

## **Supplemental Data**

### **Case 1**

Patient 1 was a 23 year old male admitted with several days of fevers, rash, strawberry tongue, painful swelling of hands/feet, and non-exudative conjunctivitis, preceded by diarrhea and abdominal pain beginning about 1 week prior to admission (physical findings; Figure 1). Admission evaluation included new diagnoses of HCV and AIDS. He was treated with multiple antibiotics without improvement and after 1 week, he remained febrile (103.9° F), with episodes of hypotension, and was transferred to the ICU for impending vascular collapse. His CXR showed increased interstitial markings; a bronchoscopy/BAL with negative stains for PCP, yeasts, molds, viral, or bacterial pathogens; cultures grew a few *Candida albicans*. Evaluation for other infectious agents was negative (Supplemental Table 1). On day 9 he became severely hypotensive requiring fluid resuscitation and high dose pressors while on empiric high dose hydrocortisone, vancomycin, meropenem, doxycycline, amphotericin, and metronidazole. An echocardiogram showed hyperdynamic ventricles with preserved function. Ultimately, the diagnosis of KLS was considered. Without other changes he received 2 gm/kg of IVIG. Aspirin was not initiated due to platelet count of 33; methylprednisolone was added to hydrocortisone. Hypotension and fevers rapidly responded to the IVIG with resolution of fevers and tapering pressors to off within 24 h. Four days later fevers relapsed on methylprednisolone without clinical deterioration, and resolved with initiation of aspirin therapy and discontinuation of antimicrobials. He developed desquamation of the fingers and toes, and around the eyes, with sloughing of his tongue epithelium. He was discharged home on day 11 after IVIG#2 on 165 mg aspirin daily, a rapid prednisone taper, and prophylaxis for PCP/MAC. The patient had follow up visits at one, five, and thirteen weeks. He started cART with subsequent immune reconstitution (absolute CD4 293; HIV viral load <50 copies/ml). He had a negative cardiac stress thallium at 6 months and discontinued ASA. With the patient's permission serum collected immediately prior to IVIG#1 and 13 weeks post discharge was stored at -80° C. The patient did not have a KLS recurrence during the next 5 years.

### **Case 2**

Patient 2 was a 31 year old male recently diagnosed with HIV (CD4 count 19, viral load 139,000 copies/ml) and idiopathic eosinophilia, admitted with ten days of fever (102.7° F), myalgias, mild abdominal pain with diarrhea and painful swelling of the hands and feet coincident with 1<sup>st</sup> cART regimen. His exam was remarkable for non-exudative conjunctivitis,

cracked lips, mild thrush, non-tender cervical lymphadenopathy, impressive painful swelling of the hands and feet, and a rash. cART was held. The working diagnoses were drug reaction *versus Chlamydia*-associated reactive arthritis. On day 5 the patient remained febrile (103° F); all testing was negative including *Chlamydia* (Supplemental Table 1). He was treated with 2 gm/kg IVIG plus ASA 325 mg qid. During the IVIG infusion he defervesced and had no further fevers, felt remarkably better and was discharged the following day on fluconazole, prior cART, ASA 325 mg bid, MAC prophylaxis with plan to initiate PCP prophylaxis during follow up. He returned to ID clinic at 2 and 5 weeks and was well on both visits. He had periungual desquamation of the hands at the 2 week visit as typically seen in KD. With the patient's permission, serum collected immediately prior to IVIG and 5 weeks post discharge were stored at -80° C. He had no KLS recurrences in the subsequent 5 years.

