

Soluble Hemojuvelin and Ferritin: Potential Prognostic Markers in Pediatric Hematopoietic Cell Transplantation

Supplementary Table S1. Differences between parameters of iron metabolism.

Parameters	Total number of patients	Controls (group I)	Acute leukemia at diagnosis (group II)	Acute leukemia after intensive chemotherapy (group III)	After HCT (group IV)	p-value
<i>n</i>	137	19	36	50	32	
PRBC transfusions [units] median (range)	7 (0-99)	0 (0-0)	1 (0-10)	10 (2-40)	23 (5-99)	I vs II; $p<0.001$ I vs III; $p<0.001$ I vs IV; $p<0.001$ II vs III; $p<0.001$ II vs IV; $p<0.001$ III vs IV; $p<0.001$
Serum iron [mg/dL] median (range)	117.65 (10.0-265.4)	67.90 (20.1-97.4)	135.00 (39.0-262.0)	107.90 (10.0-264.0)	130.80 (41.9-265.4)	I vs II; $p<0.001$ I vs III; $p<0.001$ I vs IV; $p<0.001$ II vs III; $p=0.084$ II vs IV; $p=0.530$ III vs IV; $p=0.347$
Transferrin [mg/L] median (range)	852.8 (131.4-15000.0)	647.0 (218.8-15000.0)	860.0 (151.9-15000.0)	1205.9 (243.2-5206.0)	722.1 (131.4-2634.0)	I vs II; $p=0.276$ I vs III; $p=0.015$ I vs IV; $p=0.953$ II vs III; $p=0.041$ II vs IV; $p=0.320$ III vs IV; $p=0.003$
TIBC [μg/L] median (range)	267 (125-439)	355 (292-439)	269 (125-329)	267 (183-379)	242 (128-286)	I vs II; $p<0.001$ I vs III; $p<0.001$ I vs IV; $p<0.001$ II vs III; $p=0.634$ II vs IV; $p=0.002$ III vs IV; $p<0.001$
Ferritin [μg/L] median (range)	701.0 (5.4-12000.0)	26.9 (5.4-73.3)	325.6 (14.2-1660.0)	963.5 (22.0-5503.2)	3370.0 (1070.0-12000.0)	I vs II; $p<0.001$ I vs III; $p<0.001$ I vs IV; $p<0.001$

						II vs III; p=0.006 II vs IV; p<0.001 III vs IV; p<0.001
FTH1 [pg/mL] median (range)	22.22 (0.00-726.50)	16.45 (0.53-83.87)	23.04 (0.00-726.50)	24.59 (0.50-132.00)	21.95 (0.00-309.40)	I vs II; p=0.348 I vs III; p=0.207 I vs IV; p=0.938 II vs III; p=0.999 II vs IV; p=0.446 III vs IV; p=0.314
FTL [pg/mL] median (range)	101.90 (0.00-571.80)	92.21 (29.44-571.80)	116.55 (43.29-363.00)	102.95 (0.00-286.10)	98.32 (0.00-288.10)	I vs II; p=0.479 I vs III; p=0.582 I vs IV; p=0.838 II vs III; p=0.115 II vs IV; p=0.233 III vs IV; p=0.857
Hepcidin [ng/mL] median (range)	202.80 (9.63-1000.00)	30.61 (9.63-468.20)	229.20 (13.94-738.60)	136.65 (17.26-734.90)	281.85 (27.99-1000.00)	I vs II; p<0.001 I vs III; p<0.001 I vs IV; p<0.001 II vs III; p=0.073 II vs IV; p=0.026 III vs IV; p<0.001
sHJV [ng/mL] median (range)	46.89 (18.34-136.80)	63.47 (28.78-91.47)	45.72 (27.33-88.23)	46.23 (24.78-136.80)	38.97 (18.34-98.41)	I vs II; p<0.001 I vs III; p<0.001 I vs IV; p<0.001 II vs III; p=0.969 II vs IV; p=0.020 III vs IV; p=0.012
Ferritin / sHJV ratio median (range)	15.01 (0.19-341.27)	0.31 (0.19-0.87)	8.05 (0.25-33.44)	19.71 (0.34-160.91)	91.76 (11.18-341.27)	I vs II; p<0.001 I vs III; p<0.001 I vs IV; p<0.001 II vs III; p=0.012 II vs IV; p<0.001 III vs IV; p<0.001
FNP [pg/mL] median (range)	84.72 (18.42-1321.00)	75.75 (18.42-251.90)	84.92 (29.12-924.70)	86.08 (38.57-1321.00)	114.35 (27.11-1250.00)	I vs II; p=0.697 I vs III; p=0.768 I vs IV; p=0.102 II vs III; p=0.999 II vs IV; p=0.219 III vs IV; p=0.233
Erythroferrone (ERFE) [ng/mL] median (range)	8.482 (1.413-100.0)	8.236 (2.972-100.0)	10.201 (2.332-100.0)	7.825 (1.413-100.0)	7.856 (1.831-100.0)	I vs II; p=0.371 I vs III; p=0.662 I vs IV; p=0.477

						II vs III; p=0.108 II vs IV; p=0.112 III vs IV; p=0.686
EPO [mIU/mL] median (range)	30.62 (0.90-200.0)	10.88 (0.90-25.46)	85.39 (3.62-200.0)	30.92 (8.59-200.0)	24.31 (6.20-200.0)	I vs II; p<0.001 I vs III; p<0.001 I vs IV; p<0.001 II vs III; p<0.001 II vs IV; p<0.001 III vs IV; p=0.035
sTfR [µg/mL] median (range)	0.613 (0.358-6.285)	0.608 (0.377-1.866)	0.606 (0.380-6.285)	0.839 (0.362-3.527)	0.507 (0.358-3.192)	I vs II; p=0.846 I vs III; p=0.498 I vs IV; p=0.471 II vs III; p=0.730 II vs IV; p=0.219 III vs IV; p=0.133
CRP [mg/L] median (range)	0.90 (0.05-297.54)	0.47 (0.16-2.34)	1.03 (0.37-156.50)	0.50 (0.05-36.37)	3.27 (0.22-297.54)	I vs II; p=0.004 I vs III; p=0.488 I vs IV; p<0.001 II vs III; p<0.001 II vs IV; p=0.381 III vs IV; p<0.001
PCT [ng/mL] median (range)	0.06 (0.00-11.47)	0.02 (0.02-0.10)	0.08 (0.01-2.82)	0.05 (0.00-1.20)	0.12 (0.02-11.47)	I vs II; p<0.001 I vs III; p<0.001 I vs IV; p<0.001 II vs III; p<0.001 II vs IV; p=0.651 III vs IV; p<0.001

Abbreviations: sHJV, soluble hemojuvelin; sFNP-1, soluble ferroportin-1; ERFE, erythroferrone; EPO, erythropoietin; sTfR, soluble transferrin receptor; TIBC, total iron-binding capacity; FTH1, ferritin heavy chain; FTL, ferritin light chain; CRP, C-reactive protein; PCT, procalcitonin; HCT, hematopoietic cell transplantation; PRBC, packed red blood cell concentrate.