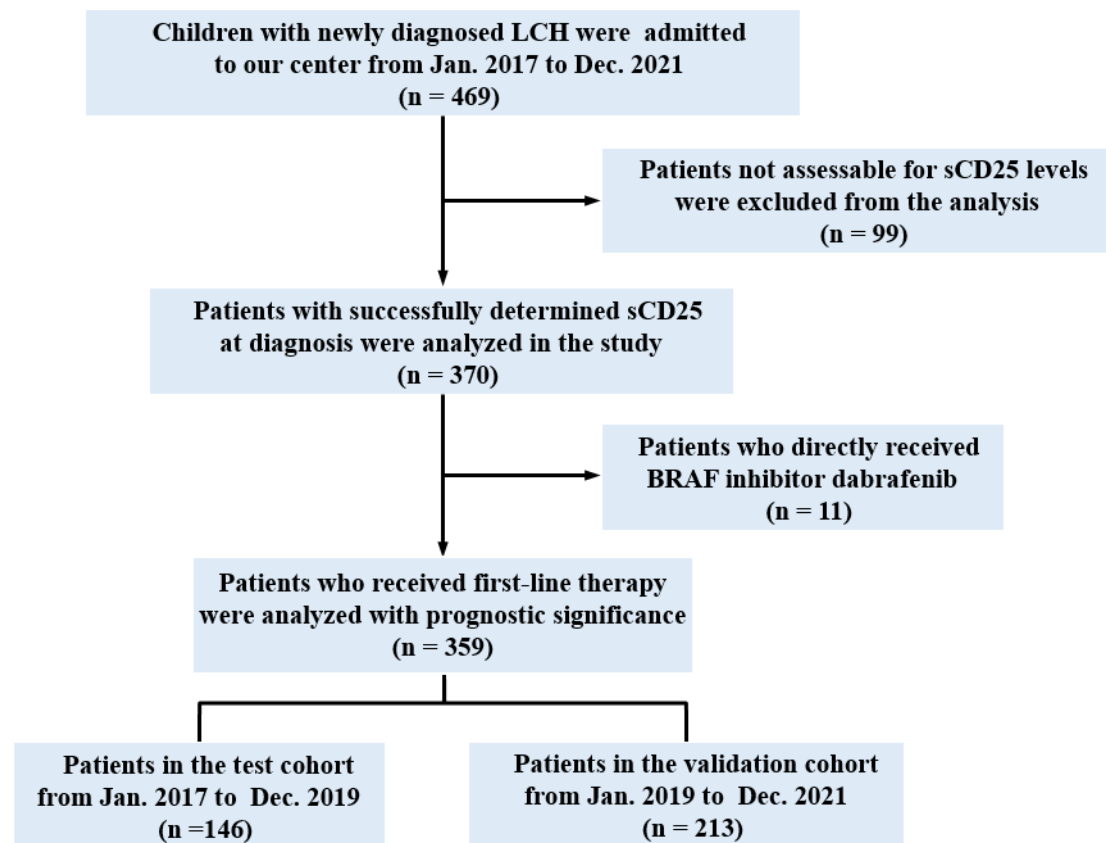


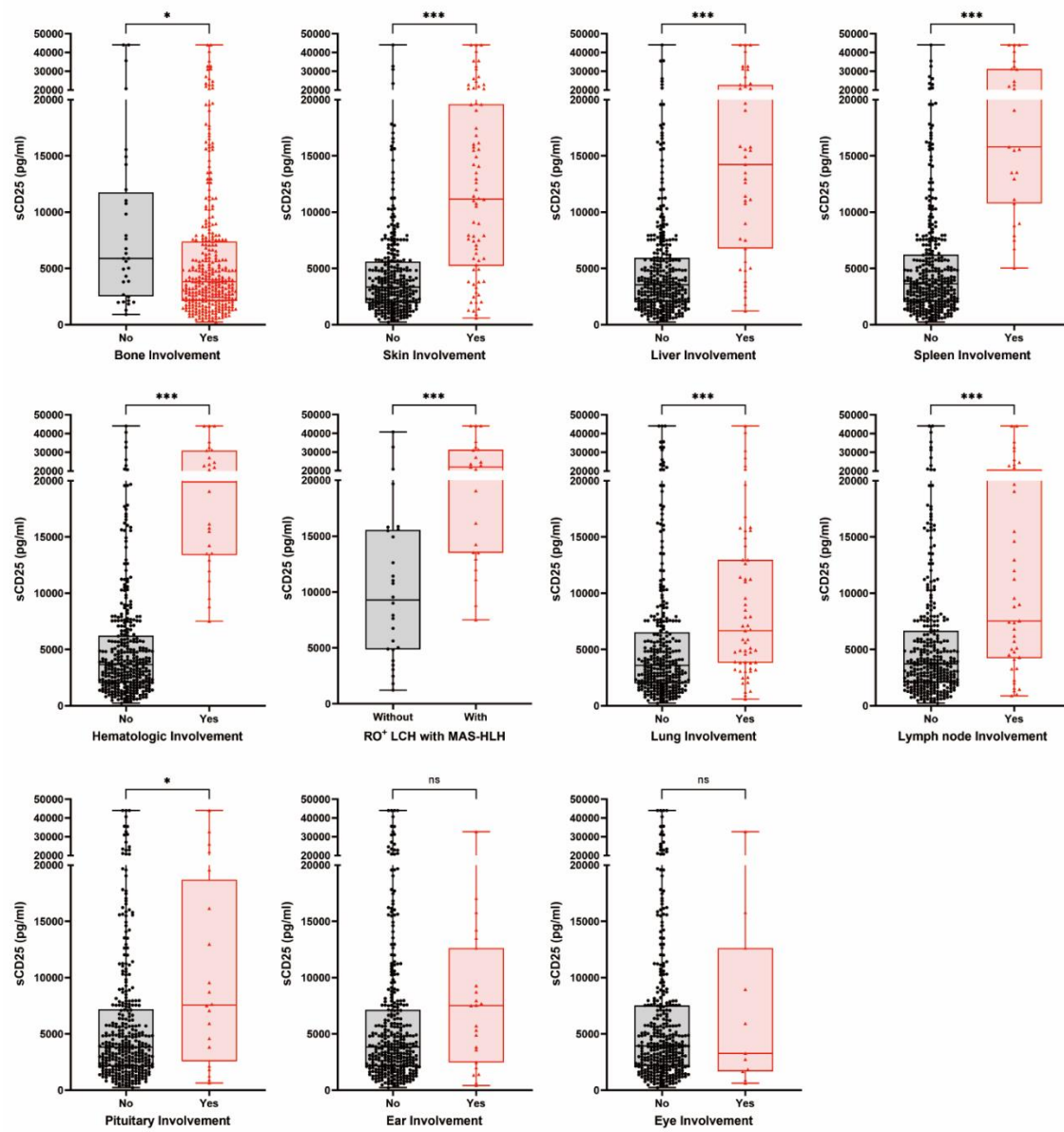
Supplementary TableS1 Univariate analysis of prognostic factors for progression-free survival in children with Langerhans cell histiocytosis in the test cohort

Characteristics	Total n (%)	Univariate analysis HR (95% CI)	P- value
Total	146	–	–
sCD25 levels			
Low (< 2921 pg/ml)	69 (47.3)	1	< 0.001
High (≥ 2921 pg/ml)	77 (52.7)	2.594 (1.550 – 4.343)	
Gender			
Male	88 (60.3)	1	0.591
Female	58 (39.7)	1.145 (0.699 – 1.875)	
Age at diagnosis			
≥ 2 years	86 (58.9)	1	0.014
< 2 years	60 (41.1)	1.839 (1.130 – 2.994)	
Disease extents			
SS	84 (57.5)	1	< 0.001
MS RO ⁻	38 (26)	2.930 (1.678 – 5.116)	
MS RO ⁺	24 (16.4)	4.653 (2.452 – 8.828)	< 0.001
Involvements			
Bone			
No	18 (12.3)	1	0.965
Yes	128 (87.7)	0.983 (0.469 – 2.062)	
Skin			
No	110 (75.3)	1	0.003
Yes	36 (24.7)	2.209 (1.311 – 3.723)	
Liver			
No	125 (85.6)	1	0.001