### **Statistical Analyses**

For the HIV KLS study, data was analyzed as individual comparisons of patient 1 and patient 2 acute and convalescent values to the combined analyte data from the three asymptomatic HIV<sup>+</sup> control subjects with a Student's t-test. Results from the seronegative control "normal serum" were not included in the analysis. For within-the-study statistical comparisons, *p values* of <0.05 are considered statistically significant. Correction for multiple comparisons were not performed because analytes in the panel had previously been reported to be elevated in KLS or KD, or were logically linked with KLS pathogenesis (*Ccl1*, IL-13, and *Cxcl11*). A power calculation was performed for analytes of interest (elevated in both KLS patients with *p values* <0.05) to estimate the sample size in a follow up study to confirm/refute the preliminary data. Power calculation results are included in the figure legends for analytes of interest. Power analyses were performed with an alpha level of 0.05 and power level of 0.80 (beta level = 0.20), with means and standard deviations based off of values derived from this pilot study with three controls and one case (thus weighted at a three to one ratio). As the standard deviation of the case arm could not be estimated based on a single typical KLS case, it was assumed to be the same as the standard deviation as the HIV control arm for power analysis purposes, an assumption not likely valid for all analytes, and likely problematic for analytes that do not approximate zero in asymptomatic HIV<sup>+</sup> individuals.

For the pediatric KD study, in Step 1 the acute phase reactants IL-6, sTNFR1, and sTNFR2 were analyzed by one-way ANOVA with multiple comparison correction (GraphPad Prism version 5.00) to test if there are differences among KD, FC, and HC samples. A ROC analysis showed that a TNFR1 <2000 and TNFR2 <1900 pg/ml removed the same set of samples (all HC and 3 FC). In Step 2, for each of the remaining analytes a T-test with Welch correction was performed to determine whether levels in KD and FC were different, along with an ROC analysis to find optimal cutoffs. ROC analysis showed that *Ccl1*, *Ccl2*, and *Cxcl11* were useful predictors of KD *versus* FC. Using sample 12 (KD) and sample 26 (FC) to educate, at least two of the predictors needed to be above their cutoffs to classify these two samples correctly. Data points were considered to be outliers if the value was >5-fold higher than the mean of the experimental group, and if the corresponding paired serum or plasma value was not within 5-fold of the questionable value. Of 416 values in the study 3 met outlier criteria (white boxes in Supplemental tables 5 and 6). Two were in the healthy controls (I-TAC) and one in a febrile control (I-TAC), suggesting possible slight technical issues specific to the I-TAC analyte assay. Outlier values were not used during performance of the KD *versus* FC t-tests or for ROC analysis. Including or excluding the outlier data had no impact on the result of applying the KD diagnostic algorithm. The subjects with outlier values had the possibility of a KD diagnosis rejected at step1 based on sTNFR2 levels <1900 pg/ml.

**Table 1- Diagnostic Testing**

Diagnostic Test	Patient 1 KLSS (shock)	Patient 2 KLS
Admission WBC	5.8	3.5
CD4 count	3	19
HIV vl	180,000	139,000
HCV studies	1a	neg
HBV sAg	neg	neg
Oral HSV culture	neg	ND
CXR	NAD	NAD
Urinalysis	2 WBC	0 WBC
CSF	ND	1 WBC
ESR	5	87
ANA	ND	<1:40
LDH	1370	ND
Ig A level	531	267
ASO titer (ULN <199)	200	200
Strep screen	neg	ND
RPR	neg	neg
Monospot	neg	neg
EBV IgM	neg	neg
CMV IgM	neg	neg
Toxo IgM	neg	ND
Erhlichea pcr	neg	ND
Parvovirus B19 pcr	neg	ND
Parvovirus B19 IgM	ND	neg
HHV6 pcr	neg	ND
Urine <i>Histoplasma</i> ag	neg	neg
Serum cryptococcal ag	ND	neg
Blood cultures	neg	neg
Stool culture/O&P	neg	neg
<i>Chlamydia</i> /GC LCR	ND	neg
Nasopharynx viral cult.	neg	neg
BAL stains	neg	ND
BAL culture	few <i>Candida</i>	ND
BM bx stains & cultures	neg	ND
Skin bx	perivascular lymphocytes	perivascular lymphocytes, few eosinophils

