

**Supplemental Table 1.** Meglumine antimoniate induced modulation of gene expression in skin lesion biopsies and PBMCs of CL patients.

Gene	<i>Biopsies</i>			<i>PBMCs</i>		
	Fold Change	95% CI	P value	Fold Change	95% CI	P value
BCL6	0.90	( 0.70, 1.11 )	0.618	1.02	( 0.89, 1.16 )	0.613
C3	2.67	( 0.40, 4.99 )	<b>0.029</b>	1.20	( 0.68, 1.72 )	0.504
C3AR1	0.77	( 0.39, 1.15 )	0.438	1.20	( 0.51, 1.90 )	0.376
CCL11	1.84	( 0.90, 2.79 )	0.097	0.98	( 0.48, 1.49 )	0.900
CCL13	1.46	( 0.38, 2.55 )	0.318	1.20	( 0.59, 1.81 )	0.602
CCL16	1.89	( 0.89, 2.89 )	0.073	1.01	( 0.50, 1.52 )	0.711
CCL17	1.78	( 0.76, 2.81 )	0.085	1.30	( 0.61, 2.00 )	0.176
CCL19	0.73	( 0.04, 1.41 )	0.548	0.80	( 0.26, 1.36 )	0.501
CCL2	0.48	( 0.09, 0.88 )	<b>0.033</b>	1.00	( 0.57, 1.43 )	0.858
CCL21	0.75	( 0.30, 1.20 )	0.385	1.02	( 0.49, 1.55 )	0.772
CCL22	0.88	( 0.38, 1.38 )	0.570	1.02	( 0.51, 1.54 )	0.735
CCL23	1.80	( 1.02, 2.57 )	<b>0.023</b>	1.12	( 0.52, 1.72 )	0.658
CCL24	2.38	( 0.96, 3.80 )	0.096	0.88	( 0.39, 1.37 )	0.688
CCL3	0.48	( 0.18, 0.78 )	<b>0.021</b>	0.66	( 0.37, 0.96 )	0.094
CCL4	0.45	( 0.13, 0.77 )	<b>0.006</b>	0.66	( 0.29, 1.05 )	0.136
CCL5	0.65	( 0.19, 1.11 )	0.406	0.95	( 0.60, 1.31 )	0.922
CCL7	0.39	( 0.16, 0.63 )	<b>0.026</b>	0.95	( 0.44, 1.47 )	0.980
CCL8	1.60	( 0.66, 2.54 )	0.145	0.9	( 0.37, 1.43 )	0.667
CCR1	0.57	( 0.31, 0.82 )	0.073	0.10	( 0.66, 1.32 )	0.952
CCR2	0.83	( 0.50, 1.17 )	0.391	1.02	( 0.63, 1.43 )	0.939
CCR3	1.50	( 0.66, 2.29 )	0.146	1.01	( 0.08, 1.94 )	0.862
CCR4	1.34	( 0.73, 1.96 )	0.129	1.19	( 0.82, 1.57 )	0.321
CCR7	0.73	( 0.21, 1.26 )	0.632	1.03	( 0.83, 1.24 )	0.774
CD14	0.51	( 0.23, 0.79 )	0.186	2.16	( 0.56, 3.77 )	0.074
CD40	0.60	( 0.39, 0.83 )	<b>0.019</b>	0.84	( 0.48, 1.20 )	0.481
CD40LG	1.38	( 0.82, 1.94 )	0.099	0.83	( 0.60, 1.07 )	0.199
CEBPB	0.68	( 0.48, 0.89 )	<b>0.024</b>	1.11	( 0.74, 1.49 )	0.386
CRP	1.60	( 0.66, 2.54 )	0.145	1.01	( 0.50, 1.52 )	0.711
CSF1	0.93	( 0.60, 1.26 )	0.754	0.76	( 0.26, 1.27 )	0.406
CXCL1	0.25	( 0.04, 0.46 )	0.379	1.07	( 0.27, 1.89 )	0.446
CXCL10	0.08	( 0.03, 0.12 )	<b>0.000</b>	0.58	( 0.00001, 1.31 )	0.397
CXCL2	0.39	( 0.10, 0.67 )	0.475	1.07	( 0.41, 1.74 )	0.564
CXCL3	0.80	( 0.41, 1.20 )	0.478	1.09	( 0.55, 1.64 )	0.603
CXCL5	0.82	( 0.27, 1.37 )	0.517	1.34	( 0.40, 2.28 )	0.450
CXCL6	1.21	( 0.56, 1.87 )	0.256	1.43	( 0.23, 2.65 )	0.462
CXCL9	0.17	( 0.05, 0.29 )	<b>0.000</b>	0.54	( 0.04, 1.05 )	0.252
CXCR1	1.35	( 0.68, 2.04 )	0.500	0.98	( 0.51, 1.47 )	0.733
CXCR2	0.71	( 0.41, 1.03 )	0.815	1.19	( 0.43, 1.96 )	0.887
CXCR4	0.74	( 0.28, 1.20 )	0.492	1.05	( 0.75, 1.36 )	0.900
FASLG	0.58	( 0.26, 0.90 )	0.061	0.79	( 0.49, 1.09 )	0.237
FOS	0.84	( 0.18, 1.50 )	0.384	0.84	( 0.45, 1.24 )	0.564
IFNG	0.28	( 0.09, 0.48 )	<b>0.000</b>	0.38	( 0.00001, 0.83 )	0.207
IL10	0.64	( 0.25, 1.03 )	0.292	1.15	( 0.78, 1.53 )	0.445
IL10RB	1.06	( 0.88, 1.24 )	0.397	1.08	( 0.88, 1.28 )	0.440
IL15	0.82	( 0.49, 1.15 )	0.760	0.83	( 0.55, 1.12 )	0.345
IL17A	1.52	( 0.63, 2.42 )	0.167	1.01	( 0.50, 1.52 )	0.711
IL18	1.08	( 0.73, 1.44 )	0.354	1.51	( 1.04, 1.99 )	0.015
IL1A	0.74	( 0.23, 1.26 )	0.867	0.81	( 0.16, 1.48 )	0.649
IL1B	0.18	( 0.01, 0.35 )	0.484	0.81	( 0.16, 1.48 )	0.563
IL1R1	1.57	( 1.20, 1.95 )	<b>0.000</b>	1.42	( 0.66, 2.19 )	0.367
IL1RAP	0.83	( 0.55, 1.12 )	0.537	0.91	( 0.75, 1.07 )	0.418
IL1RN	0.49	( 0.19, 0.79 )	0.701	0.83	( 0.58, 1.09 )	0.316
IL22	1.33	( 0.62, 2.05 )	0.147	0.53	( 0.00001, 1.10 )	0.307
IL23A	1.06	( 0.64, 1.49 )	0.421	0.97	( 0.75, 1.20 )	0.768
IL23R	1.40	( 0.62, 2.18 )	0.178	0.88	( 0.42, 1.36 )	0.718
IL5	1.67	( 0.81, 2.53 )	0.088	0.76	( 0.24, 1.28 )	0.130
IL6	0.28	( 0.05, 0.53 )	<b>0.050</b>	0.98	( 0.00001, 1.61 )	0.918
IL6R	0.79	( 0.50, 1.10 )	0.526	0.98	( 0.65, 1.31 )	0.905

