Soluble interleukin-2 receptor is a sensitive diagnostic test in adult HLH: Supplemental <u>Data</u>

Anna Hayden, Molly Lin, Sujin Park, Morris Pudek, Marion Schneider, Michael B. Jordan, Andre Mattman, and Luke Y.C. Chen

Table 1. Characteristics of Non- HLH patients (N = 40)

Disease	No. patients				
Autoimmune disorder	8				
Sepsis	6				
Unknown	5				
Histiocyte disorder	4				
Lymphoma	3				
Acute hepatitis	3				
Acute leukemia	2				
Other malignancy	1				
IgG4 related disease	1				
Myocarditis	1				
Hemolytic anemia	1				
TTP	1				
Hb SC disease	1				
Immunodeficiency	1				
CAPS	1				
Sarcoidosis	1				
No. HLH criteria	No. patients				
7/7	0				
6/7	1				
5/7	4				
4/7	5				
3/7	6				
2/7	10				
1/7	6				
0/7	8				

Table 2. Characteristics of HLH patients (N=38)

HLH subtype	No. patients			
	MAHS	16		
	IAHS	14 5		
	Unknown			
	MAS	3		
No. HLH criteria*		No.		
		patients		
	7/7	7		
	6/7	8		
	5/7	21		
	4/7	1**		
	3/7	1**		
	2/7	0		
	1/7	0		
	0/7	0		

MAHS – malignancy associated hemophagocytic syndrome, IAHS – infection associated hemophagocytic syndrome, MAS – macrophage activation syndrome

^{*}Because NK cell function is not available in our center most patients were evaluated on the basis of the seven available HLH 2004 criteria.

^{**}Two patients were deemed by their treating Hematologist to have HPS/HLH despite having fewer than 5/7 HLH 2004 criteria. The patient with 4/7 criteria, EH21, was deemed to have HPS/HLH after presenting with fever, severe hepatitis, ferritin 10466 μg/L, sIL-2r 3784 U/mL, HScore 218, hemophagocytosis and metastatic adenocarcinoma (lung origin) in bone marrow. The patient with 3/7 criteria, H61, had disseminated tuberculosis in the context of inflammatory bowel disease, with hepatitis, ferritin 10466 μg/L, sIL-2r 3784 U/mL, HScore 200, which improved with steroids, IVIg and treatment of the tuberculosis.

Figure 1. Trends of sIL-2r and ferritin for HLH patients with multiple Measurements

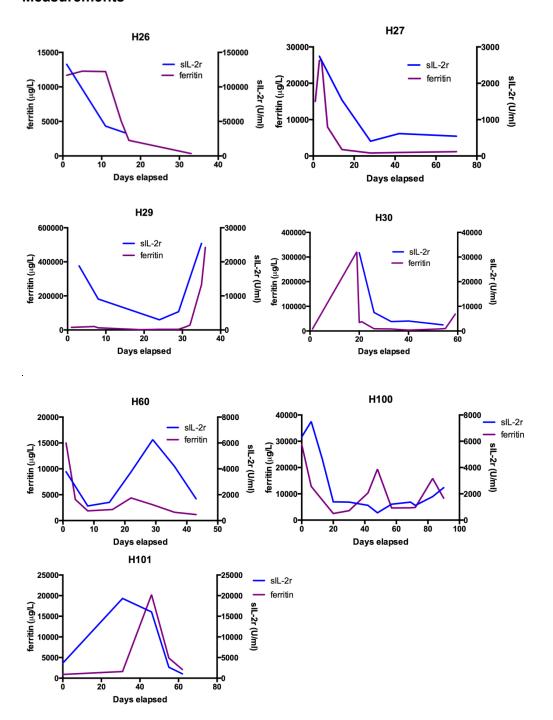


Table 3: HLH subtypes breakdown

	N	%	slL2r mean	SD	ferritin mean	ferritin SD	slL2r/ferritin ratio mean
IAHS	14	37%	9720.6	9081.9	78154.9	143048.7	0.50
MAHS	16	42%	20241.6	16991.8	58715.8	84460.9	1.41
MAS	3	8%	5007.7	1692.9	32728.7	1692.9	0.21
Unknown	5	13%	8788.2	3889.2	28982.0	27628.0	0.59