

**Supplementary Figure 4. Immunohistochemical Profile for Patient 21**

**RAD51**

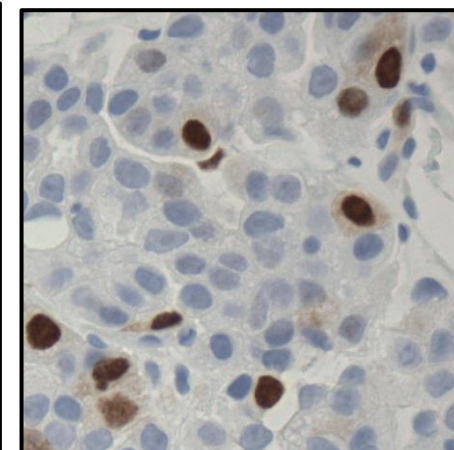
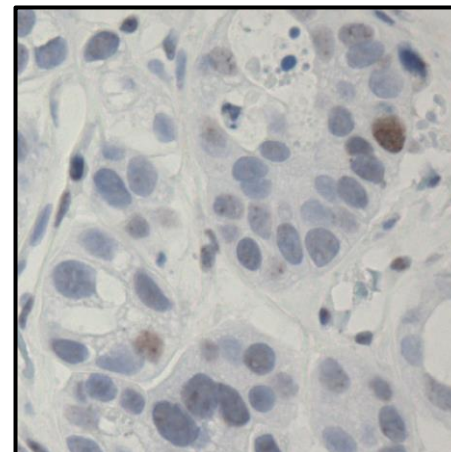
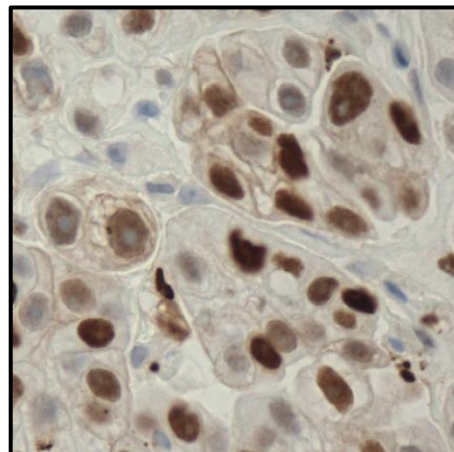
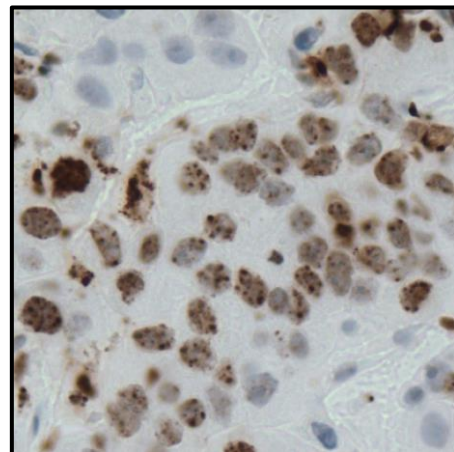
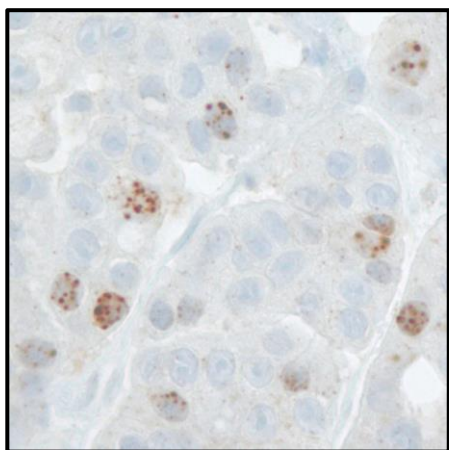
**$\gamma$ -H2AX**