NAD = no active disease

ND = not determined

**Table 2- Analyte Panel**

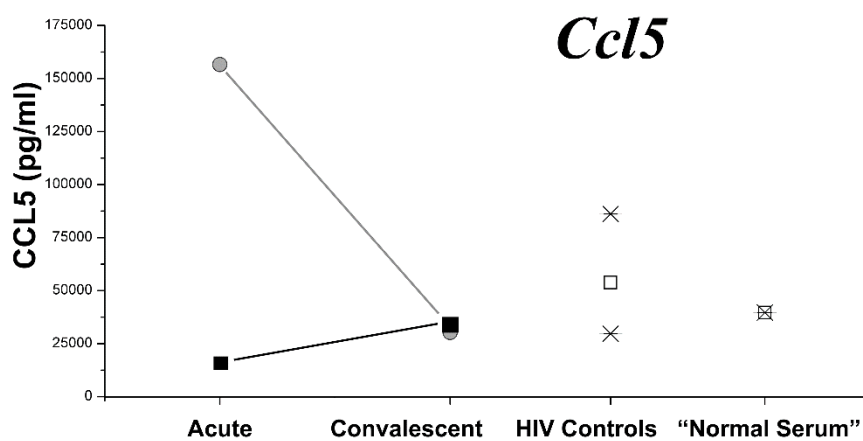
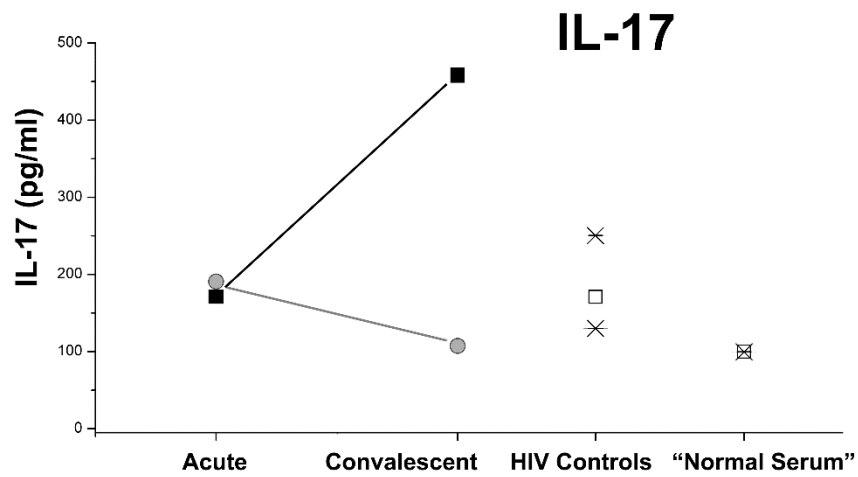
Analyte	Cell type origin	Ref.	KD serum	KD ref.
<b>IL-1beta</b>	Multiple	[1]	Elevated	[2]
<b>IL-1ra</b>	Multiple excepting lymphocytes	[3]	<b>No data</b>	<b>NA</b>
<b>IL-6</b>	Multiple including T cells	[4, 5]	Elevated	[6-8]
<b>IL-10</b>	Hematopoetic cells including T cells	[9]	Elevated	[10, 11]
<b>IL-13</b>	T cells (Th2), eosinophils, mast cells	[12-14]	<b>No data</b>	<b>NA</b>
<b>IL-17</b>	T cells (Th17 & some Th1, rare CD8)	[15]	Elevated	[16, 17]
<b>IFN-a</b>	Multiple		Conflicting	[18, 19]
<b>IFN-g</b>	T cells (Th1)	[20]	Not elevated In majority	[21, 22]
<b>TNFa</b>	Multiple including T cells	[23]	Elevated	[7, 24, 25]
<b>sTNFRII</b>	Multiple, regulated by TNFa	[26]	Elevated KD & KLS	[24, 27]
<b>M-CSF</b>	Mesenchymal cell types (endothelium, fibroblasts)	[28]	Elevated	[29, 30]
<b>Osteoprotegrin</b>	Osteoblasts, endothelial and smooth muscle cells	[31]	Elevated	[32]
<b>Ccl1 (I-309)</b>	Monocytes, T cells, endothelial cells; recruits Th2 T cells, monocytes, endothelial and smooth muscle cells	[33-36]	<b>No data</b>	<b>NA</b>
<b>Ccl2 (MCP-1)</b>	Monocytes & stromal cells (epithelium, endothelium, fibroblasts, smooth muscle cells)	[37]	Elevated	[38-40]
<b>Ccl5 (Rantes)</b>	Multiple	[41]	Elevated	[42]
<b>Cxcl10 (IP-10)</b>	Multiple, regulated by interferons	[43]	Elevated	[17, 40]
<b>Cxcl11 (I-TAC)</b>	Endothelial, epithelial cells and leukocytes; recruitment of T cells and non-homeostatic recruitment of plasma cells	[44, 45]	<b>No data</b>	<b>NA</b>

