## Supplementary

Coating	PVC discs		Endotracheal tubes	
	Dose per area* (mg/cm <sup>2</sup> )	Loading dose** (mg)	Dose per area* (mg/cm <sup>2</sup> )	Loading dose** (mg)
PLGA3000 + LDC	2.47±0.11	25.63±1.18	2.49±0.09	25.32±0.70
PLGA6000 + LDC	2.44±0.06	25.31±0.63	2.58±0.09	26.52±0.80
PLGA10000 + LDC	2.35±0.09	24.36±0.97	2.45±0.04	25.78±0.56

Table S1 The loaded dose of LDC-eluting coatings on PVC discs and size 2.5 endotracheal tubes

\*: Dose per area = (Loading dose/coating area); \*\*: Loading dose = coating weight/2; coating area was estimated as:  $0.33 \text{ cm} \times 3.14 \times 10 \text{ cm} = 10.36 \text{ cm}^2$ . Data are represented as mean ± SEM, n≥5.



**Figure S1** Water contact angles of the PVC, PLGA3000 + LDC, PLGA6000 + LDC, and PLGA10000 + LDC surfaces. Data are represented as mean ± SEM, n≥5. The significance was evaluated for \*P<0.05, \*\*P<0.01, \*\*\*P<0.001.



**Figure S2** Images and SEM morphology of uncoated PVC tube and tube with DCM spraying for 15 s. Both tubes remain transparent (A). Compared with uncoated PVC tube (B), only minor swelling due to the DCM can be observed under SEM (C). The representative area of the highest degree of swelling due to the DCM was observed (C-i).



Figure S3 SaO2 and EtCO2 variables in different groups during 5 h of intubation. (A) SaO2; (B) EtCO2. Data are represented as mean  $\pm$  SEM, n $\geq$ 5.