## **Supplementary material:**

 Table 1: Leader genes in human oral lichen planus (OLP) and in human oral squamous cell carcinoma (OSCC)

OLP				OSCC			
Official Symbol	Official Name	Role	Involvement in PI3K pathway	Official Symbol	Official Name	Role	Involvement in PI3K pathway
TP53	tumor protein p53	Regulation of cell cycle	X	TP53	tumor protein p53	Regulation of cell cycle	X
		Apoptotic signalling				Apoptotic signalling	
DCN	decorin	Cellular damage		RB1	retinoblastoma 1	Regulation of cell cycle	
CASP3	caspase 3	Regulation of cell cycle		CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	Regulation of cell cycle	X
		Apoptotic signalling			(,,,-)	Apoptotic signalling	
MMP2	matrix metallopeptidase	Cellular damage Cellular damage		BRCA1	breast cancer 1, early onset	Regulation of cell cycle	
TGFB1	transforming growth factor beta 1	Cellular damage		CTNNB1	catenin (cadherin- associated protein), beta 1, 88kDa	Regulation of cell cycle	
CDKN1A	cyclin-dependent kinase inhibitor 1A (p21, Cip1)	Regulation of cell cycle	X				
		Apoptotic signalling					
MDM2	Mdm2 p53 binding protein homolog (mouse)	Regulation of cell cycle	X				
	•	Apoptotic signalling					

Shared leader genes are shown in bold type. Their role in OLP and, and the involvement in PI3K signalling events mediated by AKT, as derived from Protein Interaction Database is also shown