

Figure S1. The example of test sample of the cholesteatoma: MMP2 negative control in cholesteatoma tissue. X 250. Positive controls in accordance to the companies guidelines and negative controls with excluding of primary antibody were developed.

Figure S2. Pictures of each criterion of semi-quantitative method.

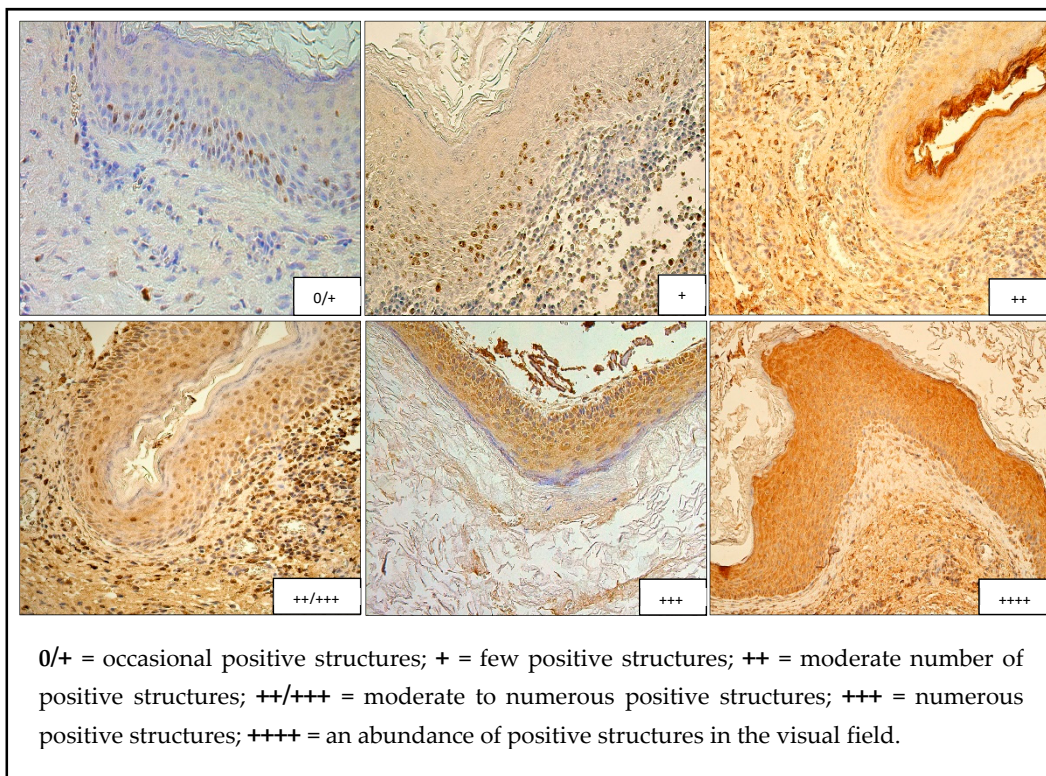


Figure S2. Pictures of each criterion of semi-quantitative method.

Table S1. Additional statistical information.

Group			MMP -2 M	MM P-2 P	MM P-9M	MM P-9P	TIM P-2 M	TIM P-2 P	TIM P-4M	TIM P-4P	Shh M	Shh P	IL-1 M	IL-1 P	IL-10 M	IL-10 P	NFK B M	NFK B P	Ki-67 M	Ki-67 P	VEG F M	VEG F P	HBD- 2 M	HBD- 2 P	HBD- 4 M	HBD- 4 P
Patients	N	Valid	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
		Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean		1.54 37	1.33 32	0.42 11	0.71 89	0.85 05	0.59 53	2.50 00	2.05 26	2.47 37	1.81 58	1.26 32	1.11 37	1.47 37	1.24 53	1.97 37	1.27 16	0.65 68	0.56 05	1.68 37	0.69 26	1.55 26	1.08 74	0.78 05	0.58 63
	Std. Deviation		0.86 064	0.61 644	0.53 394	0.43 442	0.94 937	0.60 230	0.81 650	0.72 447	0.71 635	0.58 239	0.91 846	0.76 020	1.03 379	0.82 512	0.63 407	0.96 455	0.32 692	0.47 580	0.89 646	0.68 121	0.59 849	0.63 477	0.95 113	0.50 496
	Minimum		0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0.00	0.00	0.00	1.00	0.00	0.33	0.00	0.33	0.00	0.50	0.00	0.00	0.00
	Maximum		3.50	3.00	2.00	1.50	3.00	2.00	3.50	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	1.50	1.50	3.00	2.00	2.50	2.00	3.00	2.00
Control	N	Valid	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
		Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean		1.07 14	0.92 86	1.07 14	0.69 00	1.57 14	0.71 43	2.14 29	1.64 29	1.64 29	0.64 29	0.64 29	0.71 43	1.78 57	1.50 00	0.71 43	0.47 57	0.09 43	0.09 43	2.42 86	0.78 57	1.04 71	0.26 14	1.21 43	0.57 14
	Std. Deviation		1.20 515	0.18 898	0.44 987	0.41 356	0.78 680	0.39 340	0.69 007	0.47 559	1.43 510	0.47 559	0.55 635	0.26 726	0.63 621	0.64 550	0.69 864	0.50 411	0.16 102	0.16 102	0.44 987	0.48 795	0.69 921	0.25 182	0.39 340	0.34 503
	Minimum		0.00	0.50	0.50	0.33	0.50	0.00	1.00	1.00	0.00	0.00	0.00	0.50	1.00	0.50	0.00	0.00	0.00	0.00	2.00	0.00	0.33	0.00	1.00	0.00
	Maximum		3.00	1.00	1.50	1.50	2.50	1.00	3.00	2.00	3.50	1.00	1.50	1.00	2.50	2.00	2.00	1.50	0.33	0.33	3.00	1.50	2.00	0.50	2.00	1.00