

## Supplementary Table S1.

### *Patient characteristics for PDX samples*

Tumor ID	Gender	Primary Site	p16 status	Initial Stage (TNM)	Histology	Grade	Tissue Location-Type	Smoker
HN009, HN009LN	Male	base of tongue, lymph node	negative	T1 N2b M0	HNSCC	moderately differentiated	Primary, Primary	yes
HN011P, HN011T	Male	soft palate, tonsil	positive	T2 N2c M0	HNSCC	moderately differentiated	Primary, Relapsed	yes
HN013	Male	tonsil	positive	T2 N2b M0	HNSCC	poorly differentiated	Primary	no
CUHN002*	Male	anterior tongue	negative	T2 N2b M0	HNSCC	well differentiated	Primary	yes
CUHN004*	Male	floor of mouth	negative	T3 N2c M0	HNSCC	moderately differentiated	Relapsed	yes
CUHN013*	Female	submental mass	negative	T3 N2c M1	HNSCC	moderately differentiated	Primary	yes
CUHN014*	Male	base of tongue	positive	T1 N2b M0	HNSCC	poorly differentiated	Primary	yes

\*Tumor tissues obtained from the University of Colorado-Denver, Anschutz Medical Campus. All other tumor tissues were obtained from the University of New Mexico Health Sciences Center.