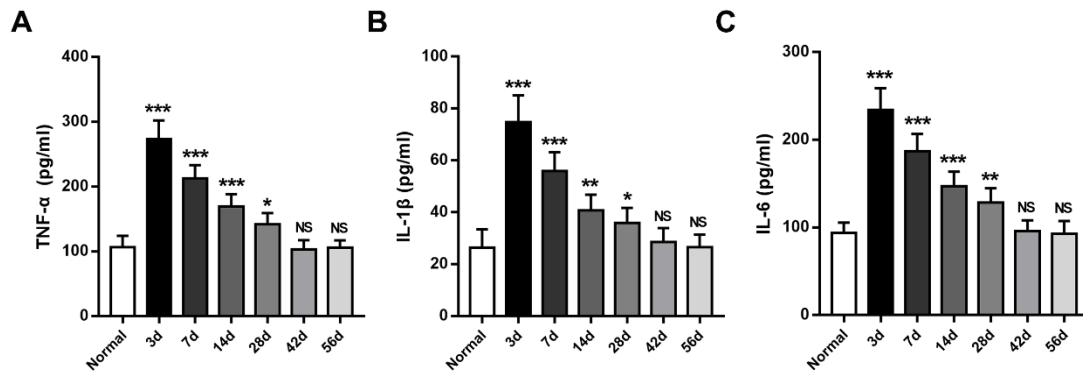
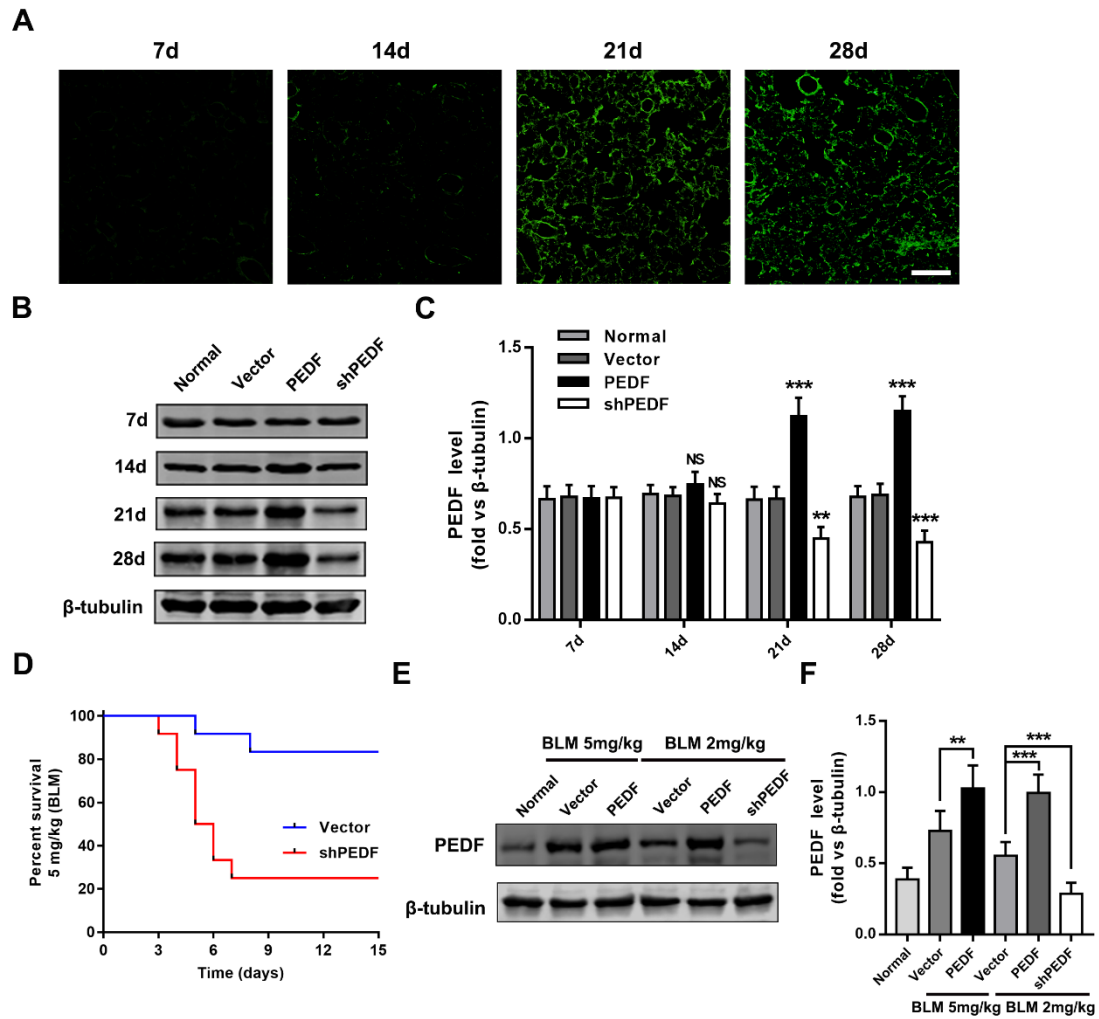


