

Supplementary Table 1: Comparison between studied male and female subjects with regard to AR expression

Variable	Sun unprotected skin				Sun protected skin			
	Epidermis							
	Males	Females	X ²	P	Males	Females	X ²	P
	No(%)	No(%)			No(%)	No(%)		
Keratinocytes							#	
Positive	32(82.1)	13(61.9)	2.9	0.09	37(94.9)	19(90.5)	0.42	0.6
Negative	7(17.9)	8(38.1)			2(5.1)	2(9.5)		
Pattern			#					
Cytoplasmic	30(93.8)	10(76.9)	2.6	0.1	27 (73)	14(73.7)	0.003	0.9
Cytonuclear	2(6.2)	3(23.1)			10(27)	5(26.3)		
Intensity								
Mild	14(43.8)	6(46.2)	0.02	0.8	5(13.5)	3(15.8)	2.49	0.2
Moderate	18(56.2)	7(53.8)			24(64.9)	15(78.9)		
					8(21.6)	1(5.3)		
Percent	66.9±17.5	51.5±25.4	U				U	
X ±SD	30 – 90	20 – 90	1.8	0.06	74.1±14.9	73.2±16.0	0.19	0.8
Range					30 – 90	30 – 90		
H score	104.1±43.0	83.1±52.2	U				U	
X ±SD	40 – 180	20 – 160	1.2	0.2	154.6±51.1	138.9±50.1	1.38	0.1
Range					30 – 270	60 – 270		
	Dermis							
	No(%)	No(%)	test	P	No(%)	No(%)	test	P
Endothelium								
Positive	0(0)	0(0)	---	-----	0(0)	0(0)	---	-----
Negative	39(100)	21(100)			39(100)	21(100)		

Fibroblasts								
Positive	0(0)	0(0)	---	----	0(0)	0(0)	---	----
Negative	39(100)	21(100)			39(100)	21(100)		
Sweat glands	N=30	N=17			N=32	N=18		
Positive	0(0)	0(0)	---	----	0(0)	0(0)	---	----
Negative	30(100)	17(100)			32(100)	18(100)		
Hair follicles	No= 29	No= 15	#		N = 30	N = 17	#	
Positive	2(6.9)	3(20)	1.6	0.3	2(6.7)	2(11.8)	0.36	0.6
Negative	27(93.1)	12(80)			28(93.3)	15(88.2)		
Sebaceous glands	No= 27	No= 14	#		N = 27	N = 16	#	
Positive	4(14.8)	0(0)	2.3	0.2	8(29.6)	0(0)	5.82	0.02
Negative	23(85.2)	14(100)			19(70.4)	16(100)		

X ± SD: mean ± standard deviation, X²: Chi square test, U: Mann-Whitney test, #: Fisher Exact test

Supplementary Table 2: Comparison between studied male and female subjects with regard to ER β expression

Variable	Sun unprotected skin				Sun protected skin			
	Epidermis							
	Males	Females	X ²	P	Males	Females	X ²	P
	No(%)	No(%)			No(%)	No(%)		
Keratinocytes			#					
Positive	35(89.7)	19(90.5)	0.0	1.0	37(94.9)	19 (90.5)	0.42	0.61
Negative	4(10.3)	2(9.5)	08		2(5.1)	2(9.5)		
Pattern								
Cytoplasmic	25(71.4)	11(57.9)	1.0	0.31	14(37.8)	7(36.8)	0.005	0.94
Cytonuclear	17(28.6)	8(42.1)	2		23(62.2)	12(63.2)		
Intensity								
Mild	14(40)	5(26.3)		0.36	6(16.2)	3(15.8)	0.69	0.71
Moderate	19(54.3)	11(57.9)	2.6		23(62.2)	10(52.6)		
	2(5.7)	3(15.8)			8(21.6)	6(31.6)		
Percent			U				U	
X ±SD	56.57±23.19	54.21±22.50	0.4	0.64	67.03±20.06	66.58±16.92	0.41	0.68
Range	10 – 90	15 – 90			30 – 95	30 – 90		
H score			U				U	
X ±SD	100.57±64.82	107.11±71.8	0.3	0.73	141.62±68.3	151.05±68.97	0.37	0.71
Range	20 – 240	20 – 270			30 – 270	60 – 270		
	Dermis							
	No(%)	No(%)	test	P	No(%)	No(%)	Test	P
Endothelium								
Positive	0(0)	0(0)	---	-----	0(0)	0(0)	-----	-----
Negative	39(100)	21(100)			39(100)	21(100)		
Fibroblasts			#				#	
Positive	2(5.1)	1(4.8)	0.4	1.0	3(7.7)	2(9.5)	0.06	1.0

Negative	37(94.9)	20(95.2)			36(92.3)	19(90.5)		
Sweat glands	N=24	N=12	#		N=19	N=12	#	
Positive	2(8.3)	1(8.3)	0.0	1.0	2(10.5)	1(8.3)	0.04	1.0
Negative	22(91.7)	11(91.7)			17(89.5)	11(91.7)		
Hair follicles	N=22	N=12	#		N=20	N=10	#	
Positive	3(13.6)	2(16.7)	0.06	1.0	4(20)	1(10)	0.48	0.64
Negative	19(86.4)	10(83.3)			16(80)	9(90)		
Sebaceous glands	N=11	N=6	#		N=13	N=7	#	
Positive	1(9.1)	0(0)	0.58	1.0	4(30.8)	1(14.3)	0.66	0.61
Negative	10(90.9)	6(100)			9(69.2)	6(85.7)		

X ± SD: mean ± standard deviation, X²: Chi square test, U: Mann-Whitney test, #: Fisher Exact test