

## **Description of Additional Supplementary Files**

### **Title: Supplementary Code 1**

Description: The code used to calculate the targeting scope of base editors in tumor modelling.

### **Title: Supplementary Data 1 - Organoid morphology after quadruple mutation induction**

**Description:** Brightfield images of all handpicked and genotyped organoids. The genotype of these organoids is visualized in figure 6. Scale bars are 500 $\mu$ m.

### **Title: Supplementary Data 2 - Variants detected in whole genome sequenced multiplexed and sequentially edited clones**

**Description:** VCF files that were used for data analysis.