

Supplementary material

Supplementary Table S1: baseline characteristics of successful and failed organoid

establishment.

| | Successful establishment (n=18) | Failed establishment (n=19) |
|--|---------------------------------------|-----------------------------------|
| Age (mean, standard deviation) | 67.7 ± 9.7 y | 65.7 ± 6.3 y |
| Male sex | 10 (55.6%) | 11 (57.9%) |
| UICC Stage | | |
| I | 7 (38.9%) | 8 (42.1%) |
| II | 6 (33.3%) | 2 (10.5%) |
| III | 3 (16.7%) | 7 (36.8%) |
| IV | 2 (11.1%) | 2 (10.5%) |
| Histology | | |
| AC | 10 (55.6%) | 10 (52.6%) |
| SCC | 5 (27.8%) | 7 (36.8%) |
| Mucoepidermoid | 1 (5.6%) | 0 (0.0%) |
| Atypical Carcinoid | 2 (11.1%) | 0 (0.0%) |
| Pleomorphic carcinoma | 0 (0.0%) | 2 (10.5%) |
| Neoadjuvant treatment | 2 (11.1%) | 5 (26.3%) |
| Hemangiosis | 10 (55.6%) | 9 (47.4%) |
| Lymphangiosis | 7 (38.9%) | 5 (26.3%) |
| Differentiation | | |
| G1 | 1 (5.6%) | 0 (0.0%) |
| G2 | 6 (33.3%) | 8 (42.1%) |
| G3 | 6 (33.3%) | 5 (26.3%) |
| n/a | 5 (27.8%) | 6 (31.6%) |
| Specimen diameter (mean, standard deviation) | 9.2 ± 4.0 mm | 8.0 ± 4.1 mm |

AC, adenocarcinoma; SCC, squamous-cell carcinoma; UICC, Union for International Cancer Control