- **NA** = not applicable

**Table 3- KLS Multiplex ELISA data**

	<b>hIL13</b>	<b>hMCP1</b>	<b>hIL6</b>	<b>hIL17</b>	<b>hTNFRII</b>	<b>hIP10</b>	<b>hRANTES</b>	<b>hITAC</b>
<u>Sample ID</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>
#1	510.4	100200	54000	171.2	25700	125.8	15700	1935
#2	286	566.8	23	458.2	3120	70.8	34000	1050.5
#3	502.4	2510	40	190.8	5540	72.6	156600	1099.5
#4	163.6	358	11.8	107.4	2765	56.4	30300	59.2
#5	204	361	11	132	955	51.2	86200	17.8
#6	218.6	529.8	11	250.8	690	51	29700	21.8
#7	104.2	115.6	12.6	130.2	934.6	55	45600	104.6
#8	93.6	161.2	7.4	100	975.1	51.2	39700	10

	<b>hOPG</b>	<b>hM-CSF</b>	<b>hTNFa</b>	<b>hIL10</b>	<b>hIL1ra</b>	<b>hI309</b>	<b>hIFNa</b>	<b>hIL1b</b>
<u>Sample ID</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>	<u>pg/ml</u>
#1	27.8	62.4	60.4	14.4	25050	48.4	<0.8	<0.4
#2	8.4	88	<4.7	2.4	361.6	4.8	5.8	<0.4
#3	9.4	58.4	<4.7	1.4	882.8	55.6	46.2	<0.4
#4	1.2	<15.6	<4.7	0.4	38.8	4.8	14.8	<0.4
#5	0.8	<15.6	<4.7	0.8	<15.6	<1.6	<0.8	<0.4
#6	0.4	<15.6	<4.7	0.6	33.6	<1.6	<0.8	<0.4
#7	4	<15.6	<4.7	4.2	134.4	3.6	<0.8	<0.4
#8	0.8	<15.6	<4.7	1.2	2048.8	20.8	<0.8	<0.4



**Figure 1.** IL-17 and *Ccl5* did not differ between KLS patients and HIV controls. Patient 1 (severe KLS) black squares; Patient 2 (typical KLS) gray circles. The HIV control subjects' mean (open square) and range of analyte values are indicated in the third column. The level of analyte in a single HIV negative "normal serum" is shown as a square in the final column.