Yes	21 (14.4)	2.835 (1.540 – 5.219)	
Spleen			
No	133 (91.1)	1	< 0.001
Yes	13 (8.9)	3.917 (1.917 – 8.003)	
Hematologic			
No	135 (92.5)	1	< 0.001
Yes	11 (7.5)	4.782 (2.154 – 10.618)	
Lung			
No	120 (82.2)	1	0.004
Yes	26 (17.8)	2.314 (1.298 – 4.125)	
Lymph nodes			
No	131 (89.7)	1	0.096
Yes	15 (10.3)	1.878 (0.894 – 3.942)	

Pituitary			
No	138 (94.5)	1	0.094
Yes	8 (5.5)	2.186 (0.874 – 5.463)	
Eye			
No	134 (91.8)	1	0.361
Yes	12 (8.2)	0.048 (0 – 32.755)	
Ear			
No	142 (97.3)	1	0.013
Yes	4 (2.7)	2.577 (1.224 – 5.424)	
<i>BRAF</i> -V600E mutations in Tissue lesions			
Evaluable patients	105		
Negative	43 (41.0)	1	0.029
Positive	62 (59.0)	1.973 (1.071 – 3.634)	
<i>BRAF</i> -V600E in plasma cell-free DNA			
Evaluable patients	119		
Negative	72 (60.5)	1	< 0.001
Positive	47 (39.5)	3.137 (1.832 – 5.374)	



Supplementary FigS1 Flow diagram for the study patients



Supplementary FigS2 Correlation between CD25 levels and organs involvements