



**Extended Data Figure 8 | Genomic instability in *Aldh2*<sup>-/-</sup>*Fancd2*<sup>-/-</sup>*Trp53*<sup>-/-</sup> mice.** **a**, Quantification of micronucleated NCEs in the blood of *Aldh2*<sup>-/-</sup>*Fancd2*<sup>-/-</sup>*Trp53*<sup>-/-</sup> and control mice (*P* calculated by two-sided Mann–Whitney test; data shown as mean and s.e.m.; *n* = 8 mice). **b**, List of chromosomal aberrations observed in the bone marrow of 8-to-12 week-old untreated *Aldh2*<sup>-/-</sup>*Fancd2*<sup>-/-</sup>*Trp53*<sup>-/-</sup> and control

mice. Three mice and 30 metaphases per mouse were analysed per genotype; the numbers represent the fraction of abnormal metaphases per mouse. **c**, Bar chart classifying the types of aberrations for each genotype (90 metaphases per condition). **d**, Examples of two metaphases from an *Aldh2*<sup>-/-</sup>*Fancd2*<sup>-/-</sup>*Trp53*<sup>-/-</sup> mouse.