**Online Supplementary Table S1. Inclusion and exclusion criteria**.

Inclusion Criteria

Patients satisfying the following criteria were eligible to participate in this study:

1. Signed informed consent.

2. Patients ≥ 18 years old.

3. Performance status 0-2 (Eastern Cooperative Oncology Group classification [ECOG]).

4. Willing to fulfill all follow-up requirements.

5. Medically inoperable primary soft tissue tumor of the lung or patient election not to have surgery. (Medically inoperable was defined per the following indicators: post-op predictive FEV1 < 40%; DLCO < 40%; hypoxemia or hypercapnia diabetes with end-organ damage; or severe cerebral, cardiovascular, peripheral vascular disease, or chronic heart disease).

6. A soft tissue tumor ≤ 2 cm in the outer two-thirds of the lung and not closer than 1 cm to the pleura. Tumor size was measured with at least 2-dimensional (2D) imaging. Only one tumor meeting the inclusion criteria were to be ablated during the day of ablation (Visit 2A). However, additional primary disease tumors may be present on the day of ablation. Note: Outer two-thirds of the lung was defined as peripheral beyond the segmental airway, past the segmental bronchi, such that proximal endobronchial soft tissue tumors were avoided; soft tissue tumors should not be contiguous with the pleura.

Exclusion Criteria

Patients who meet any of the following criteria were not be eligible to participate in this study:

1. Scheduled concurrent procedure for the target soft tissue tumor other than those indicated by the study protocol.

2. Pregnant or breastfeeding.

3. Physical or psychological condition that would impair study participation.

4. Patients with uncorrectable coagulopathy at time of screening.

5. Patient with implantable devices, including pacemakers or other electronic implants.

6. Prior pneumonectomy or bronchiectasis.

7. Severe neuromuscular disease.

8. Platelet count ≤ 50,000/mm3.

9. ASA (American Society of Anesthesiologists) score of ≥ 4.

10. Inability to tolerate anesthesia.

11. Expected survival less than 6 months.

12. Clinically significant hypertension.

13. Chronic, continuous ventilator support, which uses bi-level positive airway pressure (PAP) to improve lung function for severe conditions (however, intermittent PAP for non-pulmonary conditions, such as sleep apnea, is permitted).

14. Endobronchial soft tissue tumors proximal to the segmental airways.

15. Convex probe EBUS (CP-EBUS) lymph node sampling that results in a positive diagnosis of malignancy.

16. Imaging findings of active pulmonary infection.

17. The patient was judged unsuitable for study participation by the Investigator for any other reason.