Supplemental Figure 1. 3D model of opened Whipple specimen. This is a two viewpoint capture, generated by fusing two models of 18 images each, i.e. 36 images were required in total from upper and lower hemispheres of view.

Supplemental Figure 2. 3D model of opened extended right hemicolecotomy. There is an ulcerated tumour in the distal transverse colon and other pathological features including a diverticulum in the ascending colon as well as small polyps, which may be identified by looking around the specimen.

Supplemental Figure 3. 3D model of an opened radical nephrectomy. The solid and cystic components of the tumour are discernable. Artefactual defects are present in the cystic areas where the wall was less than 1mm thick which is unable to be rendered in the SfM photogrammetry process.

Supplemental Figure 4. 3D model of a radical cystectomy with en block hysterectomy. Tumour tissue is seen invading into perivesical fat and correlation with surrounding anatomical structures is apparent.