**Table 4- KLS/KD Acute Phase Analytes**

Analyte (pg/ml)	This report		Control	KD (KLS)	Other disease 1	Other disease 2	Reference
	HIV controls Mean	HIV KLS P1, P2					
IL-1beta	<0.4	<0.4, <0.4	310	1110	-	-	[2]
IL-1ra	59	25050, <b>882</b>	410	<b>no data</b>	7400 (urosepsis)	-	[46]
IL-6	12	54000, <b>40</b>	<5	123	26 (enterovirus)	-	[8]
			1.5	164	6 (febrile illness)	-	[7]
IL-10	1.9	14, <b>1.4</b>	16	125	27 (febrile illness)	-	[47]
			4	122	34 (febrile illness)	-	[10]
IL-13	176	510, <b>502</b>	35	<b>no data</b>	57 (RSV)	-	[48]
IL-17	171	171, <b>191</b>	2	25	-	-	[49]
IFN-a <sup>‡</sup>	<0.8	<0.8, <b>46</b>	-	-	-	-	-
IFN-g <sup>§</sup>	<10	27, <b>&lt;10</b>	-	-	-	-	-
TNF-a	<5	60, <b>&lt;5</b>	10	24	-	-	[25]
			<3.4	8	<3.4 (measles)	12 (anaphylaxis)	[50]
sTNFRI	-	-	-	2750000	1550000 (encephalitis)	-	[51]
sTNFRII	860	25700, <b>5540</b>	-	(>5000)	-	-	[27]
M-CSF*	<16	62, <b>58</b>	-	-	-	-	-
Osteoprotegerin	2	28, <b>9</b>	40	101	68 (JSLE)	80 (febrile illness)	[32]
<i>Ccl1</i> (I-309)	1.9	48, <b>56</b>	-	-	-	-	-
<i>Ccl2</i> (MCP-1)	336	100200, <b>2510</b>	-	443	83 (HSP)	328 (febrile illness)	[40]
			223	829	-	-	[52]
<i>Ccl5</i> (RANTES) <sup>†</sup>	53833	15600, <b>156600</b>	290	1320	-	-	[39]
			-	-	-	-	-
<i>Cxcl10</i> (IP-10)	52	126, <b>73</b>	-	538	59 (HSP)	417 (febrile illness)	[40]
			128	2469	-	-	[52]
<i>Cxcl11</i> (I-TAC)	48	1935, <b>1100</b>	-	3587	921 (febrile illness)	-	[17]
			68	<b>no data</b>	254 (HCV cryoglobulinemia)	-	[53]

P1= patient 1; P2 = patient 2

‡ conflicting data based on bioassays [18, 19]

§ published data in units/ml without conversion factor [21]

\* published data in units/ml without conversion factor [73]

† published data in arbitrary units mRNA in peripheral blood mononuclear cells (PBMC) [84]



# AUSHON BIOSYSTEMS

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## Aushon Multiplex Immunoassay Analysis Report

Client/Study: Johnson  
 Institute: Yale University  
 Receive Date: 11/20/2015  
 SL Lot #: 7701

