

Table SI. Serum IL-31 levels (pg/ml) in CTCL patients in different stages of the disease

	Serum IL-31 levels (pg/ml)		
	Median	IQR	Mean ± SD
IA	3.789	0.694	4.101 ± 1.038
IB	3.659	0.629	3.721 ± 0.512
IIB	3.629	0.483	3.588 ± 0.399
III	3.729	0.504	3.672 ± 0.341
IV	3.443	0.399	3.385 ± 0.545

Table SII. Comparison of frequency of haplotypes according to the algorithms expectation-maximization (EM) and Excoffier-Laval-Balding (ELB) between cutaneous T-cell lymphoma patients and healthy controls and between patients in different stages of the disease (p-Fisher's exact test)

	Algorithm EM/ELB							
	AAA	AAG	AGA	AGG	GAA	GAG	GGA	GGG
Patients vs. healthy control	0.392/1,000	0.282/1,000	1,000/0.234	0.285/0.407	0.422/0.136	0.558/0.756	0.234/0.252	0.776/1,000
IA vs. IB	0.466/0.466	–	0.127/0.056	0.335/0.244	0.598/0.804	0.047/0.043	0.421/0.421	0.637/0.637
IA vs. IIB	1,000/1,000	–	0.155/0.097	0.553/0.308	0.155/0.313	0.173/0.567	0.709/0.709	1,000/1,000
IA vs. III	1,000/1,000	–	0.143/0.071	1,000/0.577	0.623/1,000	1,000/1,000	1,000/1,000	0.183/0.183
IA vs. IV	1,000/1,000	–	0.641/0.324	1,000/1,000	0.382/0.679	0.582/0.575	1,000/1,000	1,000/1,000
IB vs. IIB	1,000/1,000	–	1,000/0.756	1,000/1,000	0.329/0.352	1,000/1,000	1,000/1,000	0.524/0.524
IB vs. III	1,000/1,000	–	0.687/0.675	1,000/1,000	1,000/1,000	0.267/0.142	0.601/0.601	0.1800.180
IB vs. IV	1,000/1,000	–	0.710/1,000	0.317/0.439	0.690/0.708	1,000/1,000	0.645/0.645	0.710/0.710
IIB vs. III	1,000/1,000	–	1,000/1,000	1,000/1,000	0.667/0.667	0.333/0.333	0.578/0.578	0.525/0.525
IIB vs. IV	1,000/1,000	–	0.667/0.667	0.384/0.384	1,000/1,000	1,000/1,000	0.625/0.625	1,000/1,000
III vs. IV	1,000/1,000	–	0.607/0.607	1,000/1,000	1,000/1,000	0.444/0.444	1,000/1,000	0.477/0.477
Early vs. advanced stages	1,000/1,000	–	0.481/0.227	1,000/0.443	0.159/0.359	0.443/1,000	1,000/1,000	0.234/0.234
IA vs. other	0.338/0.338	–	0.078/0.021	0.335/0.118	0.264/0.517	0.017/0.044	0.463/0.463	1,000/1,000

Table SIII. Serum IL-31 levels (pg/ml) in patients with specific genotypes

Serum IL-31 levels (pg/ml)			
Genotype	Median	IQR	Mean±SD
Locus -2057			
AA	3.220	0.032	3.233±0.280
AG	3.681	0.476	3.833±0.864
GG	3.764	0.608	3.869±0.644
G (+)	3.722	0.508	3.852±0.745
G (-)	3.220	0.031	3.233±0.280
Locus IVS2+12			
AA	3.553	0.514	3.650±0.612
GG	4.643	1.077	4.757±1.486

Table SIV. Comparison of serum IL-31 levels between patients characterised by a specific genotypes locus -2057, -1066, IVS2+12 IL-31 gene polymorphisms (p-Mann-Whitney U test)

Genotype	Locus -2057 <i>p</i>	Locus -1066 <i>p</i>	Locus IVS2+12 <i>p</i>
AA vs. AG	0.014	0.654	0.162
AA vs. GG	0.008	0.820	0.028
AG vs. GG	0.378	0.701	0.078
A (+) vs. A (-)	0.112	0.806	0.037
G (+) vs. G (-)	0.007	0.718	0.061

Table SV. Serum IL-31 levels (pg/ml) in patients with specific haplotypes

Serum IL-31 levels (pg/ml)			
Haplotype	Median	IQR	Mean ± SD
	Algorithm EM		
AGA (+)	3.605	0.485	3.571±0.398
AGA (-)	3.801	0.645	3.993±0.891
	Algorithm ELB		
AGA (+)	3.566	0.475	3.525±0.380
AGA (-)	3.764	0.574	3.990±0.858

Table SVI. Comparison of serum IL-31 levels between patients characterised by a specific haplotypes IL-31 gene polymorphisms (p- Mann-Whitney U test)

	Algorithm EM <i>p</i>	Algorithm ELB <i>p</i>
A A A (+) vs. A A A (-)	1,000	1,000
A G A (+) vs. A G A (-)	0.019	0.005
A G G (+) vs. A G G (-)	0.546	0.276
G A A (+) vs. G A A (-)	0.580	0.893
G A G (+) vs. G A G (-)	0.050	0.099
G G A (+) vs. G G A (-)	0.230	0.230
G G G (+) vs. G G G (-)	0.193	0.193