Figure S1. Intrabursal injection of Adeno-Cre activates conditional alleles in OSE cells and induces histopathological changes of murine OSE post induction. A, To demonstrate successful targeting, we injected Adeno-Cre virus into the bursa of recipient ROSA26STOP<sup>SEOSlacZ</sup> reporter mice. By two weeks post-induction (pi), multifocal induction was visible in the ovary (arrows in a) and confirmed to be restricted to the OSE by further sectioning of the ovaries (arrowheads in b). No evidence of β-galactosidase staining was detected in the un-injected ovary (on left in a). B, H&E staining of ovaries shows that SEOC originates in OSE (a, arrow), where it develops from hyperplastic epithelium (b, arrow) and progresses through carcinoma in situ (c, arrows) into papillary carcinoma (d, star) with invasion/destruction of the underlying ovary. Fully progressed carcinoma spreads to adjacent peritoneal organs (carcinomatosis on hepatic capsule; e, arrow) and metastasizes into distant organs such as the lung (f, arrow). C, Progression of the disease is associated with increased cell proliferation (Ki-67 IHC, brown stain) of the primary tumor cells (d) with even higher proliferation in the peritoneal carcinomatosis (arrow in e) and metastases (arrow in f). Note the gradual increase in proliferation in carcinoma in situ (arrow in c) and SEOC (star in d) compared to hyperplastic ovarian surface epithelium (arrow in b). Scale bars represent 100 μm.