**pKAP1**

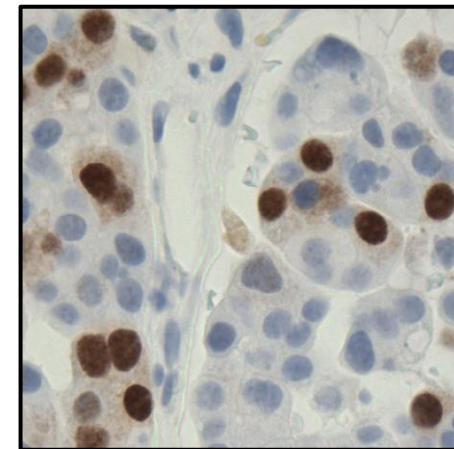
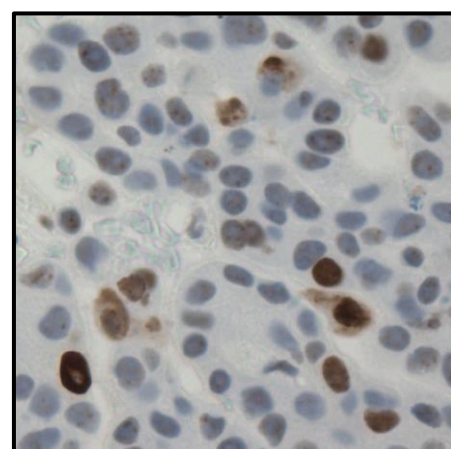
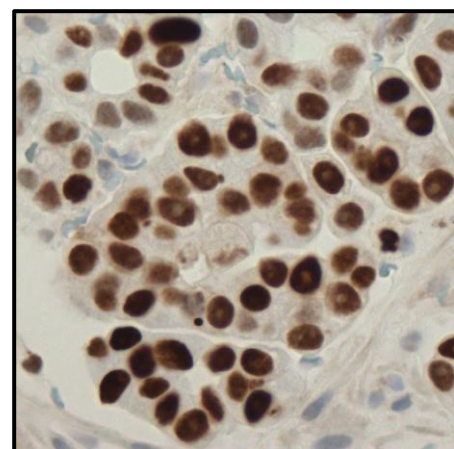
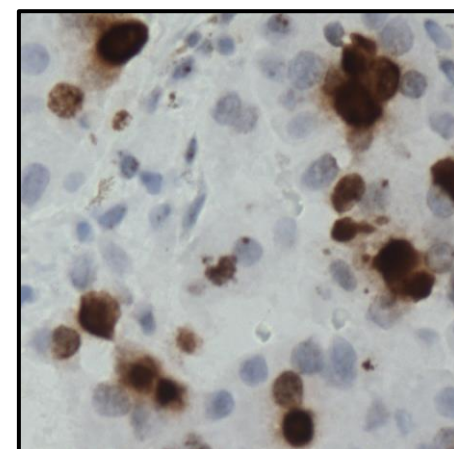
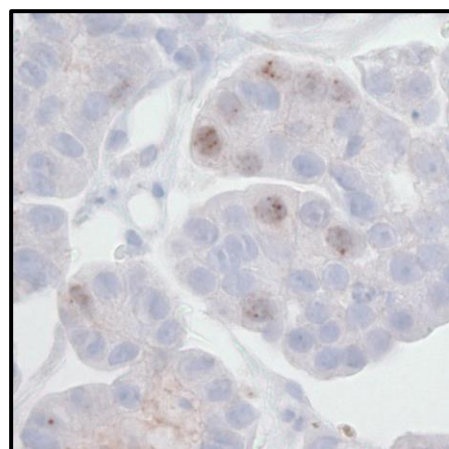
**pS3/4-RPA32**

**Geminin**

**Post-olaparib**



**Post-olaparib/prexasertib**



**Figure S4. Immunohistochemical profile for a *BRCA1*-mutant HGSOC (Patient 21).**

Shown are representative IHC staining for a *BRCA1*-mutant HGSOC patient enrolled to the expansion cohort. Included are RAD51 foci and  $\gamma$ H2AX phosphorylation staining previously included in Figure 1 for comparison. RAD51 foci staining was used as a surrogate marker of homologous recombination repair.  $\gamma$ H2AX phosphorylation occurs at sites of DNA double-stranded breaks, is a marker of DNA damage. pKAP1 is phosphorylated by ATM in response to DNA damage. pS3/4-RPA32 phosphorylation occurs at sites of residual stalled replication forks. The immunohistochemical profile supports a role for CHK1 in both replication fork stability and HR repair.