

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Overview of AI co-pilot bronchoscope robot.

The movie introduces the design of AI co-pilot bronchoscope robot, the component of AI-human shared control algorithm, teleoperation experiment, simulation results, self-centering control experiments, in vitro and in vivo experiments.

File name: Supplementary Movie 2

Description: In Vitro Experiment of Bronchial Phantom 1.

The movie shows the bronchoscopy procedures by the expert with teleoperation and the novice doctor with AI co-pilot on the bronchial phantom 1.

File name: Supplementary Movie 3

Description: In Vitro Experiment of Bronchial Phantom 2.

The movie shows the bronchoscopy procedures by the expert with teleoperation and the novice doctor with AI co-pilot on the bronchial phantom 2.

File name: Supplementary Movie 4

Description: In Vivo Experiment of Live Porcine Lung Model

The movie shows the bronchoscopy procedure by the expert with teleoperation and the novice doctor with AI co-pilot in the live porcine lung.