

Supplementary Fig 4. Peritonoid sensitivity to standard care chemotherapeutic regimens ex vivo. (A-E) In our available cases, ex vivo peritonoid FOLFOX sensitivity did not significantly separate clinical responders and non-responders to FOLFOX. (A) Doseresponse curves of 9 peritonoids exposed to FOLFOX ex vivo, normalised to vehicle alone for each line. The assays were performed in quadruplicate with at least 2 independent repeats. Representative curves are shown. (B) Dose response area under the curve (AUC) was calculated from raw dose-response data and mean AUC of 2 or 3 independent repeats are shown normalised to the mean AUC for all lines. CRPM clinical response to FOLFOX: red, progressive disease (PD); blue, partial response or stable disease (PR/SD); and black, not determined. The PD and PR/SD groups are not significantly different (t-test). (C-D) Evidence of stable disease in Patient 3 on FOLFOX for 11 months followed by (E) disease progression 4 months after cessation of Oxaliplatin but continuing with 5FU as single agent. White arrow CRPM nodule, yellow arrow ascites.



Supplementary Figure 4 Peritonoid sensitivity to standard care chemotherapeutic regimens *ex vivo* **cont. (F-G)** Dose-response curves of 9 peritonoids exposed to FOLFIRI *ex vivo*, normalised to vehicle alone for each line. The assays were performed in quadruplicate at SAHMRI, Australia, with at least 2 independent repeats. Representative curves are shown. **(G)** area under the curve (AUC) was calculated from raw dose-response data and mean AUC of 2 or 3 independent repeats are shown normalised to the mean AUC for all lines. Red indicates progressive disease following FOLFIRI treatment in the patient; black, clinical response to FOLFIRI was not determined. **(H-M)** Example FDG-PET-CT scans (patient 1) showing non-responsive disease to standard care chemotherapy. **I&K** images taken at same time 13 months after **H&J** index scan, during which time the patient was on FOLFIRI+Cetuximab. **(H,I)** frontal view, **(J,K)** transverse axial view. **(L,M)**, disease progression over further 8 months following rechallenge of patient with FOLFOX. **(N-O)** Viability of tumouroids derived from the primary CRC (red) or peritonoids from the matched CRPM (blue) following treatment with FOLFOX or FOLFIRI regimes *ex vivo* at SEngine Precision Medicine. Dose response curves showing cell viability normalised to untreated controls. For Patient 7 **(N)** tumouroids are more sensitive to both FOLFOX and FOLFIRI treatments, whereas for Patient 6 **(O)** tumouroids are only more susceptible to the FOLFIRI regime, in comparison to peritonoids from the same patient.