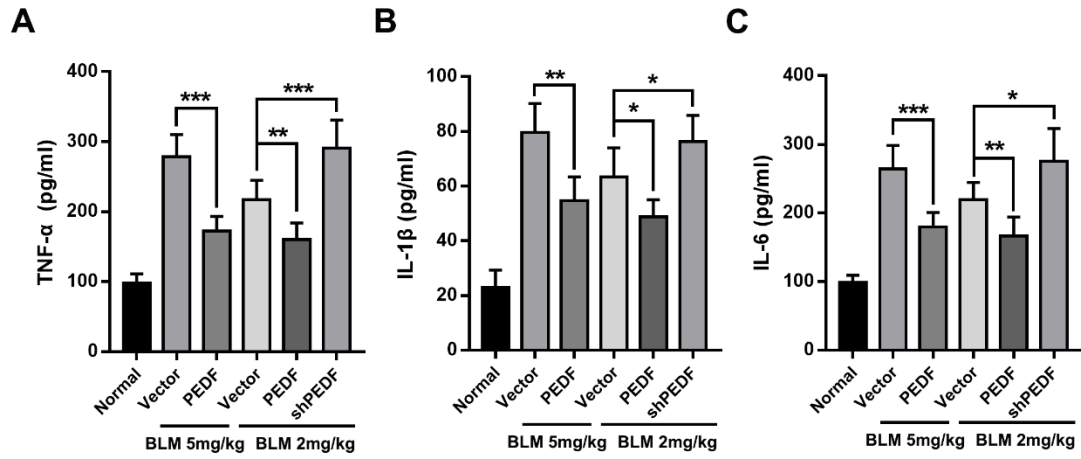
## Supplementary materials



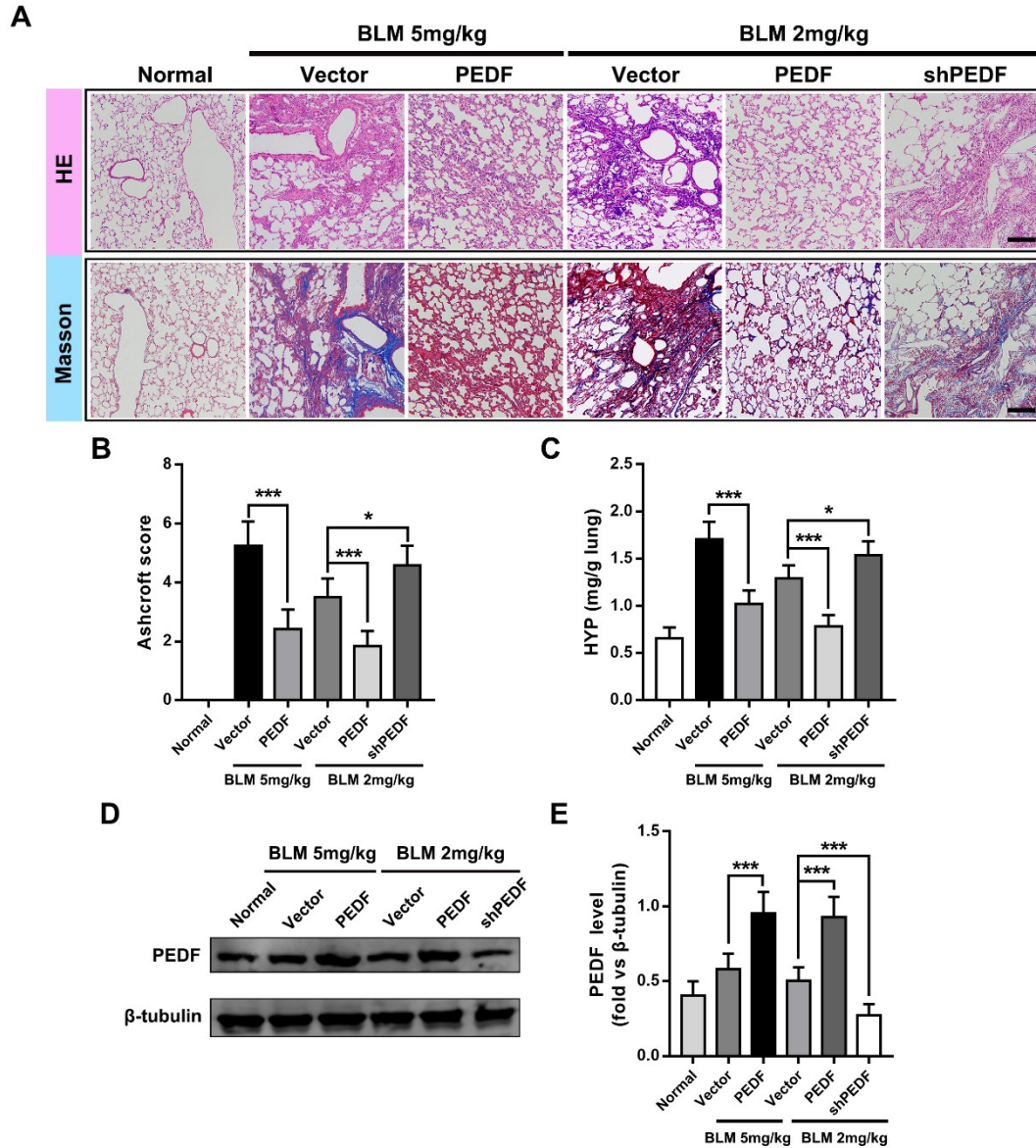
**Figure S1.** Quantification of cytokines. (A) TNF- $\alpha$ , (B) IL-1 $\beta$ , and (C) IL-6 expression levels increased in the BLM-treated groups, and the highest expression was observed in the 3d group. Data are expressed as the mean  $\pm$  SD. n = 6. NS, no significant difference; \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.



