

## **Supplementary data**

**Supplementary Table S1:** 95% confidence interval (CI) for hemodynamic parameters in rats with acute pulmonary embolism (APE) ± breviscapine treatment

Group	mPAP (mmHg), Mean $\pm$ SD	95% CI (mPAP)	RV/(LV+S) Ratio, Mean $\pm$ SD	95% CI (RV/(LV+S))
Sham	15.2 $\pm$ 1.3	14.3 – 16.1	0.24 $\pm$ 0.02	0.22 – 0.26
APE	29.8 $\pm$ 2.5	28.0 – 31.6	0.42 $\pm$ 0.04	0.39 – 0.45
APE + Low-dose Breviscapine	23.2 $\pm$ 2.1	21.7 – 24.7	0.33 $\pm$ 0.03	0.31 – 0.35
APE + High-dose Breviscapine	19.8 $\pm$ 1.8	18.5 – 21.1	0.27 $\pm$ 0.02	0.25 – 0.29

Note: Abbreviations: mPAP, mean pulmonary arterial pressure; RV/(LV+S), right ventricular hypertrophy index.

**Supplementary Table S2:** Correlation between hemodynamic parameters, endothelial markers, and inflammatory cytokines in APE rats

Variables compared	Pearson r	p value	Direction
mPAP vs plasma IL-6	0.84	0.0005	Positive (strong)
mPAP vs plasma TNF- $\alpha$	0.79	0.0011	Positive (strong)
mPAP vs lung MCP-1	0.73	0.0032	Positive (moderate)
mPAP vs plasma IL-10	-0.70	0.0048	Negative (moderate)
mPAP vs CD31-positive area	-0.79	0.0010	Negative (strong)
CD31-positive area vs ICAM-1 OD	-0.81	0.0008	Negative (strong)
CD31-positive area vs VCAM-1 OD	-0.78	0.0012	Negative (strong)

Note: Abbreviations: mPAP, mean pulmonary arterial pressure; IL, interleukin; TNF- $\alpha$ , tumor necrosis factor-alpha; MCP-1, monocyte chemoattractant protein-1; CD31, endothelial marker; ICAM-1, intercellular adhesion molecule-1; VCAM-1, vascular cell adhesion molecule-1.