

**Table S3. The summary of the cancer-related somatic mutations and *CCND1* CNV gain and *CDKN2A* CNV loss of the 5 NPC-PDX tumors.**

Pathway	Gene	PDX-ST 01	PDX-LN 02	PDX-LG 03	PDX-LV 04	PDX-B 13
Cell cycle	<i>CCND1</i>		9.6	4.8, missense		6
	<i>CDKN2A</i>	0	1.3	0		0
	<i>ANAPC7</i>					
	<i>CCNB1</i>					
	<i>CCNB3</i>					
	<i>CDC7</i>					
Tumor Suppressor Genes	<i>AIM1</i>					
	<i>DLEU7</i>					
	<i>ING1</i>					
	<i>TIMP3</i>		splice			
Immunity	<i>HLA-A</i>				stop	
	<i>HLA-DQA2</i>					
	<i>HLA-DRB5</i>					
	<i>IL1R2</i>					
	<i>TLR3</i>					
DNA repair	<i>TP53</i>				stop	
	<i>BRIP1</i>					
Epigenetic modifiers	<i>TET3</i>					
	<i>KDM2A</i>					
Cytoskeleton	<i>ARHGEF12</i>	stop				
	<i>ARHGEF3</i>					
Drug Resistance	<i>ABCG1</i>					

	CNV gain
	CNV loss
	missense
	splice site
	stop gain