

Table SI. Summary of clinical data, biopsy site and analysis method used

Sample	Sex/Age, years	Involved sites	Oral biopsy	Genital biopsy	Array	PCR	IHC
LP1	M/67	O, G	×		×	×	
LP2	F/66	O, G	×		×	×	
LP3	F/63	O, G	×		×	×	×
LP4	M/61	O, S	×		×	×	×
LP5	M/58	O	×		×	×	×
LP6	M/45	O, G	×				×
LP7	F/64	O	×				×
LP8	F/69	O, G	×	×			×
LP9	F/45	O, G	×	×		×	×
LP10	F/73	O, G	×	×	×	×	×
LP11	F/74	O, G	×	×	×	×	×
LP12	F/64	O, G	×	×	×		×
LP13	F/65	G		×	×	×	×
LP14	F/71	O, G		×	×		×
LP15	F/55	O, G		×	×		×
LP16	F/77	G		×			×
C1	M/69		×		×	×	×
C2	F/69		×		×	×	×
C3	M/49		×		×	×	×
C4	F/53		×	×	×	×	×
C5	F/50		×	×	×	×	×
C6	F/47		×	×	×	×	×
C7	F/67		×	×	×		×
C8	F/45		×	×	×		×

O: oral; G: genital; S: skin.

Table SII. Showing the most enriched biological processes by the use of DAVID in normal genital vs normal oral epithelium, oral lichen planus (OLP) vs normal oral epithelium and in genital LP (GLP) vs normal genital epithelium. The p-value is a modified Fischer Exact p-value; the smaller, the more enriched

	Count	p-value	Benjamini
Normal genital vs normal oral epithelium (ES 2.93)			
Gland development	7	2.2E-06	0.0012
Urogenital system development	5	0.00027	0.03
Prostate gland development	3	0.00044	0.04
OLP vs normal oral epithelium (ES 12.18)			
Epidermis development	31	2.8E-17	5.8E-14
Ectoderm development	31	2.6E-16	2.3E-13
Epithelium development	28	3.3E-12	2.3E-09
Epithelial cell differentiation	22	7E-12	3.6E-09
Keratinocyte differentiation	16	2.2E-11	9.2E-09
Epidermal cell differentiation	16	8.4E-11	2.9E-08
Keratinisation	13	1.7E-10	5.1E-08
Genital LP vs normal genital epithelium (ES 7)			
Epidermis development	27	2.2E-10	5.3E-07
Ectoderm development	27	1.3E-09	0.000015
Epithelium development	27	2.1E-08	0.000017
Epithelial cell differentiation	20	8.4E-08	0.00005
Keratinocyte differentiation	13	1.1E-06	0.00053
Epidermal cell differentiation	13	2.9E-06	0.0012
Keratinisation	9	0.00006	0.017

ES: Enrichment score.

Table SIII. The top 20 up- and top 20 down-regulated genes in oral lichen planus (LP) and genital LP compared to normal oral and genital epithelium

Up-regulated genes in oral LP	Up-regulated genes in genital LP	Down-regulated genes in oral LP	Down-regulated genes in genital LP
LOR	ASPRV1	CES1	KRT4
SPRR2G	LCE2B	ETNK2	MAL
ASPRV1	LCE2A	MUC21	MUC21
LCE3E	LCE1B	WNK4	TMPRSS11B
CDSN	LCE2D	RBM20	OLFM4
LCE3D	LCE6A	KRT4	CRNN
LCE2B	LCE2C	CYP3A5	KRT19
S100A7	DSC1	SCIN	GCNT3
RPTN	LCE1C	CLDN7	PPP1R3C
LCE3A	CDSN	TF	ESR1
LCE2D	C1orf68	KRT8	FAM3B
LCE2A	S100A7A	COX7A1	RHCG
TMEM45A	IL1F9	MT1G	FAM3D
LCE1B	ARG1	C21orf81	SFTA2
ALOX12B	CCL27	MAMDC2	EDN3
LCE2C	AZGP1	CYP4X1	TMPRSS11A
KRT17	KRT16	PPARGC1A	FLJ40504
C6orf15	NFE2	SAMD5	RBM20
SPINK6	PYDC1	CLDN23	FOXA1
LCE6A	SERPINB7	KRT31	CLDN7