

Description of Additional Supplementary Files

Supplementary Data 1

Description: Detailed clinicopathological characteristics of NPC patients (n=106)

Supplementary Data 2

Description: H&E staining images of 47 tumors for bulk sequencing

Supplementary Data 3

Description: Somatic mutational events identified by WES in this cohort

Supplementary Data 4

Description: Sanger sequencing validation of candidate mutations

Supplementary Data 5

Description: 48-drug screening results (42 PDOs)

Supplementary Data 6

Description: First-line CRT screening results (20 PDOs)

Supplementary Data 7

Description: 48-CRT screening results (8 PDOs)

Supplementary Data 8

Description: Gene cohorts with subtype-differentiated expressions

Supplementary Data 9

Description: Sanger sequencing validation for CRISPR-Cas9 KO experiment

Supplementary Data 10

Description: Formulation of tissue dissociation buffer and organoid culture medium

Supplementary Data 11

Description: Summary of sequencing coverages

Supplementary Data 12

Description: Drug library used for high-throughput screening (146 drugs)

Supplementary Data 13

Description: sgRNA oligos used for CRISPR-Cas9 KO experiment