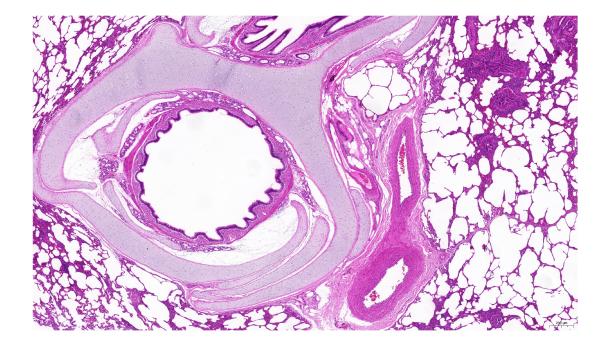
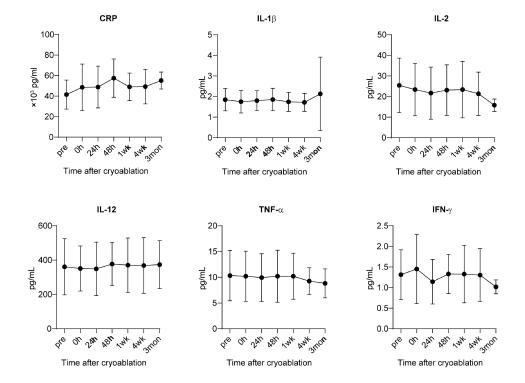


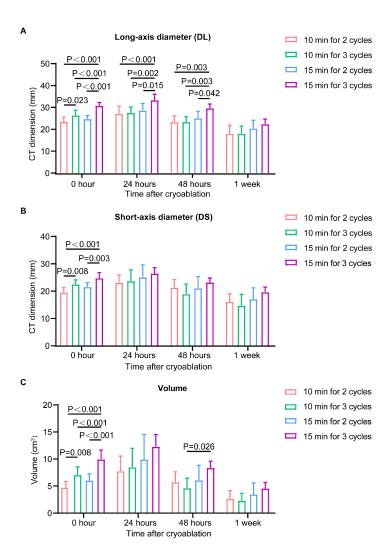
Supplementary figure S1 The operating principle of the novel flexible cryoprobe (Y1908) used in this study.



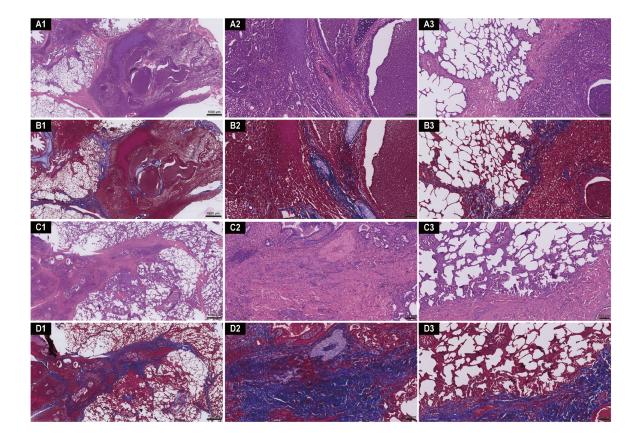
Supplementary figure S2 Representative HE staining of the non-target bronchial airways and surrounding lung tissues in the porcine model at 4 weeks after cryoablation. Scale bars: 200  $\mu$ m, at 5× magnification. HE, hematoxylin and eosin.



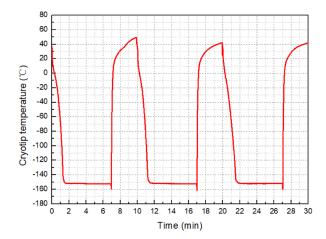
Supplementary figure S3 The level of C-reactive protein and proinflammatory cytokines including IL-1, IL-2, IL-12, TNF- and IFN- examined in the porcine peripheral blood (n=18 before theoryoablation; n=18 at 0 hour and 24 hours; n=12 at 48 hours, 1 week and 4 weeks; n=6 at 3 months). IFN- , interferon-; IL, interleukin; TNF- , tumour necrosis factor- .



Supplementary figure S4 Comparison of long-axis diameter (A), short-axis diameter (B) and volume (C) among different experimental groups measured by CT over time. (n=9 for each group at 0 hour and 24 hours; n=6 for each group at 48 hours and 1 week).



Supplementary figure S5 Representative HE and Masson staining at 4 weeks (A and B) and 3 months (C and D) after cryoablation in the group of 15 min for 3 cycles. Scale bars: 1 mm for A1, B1, C1 and D1, at  $1.5 \times$  magnification; 100  $\mu$ m for A2, B2, C2, D2, A2, B3, C3 and D3, at  $10 \times$  magnification. HE, hematoxylin and eosin.



Supplementary figure S6 Representative temperature curve of the cryoprobe tip.