Species: Human  
 Matrix: Serum and Plasma  
 # of Samples: 78  
 Total Plex: 12

TestID	Sample D	hL1b	hL4	hL6	hTAC	hMCP1	hL13	hMIG	hEchxn	hI309	hMIP1b	hTNFR1	hTNFR2	Sample ID
	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	pg/ml	
Sample 2	2	0.5	0.3	1882.9	1312	1158.1	0.8	45.6	210.3	22.0	621.5	4529.8	2843.2	12005
Sample 4	4	0.5	0.3	1882.9	565.2	1144.2	0.3	745.2	94.0	16.4	229.2	5696.2	4465.0	12015
Sample 6	6	3.5	2.1	571.1	61.0	1201.8	0.059	151.5	189.6	9.7	486.7	3734.5	3107.1	12025
Sample 8	8	30.5	12.1	53.0	39.5	1837.0	0.1	148.0	18.2	11.5	312.3	4128.9	2788.0	12035
Sample 10	10	1.5	0.7	45.6	162.3	804.6	0.9	438.6	18.2	3.8	118.0	2913.6	1919.8	12045
Sample 12	12	1.3	1.0	45.4	29.3	752.0	0.1	56.9	68.6	3.8	118.0	2913.6	1919.8	12055
Sample 14	14	91.5	39.4	762.3	67.2	2876.9	19.2	990.1	242.8	169.9	738.4	5674.8	6497.2	12065
Sample 16	16	0.3	0.099	27.3	68.9	983.5	1.1	100.5	77.6	36.9	328.8	3593.7	3585.6	12075
Sample 18	18	9.8	4.3	93.5	40.7	574.3	1.3	93.2	50.1	15.0	299.7	3983.8	2924.1	12085
Sample 60	60	14.1	3.3	85.6	3487.8	3288.9	0.2	1015.0	196.0	47.1	433.2	6201.8	4789.1	11015
Sample 62	62	0.3	0.091	105.5	191.4	1389.7	0.087	211.3	194.7	9.7	4417.6	4417.6	3738.8	11025
Sample 64	64	0.4	0.061	109.0	134.7	1389.6	0.033	44.6	522.0	4.0	144.3	5503.0	2940.9	11035
Sample 66	66	0.4	0.2	354.2	108.7	1624.0	0.2	143.7	208.7	13.8	250.7	8845.2	8103.5	11045
Sample 68	68	23.1	4.2	4.1	257.1	1458.7	0.057	80.5	788.9	21.9	250.0	2981.2	3419.6	11055
Sample 70	70	2.9	1.3	20.7	484.9	2189.8	0.2	208.9	430.6	22.6	235.1	4738.3	3955.6	11065
Sample 72	72	44.3	16.4	40.6	109.6	1366.2	6.5	298.6	478.2	18.1	399.7	2945.0	2631.4	11075
Mean		15.0	6.7	278.7	371.2	2126.5	2.0	298.0	249.4	28.2	347.0	4930.4	4052.6	
SD		25.0	10.5	491.8	845.4	2515.9	4.9	327.6	215.0	40.9	174.4	1892.0	1829.8	
Sample 20	20	18.8	11.2	2.7	22.7	953.6	0.3	33.0	144.9	7.8	333.3	1917.4	1507.0	22005
Sample 22	22	8.1	4.7	3.6	644.3	1071.4	0.6	58.1	718.5	3.9	194.5	1690.2	1485.9	22015
Sample 24	24	2.8	1.7	30.0	14.0	650.8	0.8	18.9	61.2	4.1	198.4	2732.5	2198.5	22025
Sample 26	26	3.5	1.2	33.4	16.0	792.3	6.2	174.4	83.4	2.6	215.7	4731.3	3198.1	22035
Sample 28	28	0.8	0.6	8.0	33.7	266.4	0.013	14.5	93.5	3.1	317.3	2981.1	2106.6	22045
Sample 30	30	0.4	0.051	15.2	25.0	399.7	0.024	30.7	99.4	4.9	364.8	3599.8	2310.5	22055
Sample 32	32	7.3	4.6	21.2	31.4	653.2	0.8	20.4	140.3	3.5	230.3	1712.5	1302.3	22065
Sample 34	34	14.2	5.0	24.7	15.9	677.5	0.9	72.6	83.6	3.5	280.4	3278.9	2062.7	22075
Sample 36	36	8.5	3.7	165.4	39.3	499.7	0.066	37.9	51.4	4.2	331.2	6691.8	2803.7	22085
Sample 38	38	0.4	0.037	25.5	11.3	506.1	0.4	14.6	73.6	3.6	1208.3	6900.0	3575.8	22095
Sample 78	78	1.6	0.5	80.8	109.7	981.1	0.043	62.9	109.7	3.3	201.8	3430.9	2277.4	21035
Mean		6.0	3.0	37.3	87.6	641.5	0.9	58.0	182.9	4.0	356.9	3566.9	2287.1	
SD		6.1	3.3	47.6	186.7	233.9	1.8	48.6	211.4	1.4	288.6	1822.3	708.1	
Sample 40	40	2.7	1.4	25.9	24.0	818.4	0.4	91.9	98.0	2.5	406.0	1632.4	1390.8	32005
Sample 42	42	3.6	1.4	4.7	11.2	856.3	0.1	13.0	31.5	1.7	371.5	1527.4	882.9	32015
Sample 44	44	0.1	0.2	18.7	23.2	382.7	0.4	36.7	34.6	2.9	193.4	1538.3	1190.9	32025
Sample 46	46	1.9	1.5	6.8	3.3	1627.3	0.1	10.0	100.8	1.5	147.0	1623.3	1090.0	32035
Sample 48	48	11.0	4.0	3.8	157.0	499.3	0.070	23.1	154.0	2.2	211.6	1772.3	1325.9	32045
Sample 50	50	9.1	3.2	7.5	11.6	725.2	0.052	24.6	51.1	2.6	131.1	1725.8	1265.9	32055
Sample 52	52	0.3	0.4	2.7	6.5	474.1	0.048	25.8	82.0	1.6	194.1	1137.3	1059.9	32065
Sample 54	54	19.6	7.0	19.4	6.6	1011.9	0.037	15.4	198.1	2.1	227.3	1175.2	886.0	32075
Sample 56	56	1.3	0.6	6.4	6.4	938.8	0.1	23.3	184.9	6.0	355.8	1331.6	1062.9	32085
Sample 58	58	0.7	0.4	5.6	14.9	1068.3	0.043	36.8	68.3	4.8	373.4	1780.2	1070.0	32095
Mean		6.0	2.0	9.9	26.5	842.0	0.140	41.6	104.8	2.8	281.1	1504.4	1115.2	
SD		6.3	2.2	7.9	46.4	367.5	0.134	41.2	48.8	1.5	704.0	238.4	168.9	

