

## Description of Additional Supplementary Files

Title: Supplementary Data 1

Description: Transcription factor binding motifs that are enriched in chromatin regions with higher accessibility in Brca1/p53 animals compared to WT.

Title: Supplementary Data 2

Description: Sequences of primers that were used for the genotyping of Brca1/p53 animals and probes that were used for qRT-PCR. mut=mutated locus, FW=forward, RV=reverse.

Title: Supplementary Data 3

Description: Clinical meta data of human samples.