CXCL8	0.21	( 0.00001, 0.47 )	0.533	0.89	( 0.43, 1.37 )	0.984
IL9	1.59	( 0.66, 2.54 )	0.145	0.55	( 0.00001, 1.12 )	0.185
ITGB2	0.73	( 0.20, 1.26 )	0.995	1.02	( 0.68, 1.38 )	0.922
KNG1	1.60	( 0.66, 2.54 )	0.145	1.01	( 0.50, 1.52 )	0.711
LTA	1.20	( 0.60, 1.82 )	0.229	0.70	( 0.44, 0.97 )	0.111
LTB	0.85	( 0.28, 1.44 )	0.455	0.98	( 0.70, 1.26 )	0.919
LY96	1.07	( 0.64, 1.50 )	0.571	1.07	( 0.86, 1.30 )	0.567
MYD88	0.7	( 0.55, 0.85 )	<b>0.004</b>	1.03	( 0.79, 1.29 )	0.805
NFKB1	0.85	( 0.73, 0.99 )	0.065	0.96	( 0.79, 1.13 )	0.574
NOS2	1.53	( 0.65, 2.42 )	0.142	1.00	( 0.49, 1.51 )	0.786
NR3C1	1.31	( 1.06, 1.58 )	<b>0.007</b>	1.02	( 0.86, 1.19 )	0.822
PTGS2	0.48	( 0.15, 0.82 )	0.802	0.70	( 0.23, 1.18 )	0.617
RIPK2	0.93	( 0.63, 1.24 )	0.845	0.88	( 0.64, 1.13 )	0.443
SELE	0.80	( 0.34, 1.25 )	0.455	0.96	( 0.42, 1.51 )	0.795
TIRAP	1.45	( 1.06, 1.85 )	<b>0.030</b>	1.01	( 0.75, 1.29 )	0.933
TLR1	0.99	( 0.64, 1.36 )	0.825	0.90	( 0.71, 1.10 )	0.283
TLR2	0.52	( 0.30, 0.75 )	<b>0.027</b>	0.93	( 0.63, 1.24 )	0.951
TLR3	0.91	( 0.72, 1.10 )	0.521	0.86	( 0.58, 1.14 )	0.531
TLR4	1.02	( 0.58, 1.48 )	0.587	1.22	( 0.78, 1.67 )	0.510
TLR5	1.60	( 1.05, 2.17 )	<b>0.023</b>	1.37	( 0.93, 1.81 )	0.176
TLR6	1.34	( 0.72, 1.97 )	0.112	1.08	( 0.58, 1.59 )	0.923
TLR7	0.98	( 0.58, 1.39 )	0.551	0.84	( 0.51, 1.19 )	0.543
TLR9	1.59	( 0.66, 2.54 )	0.145	1.03	( 0.69, 1.37 )	0.779
TNF	0.65	( 0.36, 0.95 )	0.270	0.66	( 0.37, 0.95 )	0.057
TNFSF14	1.36	( 0.69, 2.03 )	0.182	0.89	( 0.55, 1.23 )	0.631
TOLLIP	1.05	( 0.76, 1.34 )	0.182	1.01	( 0.71, 1.32 )	0.990

The p values are calculated based on a Student's t-test of the replicate  $2^{(-\Delta\Delta CT)}$  values for each gene in the control group and treatment groups, and p values less than 0.05 are considered significant. PCR Array Code: Inflammatory response and Autoimmunity PAHS-077Z-Qiagen.

**Supplemental Table 2. Socio-demographic characteristics of participants included in the cohort for SNPs analysis.**

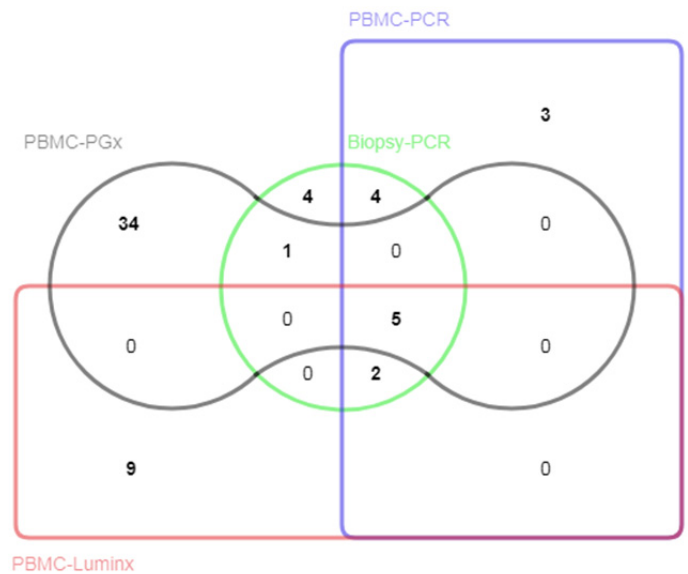
<b>Characteristic</b>	<b>Total</b>	<b>Cure</b>	<b>Treatment Failure</b>	<b>p</b>
Number of patients. No. (%)	40 (100)	20 (50)	20 (50)	-
Sex , No. (%)				
Male	34 (85)	17 (85)	17 (85)	1.00*
Female	6 (15)	3 (15)	3 (15)	
Age, median (SD), years.	31 (8.9)	32.6 (8.7)	30.9 (9.2)	0.56 <sup>+</sup>
Ethnicity, No. (%)				
Afrocolombian	28 (70)	14 (70)	14 (70)	1.00*
Other	12 (30)	6 (30)	6 (30)	
Weight, median (SD), Kg	72.4 (9.7)	71.6 (11.2)	73.2 (8.2)	0.60 <sup>+</sup>
Time of lesion evolution, median (IR), months.	1 (1 – 2)	2 (1 – 2.5)	1 (1 – 2)	0.19 <sup>+</sup>
Number of lesions per patient, median (IR), No.	2 (1 – 2)	2 (1 – 2-5)	1.5 (1 – 2)	0.59 <sup>+</sup>
Prior episodes of CL, No. (%)				
Yes	2 (5)	0 (0)	2 (5)	0.48*
No	38 (95)	20 (100)	18 (95)	
Adherence to treatment, median (IR), % received/formulated ampulles	100 (100 – 100)	100 (100 – 100)	100 (100 – 100)	0.26 <sup>+</sup>
* Chi2/Fisher + T-test/Wilcoxon sum rank.				

## Supplemental Figure 1

**A**

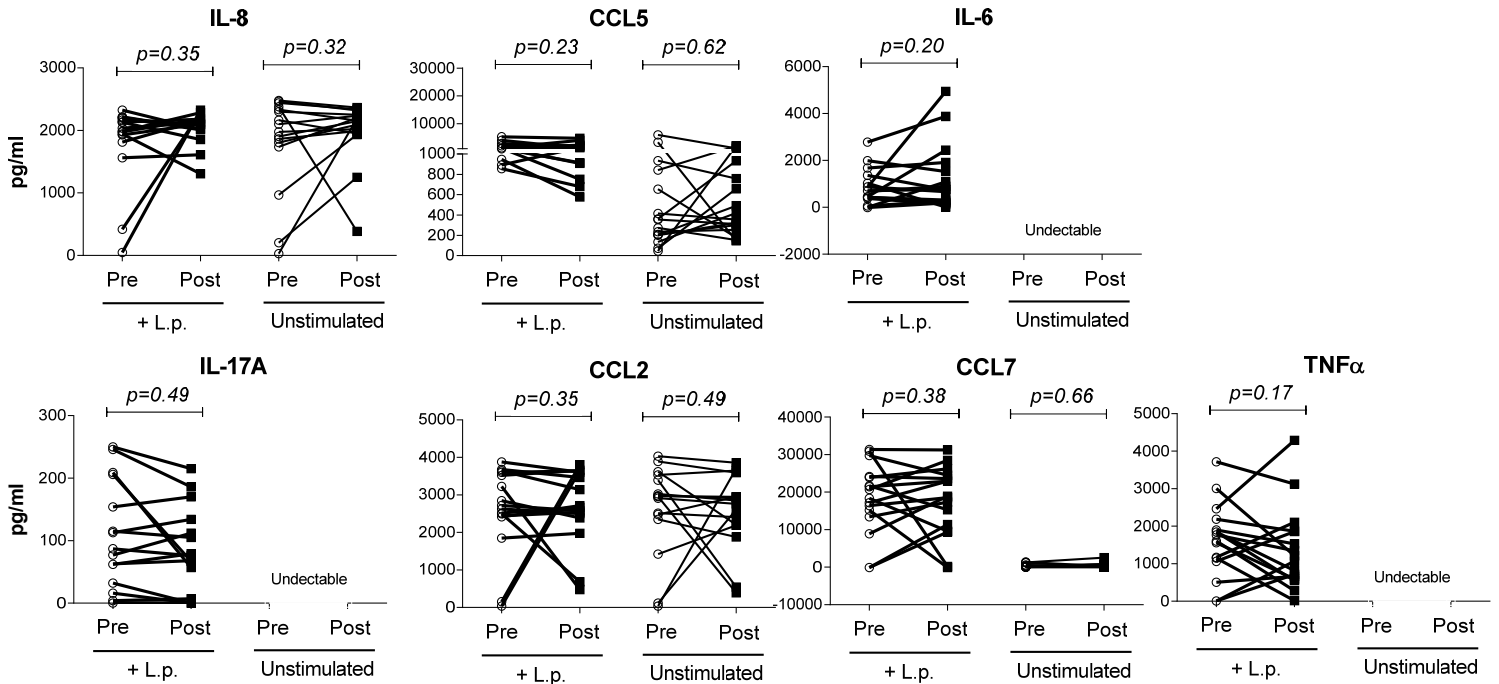
<b>N=60</b>	<b>Number of participants contributing samples for each experimental approach</b>
<b>Paired pre and post-treatment PBMCs</b>	<b>n= 23</b> (Gene expression PCR arrays n=14 and Luminex n=16)
<b>Pre-treatment PBMCs</b>	<b>n=40</b> (Pharmacogenomics - PGx)
<b>Paired pre and post-treatment lesion biopsies</b>	<b>n=16</b> (Gene expression PCR arrays)

**B**



**Supplementary Figure 1. Schematic representation of total numbers of participants and samples for each experimental approach. (A)** A total of 60 patients participated in this study. The sample size for each sample type and experimental procedures are shown. **(B)** The Venn diagram represents the distribution of patients contributing samples for each experimental approach. Intersections show number of patients who contributed samples for more than one experimental approach. PBMC-PCR (PBMCs used for PCR arrays); PBMC-PGx (PBMCs used for screening of CCL2 polymorphisms); PBMC-Luminex (PBMCs used for protein measurement using Luminex); Biopsy-PCR (Lesion biopsy samples used for PCR arrays).

## Supplemental Figure 2



**Supplemental Figure 2. Protein measurement in PBMCs obtained pre-treatment and post-treatment.** Secreted protein levels were measured in a Luminex 200 instrument, from culture supernatants of PBMCs from CL patients (n=16) collected before and at the end of treatment, and re-exposed to *L. V panamensis* promastigotes. Median fluorescence intensity data were analyzed and data expressed in pg/mL. P values were calculated using a Wilcoxon matched-pair signed rank test or Paired t test depending on the distribution of the data.