

Supplementary data

Human Respiratory Syncytial Virus-induced immune signature of infection revealed by transcriptome analysis of clinical pediatric nasopharyngeal swab samples

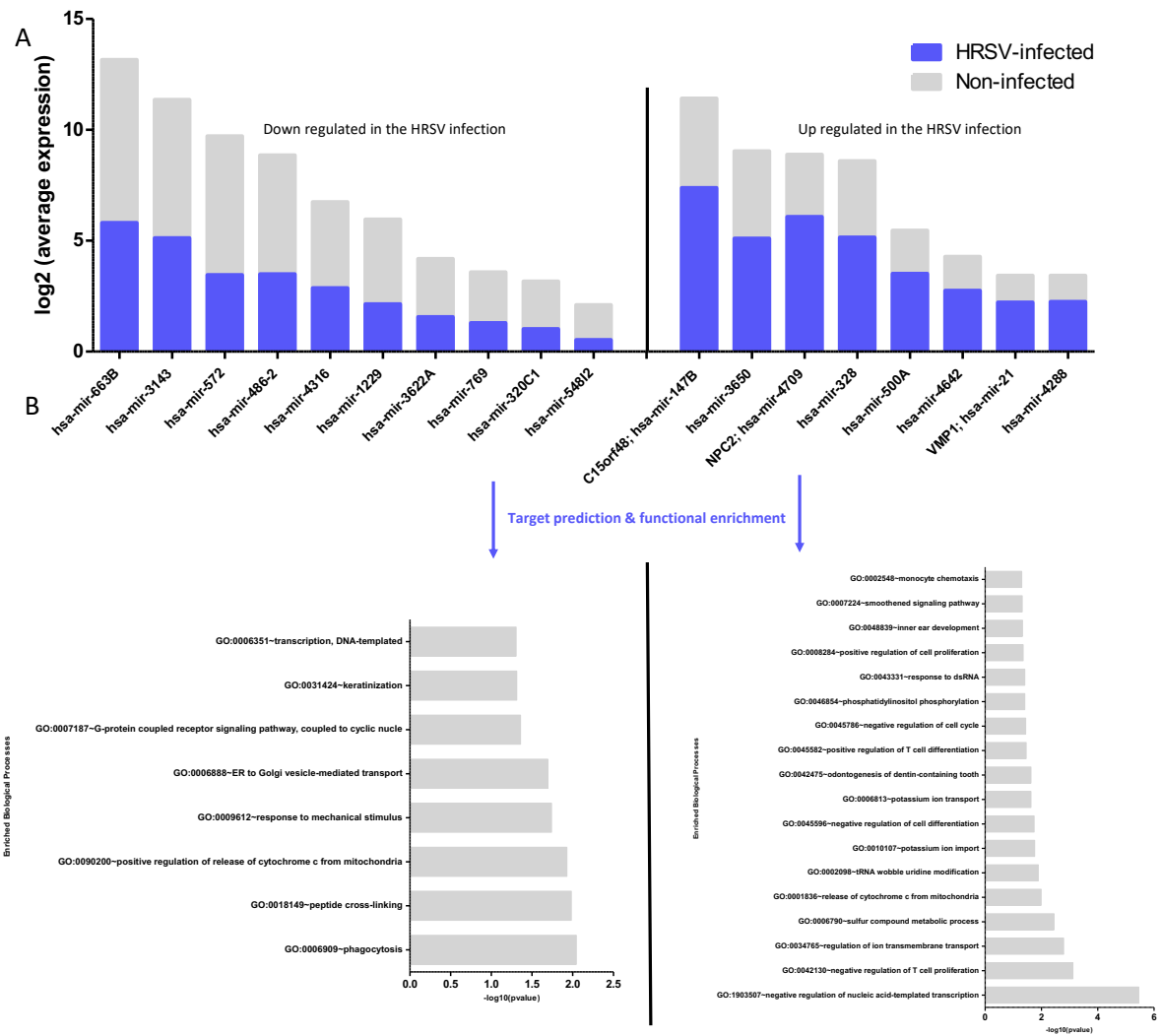
Authors

Claire NICOLAS DE LAMBALLERIE, Andrés PIZZORNO, Julia DUBOIS, Blandine PADEY, Thomas JULIEN, Aurélien TRAVERSIER, Julie CARBONNEAU, Elody ORCEL, Bruno LINA, Marie-Eve HAMELIN, Magali ROCHE, Julien TEXTORIS, Guy BOIVIN, Catherine LEGRAS-LACHUER, Olivier TERRIER, Manuel ROSA-CALATRAVA

Infection Status	Sample ID	Sample type	RIN after RNA extraction	Initial concentration quantification (ng/ μ L)	RIN after purification	Concentration after purification (ng/ μ l)	cRNA quantification after amplification and purification (μ g)	cDNA quantity (ng/ μ l) after conversion	cDNA quantification after conversion (μ g)
Non-infected	1	Total RNA	2.6	0.68	1	0.11	7.835	166.78	5.3
Non-infected	2	Total RNA	2.6	0.67	1	0.27	5.225	205.78	6.6
Non-infected	3	Total RNA	2.6	1.6	1	0.084	4.92	130.11	4.2
Non-infected	4	Total RNA	1.2	0.27	Not Available	0.012	10.87	250.85	7.0
Non-infected	5	Total RNA	Not Available	40	1	1	16.54	314.3	8.8
HRSV-infected	6	Total RNA	2.6	0.790	Not Available	0.04	21.52	280.24	7.85
HRSV-infected	7	Total RNA	2.6	0.880	1	0.023	18.49	369.48	10.3
HRSV-infected	8	Total RNA	2.6	1.100	1	0.077	5.975	198.28	6.3

Suppl. Table 1: Minimal quantities requested for microarray hybridization and homogeneity between samples are respected post amplification. The 8 samples (3 infected and 5 non-infected) were quantified and qualified after total RNA extraction (Quantifluor RNA System, Promega). The low quantity/quality observed after purification determined the need for subsequent amplification of the samples for hybridization. Samples underwent 3 rounds of unbiased *in vitro* amplification and sufficient cRNA was obtained to be used as cDNA template. Minimal quantities requested for hybridization on Affymetrix Human Genechip™ 2.0 ST Array were reached for all samples after three rounds of *in vitro* transcription.

Supplementary Table 2. Gene expression results (*available upon request*)



Supp Figure 1. miRNA differential and functional analysis. (A) Log₂ average expression values of both up- and down-regulated miR were extracted from the differential expression gene list (absolute fold change > 2 and p-value < 0.05). The identification of all genes targeted by at least one of the miRNAs was performed with the target prediction algorithm TargetScan 7.2. (B) Functional enrichment analysis (DAVID 6.8) of predicted biological targets to capture the involvement of such genes in several biological processes is show

