Supplementary Information

Table S1. Experimental study plan

Group No.	DAY 0_Disease induction	Treatment groups DAY 0 - DAY 14	Animal	Bleomycin	Treatment method	Sacrifice
1	Vehicle Control: Saline @ 50µL/mice	Vehicle Control: Saline @ 50µL/mice	**10**	**No**	**Prophylactic (day 0-14)**	**Day 14**
2	Disease Control: Bleomycin SO_4 in saline @ 50µg/50µL/mice	Disease Control: Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**		
3	Nintedanib 60mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice	Nintedanib 60mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**		
4	Diosgenin 10mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice	Diosgenin 10mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**		
5	Diosgenin 30mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice	Diosgenin 30mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**		
6	Diosgenin 10mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice	Diosgenin 10mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**	**Therapeutic (day 8-14)**	

7	Diosgenin 30mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice	Diosgenin 30mg/kg Bleomycin SO_4 in saline @ 50µg/50µL/mice,	**10**	**Yes**		

Table S2. Primer sequences details

TBP	Forward	GTTGGGCTTCCCAGCTAAGT
	Reverse	CACAAGGCCTTCCAGCCTTA
Col1	Forward	TTCTCCTGGCAAAGACGGAC
	Reverse	CGGCCACCATCTTGAGACTT
TGFβ	Forward	AGGGCTACCATGCCAACTTC
	Reverse	CCACGTAGTAGACGATGGGC
α-SMA	Forward	GTACCACCATGTACCCAGGC
	Reverse	GCTGGAAGGTAGACAGCGAA
Fibronectin	Forward	CGAGGTGACAGAGACCACAA
	Reverse	CTGGAGTCAAGCCAGACACA
MCP-1	Forward	CCACAACCACCTCAAGCACT
	Reverse	AGGCATCACAGTCCGAGTCA

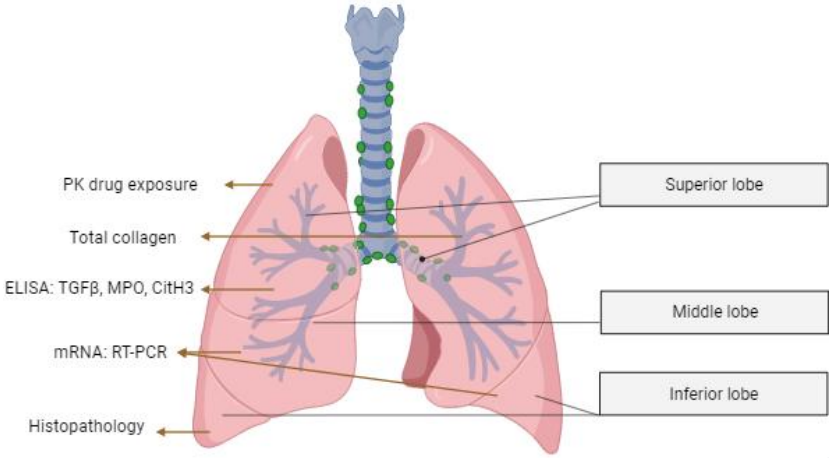


Figure S 1: Study sample collection details. Left superior lobe for total collagen, half of right superior lobe for PK drug exposure, rest half of right superior lobe for ELISA: TGFβ, CitH3 & MPO, right middle lobe along with left inferior or accessory lobe for transcript evaluation through RT-PCR (TGFβ, Col1, αSMA, Fibronectin, MCP1vs. TBP) and right inferior lobe for histopathology evaluation (H & E and Trichrome Gomori).