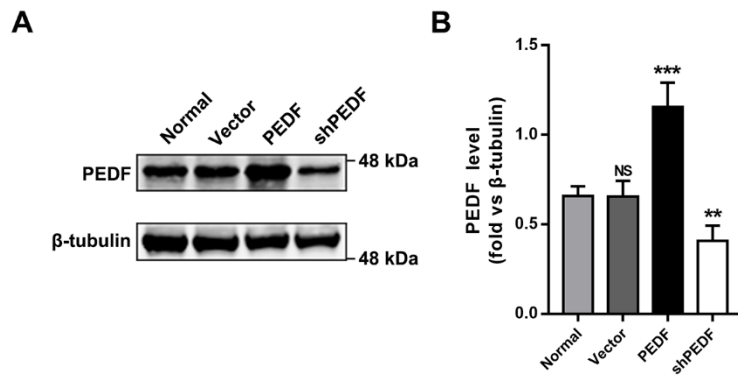
**Figure S2.** PEDF expression level in rats. (A) Representative GFP expression images were shown. Both the blank AAVs and PEDF-AAVs were constructed and labeled with GFP. The lungs were harvested from referential time point. bar=200 $\mu$ m. (B) and (C) Western blot to detect the transfection efficiency of AAVs (PEDF-AAV or PEDF-siRNA-AAV). Data are expressed as the mean  $\pm$  SD, n = 6. (D) The survival curve of shPEDF rats after exposure to BLM (5 mg/kg). n=12. (E) and (F) 28 days after BLM-exposed, western blot to detect the transfection efficiency of AAVs (PEDF-AAV or PEDF-siRNA-AAV). n=6. NS, no significant difference; \*\*P < 0.01; \*\*\*P < 0.001.



**Figure S3.** PEDF could inhibit BLM-induced inflammatory response. Quantification of (A) TNF- $\alpha$ , (B) IL-1 $\beta$ , and (C) IL-6 expression levels of the BALF from the experimental group and AAV treatment group (3 days after BLM-exposed). Data are expressed as the mean  $\pm$  SD, n = 6, \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.



**Figure S4.** Delayed intervention of PEDF could also inhibit collagen deposition. (A) Representative images of the H&E and Masson-stained cross-section of the lung from the experimental group and delayed treatment group (42 days after BLM-exposed). Bar = 200 $\mu$ m. (B) The Ashcroft score among multiple groups. (C) Quantification of hydroxyproline content in lung tissue of each group. Data are expressed as the mean  $\pm$  SD, n = 6, \*P < 0.05; \*\*\*P < 0.001. (D) and (E) 42 days after BLM-exposed, western blot to detect the transfection efficiency of AAVs (PEDF-AAV or PEDF-siRNA-AAV). n=6. \*\*P < 0.01; \*\*\*P < 0.001.



**Figure S5.** PEDF expression level in RPL fibroblasts. (A) and (B) Western blot to detect the transfection efficiency of LVs (PEDF-LV or PEDF-siRNA-LV). Data are expressed as the mean  $\pm$  SD,  $n = 4$ , NS, no significant difference; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .