



**Figure S1. *BRCA1* Deletion Inaccurately Aligned by CASAVA**

A 19 nt *BRCA1* deletion was not identified by one alignment program (CASAVA), and instead appears as a series of SNVs. The *BRCA1* deletion is still observable on IGV (middle box) as these SNVs align to two separate regions of *BRCA1* exon 15 (arrowed red boxes). This deletion leads to a frameshift starting with p.1655Ser and a premature STOP at p.1670, resulting in the loss of 193 AA.