

Supplementary Table 1. Cases with the number of resected tumors ≥ 10 by partial resection

| Case # | Age | Sex | Histology | Size of the largest lesion (mm) | Number of resected tumors | Preoperative FEV1 (L) | Postoperative FEV1 (L) | Decrement of FEV1 (L) | Rate of decrease (%) | Period from the lung resection to postoperative pulmonary function test (Days) |
|--------|-----|-----|--------------------------------------|---------------------------------|---------------------------|-----------------------|------------------------|-----------------------|----------------------|--|
| 55 | 51 | F | Leiomyosarcoma | 27 | 18 | 2.02 | 1.63 | 0.39 | 19.3 | 65 |
| 59 | 50 | F | Leiomyosarcoma | 24 | 10 | 1.40 | 1.63 | -0.23 | -16.4 | 372 |
| 64 | 51 | F | Leiomyosarcoma | 25 | 16 | 1.63 | 1.62 | 0.01 | 0.6 | 359 |
| 86 | 66 | M | Leiomyosarcoma | 33 | 13 | 2.10 | 1.66 | 0.44 | 21.0 | 31 |
| 120 | 44 | M | Extraskkeletal myxoid chondrosarcoma | 12 | 13 | 3.44 | 3.27 | 0.17 | 4.9 | 159 |
| 122 | 69 | M | Extraskkeletal osteosarcoma | 13 | 11 | 3.38 | 2.55 | 0.83 | 24.6 | 491 |
| 137 | 17 | M | Osteosarcoma | 20 | 15 | 4.23 | 2.94 | 1.29 | 30.5 | 39 |
| 143 | 17 | M | Osteosarcoma | 42 | 15 | 2.94 | 2.52 | 0.42 | 14.3 | 238 |
| 162 | 51 | F | Leiomyosarcoma | 7 | 13 | 2.00 | 1.52 | 0.48 | 24.0 | 26 |
| 164 | 47 | F | Leiomyosarcoma | 29 | 11 | 2.06 | 1.52 | 0.54 | 26.2 | 62 |
| 170 | 62 | F | Leiomyosarcoma | 11 | 11 | 1.39 | 1.27 | 0.12 | 8.6 | 208 |
| 196 | 60 | F | Carcinosarcoma | 38 | 11 | 2.17 | 1.39 | 0.78 | 35.9 | 56 |
| 204 | 60 | F | Leiomyosarcoma | 16 | 10 | 1.73 | 1.46 | 0.27 | 15.6 | 43 |
| 231 | 43 | F | Alveolar soft part sarcoma | 18 | 12 | 2.63 | 2.26 | 0.37 | 14.1 | 20 |
| 247 | 44 | F | Leiomyosarcoma | 15 | 14 | 2.52 | 2.25 | 0.27 | 10.7 | 118 |
| | | | | Average | 12.9 | | | Average | 0.41 | 15.6 |
| | | | | Median | 13.0 | | | Median | 0.39 | 15.6 |

Supplementary Table 2. Regimen of chemotherapy before the first pulmonary metastasectomy

| Regimen | Cases (n = 58) |
|------------------|----------------|
| GEM + DOC | 22 |
| IFO + CDDP + ADR | 8 |
| Pasopanib | 7 |
| IFO + ADR | 5 |
| ADR | 2 |
| CPA | 2 |
| IFO + ETP | 2 |
| PTX + CBDCA | 2 |
| CPA + ADR + DTIC | 1 |
| DTIC | 1 |
| ET-743 | 1 |
| GEM | 1 |
| IFO + CDDP | 1 |
| IFO + EPI | 1 |
| IFO + EPI + CDDP | 1 |
| Imatinib | 1 |

GEM, gemcitabine; DOC, docetaxel; IFO, ifosfamide; CDDP, cisplatin; ADR, adriamycin; CPA, cyclophosphamide; ETP, etoposide; PTX, paclitaxel; CBDCA, carboplatin; DTIC, dacarbazine; ET-743, trabectedin; EPI, epirubicin

Supplementary Table 3. Regimen of chemotherapy before the most recent pulmonary metastasectomy

| Regimen | Cases (n = 45) |
|--|----------------|
| GEM + DOC | 16 |
| Pasopanib | 10 |
| IFO + CDDP + ADR | 3 |
| DTIC | 2 |
| GEM | 2 |
| IFO | 2 |
| IFO + ETP | 2 |
| ADR | 1 |
| CDDP | 1 |
| CPA | 1 |
| ET-743 | 1 |
| IFO + ADR | 1 |
| ADR + IFO + DTIC | 1 |
| PTX + CBDCA | 1 |
| Raf/MEK inhibitor (investigational agent) | 1 |

GEM, gemcitabine; DOC, docetaxel; IFO, ifosfamide; CDDP, cisplatin; ADR, adriamycin; DTIC, dacarbazine; ETP, etoposide; CPA, cyclophosphamide; ET-743, trabectedin; PTX, paclitaxel; CBDCA, carboplatin