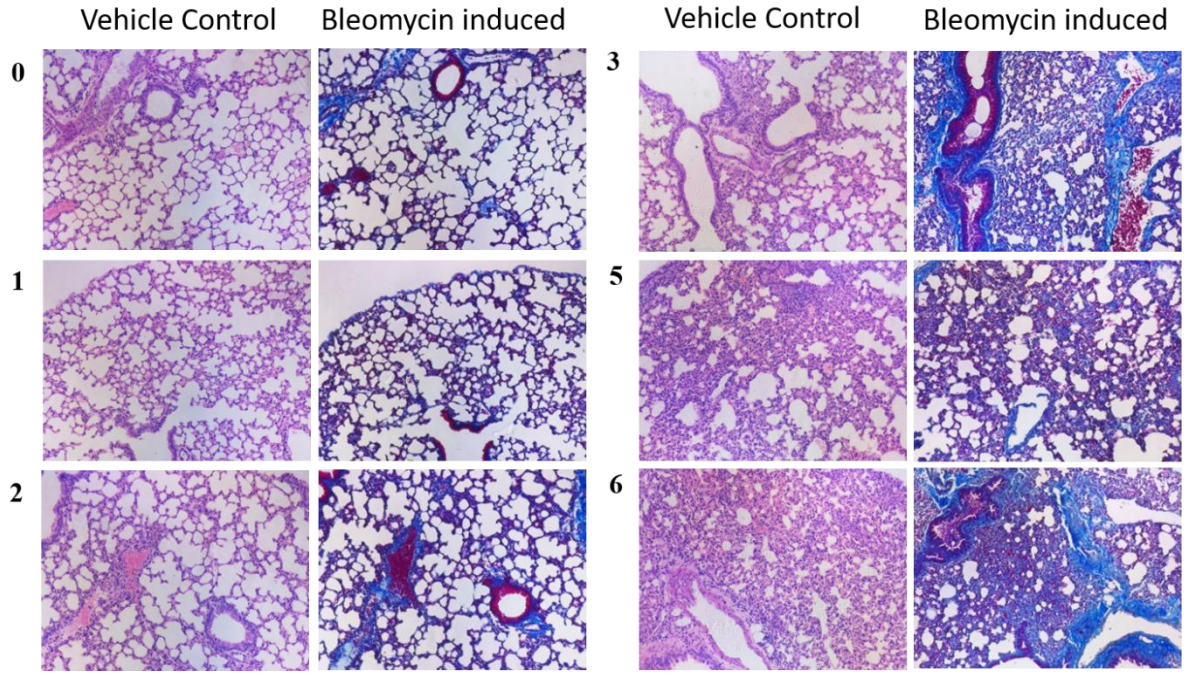


Figure S2: Representative images from the current study for Trichrome Gomori staining and scoring pattern. The scoring system for lung evaluation is as follows: a score of 0 indicates a normal lung, a score of 1 indicates the presence of isolated alveolar septa with mild fibrotic changes, and a score of 2 indicates the presence of fibrotic alterations in the alveolar septa characterized by the creation of knot-like structures. A score of 3 indicates the presence of continuous fibrotic walls within the alveolar septa. A score of 5 indicates the presence of confluent fibrotic masses. A score of 6 indicates the presence of large contiguous fibrotic masses.

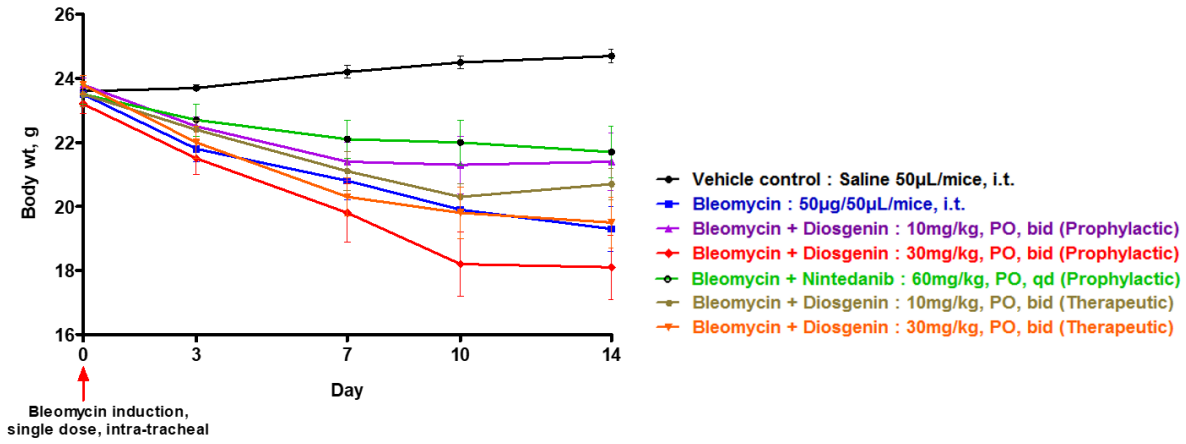


Figure S3: Effect of Diosgenin on body weight in Bleomycin-induced lung fibrosis mice. Diosgenin at 10mg/kg inhibited body weight loss in fibrotic mice. The mice's body weights were measured twice weekly until the course of the study. Nintedanib (60mg/kg) was used as a positive control. N=10 mice per group. $ P value < 0.05, #P value < 0.001, *P value < 0.0001 One-way ANOVA, Bonferroni posttest. The experiment was conducted twice, and the data was collected from a single experiment.