Description of Additional Supplementary Files

File Name: Supplementary Data 1
Description: Series of in-house patients with newly generated sequencing data.

File Name: Supplementary Data 2
Description: Correspondence of disease, study name, study abbreviation and organ used for signature fitting in the series of Genomics England patients.

File Name: Supplementary Data 3
Description: Single base substitution catalogues on the complete series of samples.

File Name: Supplementary Data 4
Description: List of common and rare SBS mutational signatures per tissue.

File Name: Supplementary Data 5
Description: Substitution frequencies of SBS mutational signatures used for data fitting.

File Name: Supplementary Data 6
Description: Absolute exposures to SBS mutational signatures in selected tumor samples.

File Name: Supplementary Data 7
Description: Substitution frequencies of SBSnovel.

File Name: Supplementary Data 8
Description: Signature exposure and cosine similarity statistics in samples with SBS96 as a candidate rare signature.

File Name: Supplementary Data 9
Description: Number of variants with a high probability of originating from individual SBS mutational signatures per lineage.

File Name: Supplementary Data 10
Description: List of publicly available human epigenomic datasets used.

File Name: Supplementary Data 11
Description: Transcription strand asymmetry analysis statistics.

File Name: Supplementary Data 12
Description: Replication strand asymmetry analysis statistics.

File Name: Supplementary Data 13
Description: Methylation blocks differential methylation analysis and mutation rates per tumor type.

File Name: Supplementary Data 14
Description: Mapping statistics of CUT&RUN experiments.