Childrens KD samples

IU KD samples

Childrens Febrile controls  
 IU Febrile Controls

Childrens Healthy Controls



<b>Table 7. Demographic Characteristics of Study Subjects</b>			
<b>Demographics</b>	<b>Kawasaki (N= 16)</b>	<b>Febrile Control (N=11)</b>	<b>Afebrile Control (N=10)</b>
Age (years)	3.2 (1.6)	3.2 (2.3)	4.2 (1.6)
Gender (M)	8 (50%)	1 (9%)	5 (45%)
Race			
Caucasian	9 (56%)	10 (91%)	10 (100%)
Black or African- American	5 (31%)	1 (9%)	0 (0%)
Asian	2 (13%)	0 (0%)	0 (0%)
Ethnicity			
Hispanic or Latino	0 (0%)	0 (0%)	2 (20%)
Non-Hispanic or Latino	16 (100%)	11 (100%)	8 (80%)

Data reported as mean (SD) or n (%).



‡Rash (R), non-exudate conjunctivitis (Con), mucous membrane changes (Mu), erythema and/or painful swelling of the extremities (Ext), cervical lymphadenopathy (LN), coronary artery aneurysms (CA).

† Considered abnormal based on American Heart Association criteria [1]. Subject 1101 had an LAD z-score of +2.69 with marker perivascular brightness around the coronaries. Subject 1104 had an LAD z-score of +3.19 with perivascular edema present. Subject 1200 had coronary artery aneurysms (Y-CA) with an LAD z-score of +9.42 and an RCA z-score of +8.56.

Alb, Albumin; CRP, C-Reactive Protein; ECHO, Echocardiogram; ESR, Erythrocyte Sedimentation Rate; IU, Indiana University; IVIG, Intravenous Immunoglobulin; JIA, Juvenile Idiopathic Arthritis; KD, Kawasaki Disease; MN, Children’s Minnesota; MSSA, Methicillin-Susceptible *Staphylococcus aureus*; N/A, Not Available; Plt, Platelet Count; RSV, Respiratory Syncytial Virus; UTI, Urinary Tract Infection; WBC, White Blood Cell Count.

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<b>Table 9. Diagnosis of Afebrile Control Subjects</b>		
<b>Subject</b>	<b>Final Diagnosis</b>	<b>KD Algorithm Result</b>
3200	Dog Bite, Facial Laceration	-
3201	Supracondylar Humerus Fracture	-
3202	Femur Fracture	-
3203	Supracondylar Humerus Fracture	-
3204	Ulna Fracture, Radius Fracture	-
3205	Tonsillar Laceration, Oral Injury	-
3206	Ulna Fracture, Radius Fracture	-
3207	Supracondylar Humerus Fracture	-
3208	Closed Head Injury, Concussion	-
3209	Closed Head Injury, Motor Vehicle Collision	-

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