Supplement. Table 1: Gene expression data for cytokines collected on a custom Luminex

QuantiGene® Plex Gene Expression Kit for Immature and Mature Neutrophils by Experimental

Group, expressed as fold change of control.

The data show fold increase over control genes and samples were run in duplicate. We used flow sorting to collect total and mature neutrophils (bands and segmented forms) for adults (n=10), neonates delivered vaginally (n=11), and neonates delivered by cesarean (n=11). Immature granulocytes (promyelocytes, myelocytes, and metamyelocytes) were only collected for the neonate groups, due to the established extremely low levels of immature neutrophils in adults. Gene expression data for selected genes was divided into (I) adult, (II) vaginal delivery, and (III) cesarean delivery neutrophils, based on the developmental stage of the neutrophils. **Note**: Means or medians with the same capital letters (A or B) are not significantly different. Significance is indicated by unlike capital letters. ^aANOVA: Value is mean (Standard Deviation), ^bKruskal-Wallis Test: Value is median (25th-75th percentile); ^cStudent's t-test: Value is mean (standard Deviation); ^dWilcoxon-Mann-Whitney Test for two medians: Value is median (25th-75th percentile).

Total Neutrophils

NEUTROPHIL GROUP	RNA	ADULT (N=10)	VAGINAL (N=11)	CESAREAN (N=11)	P-VALUE
TOTAL	IL1-β	14.41 (7.04) ^A	16.13 (7.50) ^A	23.34 (10.22) ^A	0.05 ^a
	IL-8	6.18 (3.56, 7.77) ^B	0.93 (0.76, 1.36) ^A	1.27 (0.97, 1.48) ^A	< 0.0001 ^b
	TNF-α	2.19 (1.49) ^A	1.27 (0.65) ^{AB}	0.73 (0.47) ^B	0.006 ^a
	Resistin	0.12 (0.06,0.16) ^A	1.47 (0.61, 4.84) ^B	1.33 (0.66, 4.08) ^B	<0.001 ^b
MATURE	IL1-β	15.63 (7.79) ^A	19.00 (9.80) ^{AB}	28.71 (11.12) ^B	0.01 ^a
	IL-8	7.28 (3.54) ^A	1.42 (0.78) ^B	2.14 (0.91) ^B	<0.0001 ^a
	TNF-α	2.11 (1.52) ^A	0.83 (0.39) ^B	0.55 (0.49) ^B	0.001 ^a
	Resistin	0.12 (0.00, 0.15) ^A	0.20 (0.16, 0.66) ^A	0.19 (0.08, 0.54) ^A	0.01 ^b
IMMATURE	IL1-β		1.42 (1.22, 2.75)	1.39 (1.06, 2.93)	0.80 ^d
	IL-8		0.028 (0.022, 0.047)	0.043 (0.036, 0.11)	0.10 ^d
	TNF-α		0.62 (0.29)	0.78 (0.41)	0.30 ^c
	Resistin		10.49 (7.26)	10.22 (7.16)	0.93 ^d

<u>Supplemental Table 1</u>: Gene expression data for cytokines collected on a custom Luminex QuantiGene® Plex Gene Expression Kit for Immature and Mature Neutrophils by Experimental Group, expressed as fold change of control.