

**Supplementary Table V.** The percentage of samples with high/medium protein expression of the genes in HPV +ve and HPV -ve basal/parabasal layers (B/P), spinous layer and HNSCC tissues

Genes	HPV	B/P (%)	Overall B/P (%)	Spinous (%)	Overall spinous (%)	Tumour (%)	Overall tumour (%)
HIF1 $\alpha$	HPV+ve	11/28 (39)	25/58 (43)	6/28 (21)	14/58 (24)	26/30 (87)	43/62 (69)
	HPV-ve	14/30 (47)		8/30 (27)		17/32 (53)	
<i>VHL</i> (N)	HPV+ve	11/28 (39)	31/58 (53)	21/28 (75)	44/58 (76)	3/30 (10)	14/62 (23)
	HPV-ve	20/30 (67)		23/30 (77)		11/32 (34)	
<i>VHL</i> (C)	HPV+ve	18/28 (64)	43/58 (74)	13/28 (46)	34/58 (59)	14/30 (47)	27/62 (44)
	HPV-ve	25/30 (83)		21/30 (70)		13/32 (41)	
<i>LIMD1</i> (N)	HPV+ve	19/28 (68)	45/58 (78)	22/28 (79)	45/58 (78)	16/30 (53)	34/62 (55)
	HPV-ve	26/30 (87)		23/30 (77)		18/32 (56)	
<i>LIMD1</i> (C)	HPV+ve	17/28 (61)	36/58 (62)	13/28 (46)	35/58 (60)	10/30 (33)	19/62 (31)
	HPV-ve	19/30 (63)		22/30 (73)		9/32 (28)	
VEGF	HPV+ve	11/28 (39)	25/58 (43)	4/28 (14)	14/58 (24)	21/30 (70)	38/62 (61)
	HPV-ve	14/30 (47)		11/30 (37)		17/32 (53)	