

Table SI. HPV Genotyping and grouping.

Group	Age (years)	Pathological type
HPV-16-1	53	Cervical cancer Invasive squamous cell carcinoma Large cell Non-keratinizing carcinoma
HPV-16-2	53	Cervical cancer Invasive squamous cell carcinoma Large cell Keratotic carcinoma
HPV-16-3	37	Cervical cancer basaloid squamous cell carcinoma
HPV-18-1	47	Cervical cancer Invasive squamous cell carcinoma Large cell Keratotic carcinoma
HPV-18-2	42	Cervical cancer Invasive squamous cell carcinoma Large cell Keratotic carcinoma
HPV-18-3	38	Cervical cancer Moderately differentiated adenocarcinoma
Normol-1	47	Normal cervical tissue
Normol-2	47	Normal cervical tissue
Normol-3	51	Normal cervical tissue

HPV, human papilloma virus.

Table SII. List of bisulfite PCR and sequencing primers.

Sequence	Probe ID/ primer name	Primer name	Base sequence (5'to3')	5' Modification
1	cg24575234	CHRM2-F (107 bp)	ATAGGTTATAGATTAGTTAAGTGGTTGAGA	
		CHRM2-R	AAAAAACCCACCCCAAACTCTAAC	5'-Biotin
		CHRM2-S	TGGGGTGAGTGATTTT	
2	cg20818778	GNG4-F (97 bp)	GTGATTATAGTTTTTTTTTTTTTTAGGGAAA	
		GNG4-R	ACTTCTCTATTCCCAAAATTTC	5'-Biotin
		GNG4-S	TTTTTAGGGAAAAAATAGTTTAAG	
3	cg14289461	LAMA4-F (91 bp)	GAGTTTTTTTAAGGGTTTTAGAAGAATAT	
		LAMA4-R	ATAAAACATCCCATACCTTAACCTACATAAA	5'-Biotin
		LAMA4-S	TTTAGAAGAATATTTAGTTTTTGTG	
4	cg06818777	CHAD-F (99 bp)	GAGAGAGGGAGGAGTTTTTTTAATTTATT	
		CHAD-R	CCTCCCATCCAAAACACCC	5'-Biotin
		CHAD-S	ATTTATTTGTTTGTTAGGTTTGA	
5	cg08361126	ITGA8-F (84 bp)	GGTTTAGTTGGTGGTTGGA	
		ITGA8-R	AAACTAATTATCCTTAAAATAAACTACA	5'-Biotin
		ITGA8-S	AGTTGGTGGTTGGAG	
6	cg06381931	COL11A1-F (88 bp)	GGTTGGTAGAGGTAATTTTATTTTTGTGTA	
		COL11A1-R	CAAATAAACAACCCAATAAATCCACTAAT	5'-Biotin
		COL11A1-S	TAGAGGTAATTTTATTTTTGTGTAA	
7	cg08976810	FGF10-F (52 bp)	GTGGTGTGTGTAGATTGAAGGTT	
		FGF10-R	TCCCCCAAACAAAAATAACTTT	5'-Biotin
		FGF10-S	TGTTTGTAGATTGAAGGTTG	
8	cg20881548	IGF1-F (60 bp)	GAGAGGATTAAAGGAATTTTTGTAATGA	
		IGF1-R	ATCCTCCACTTCTACAAACTT	5'-Biotin
		IGF1-S	ATTAAAGGAATTTTTGTAATGAT	
9	cg08264401	TEK-F (85 bp)	GGTTTTTATATTTAAAAGTTTTTTTGT	5'-Biotin
		TEK-R	AATAACCAATCCTTCTCAAACCTC	
		TEK-S	CAAACCTCTAACAACCTCTC	