Effects of Thalidomide on Erythropoiesis and Iron Homeostasis in Transfusion-Dependent β-Thalassemia

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Online Supplement

Table S1. Erythropoiesis-related parameters before and after thalidomide treatments.

	Before TT	After TT	*p* value
RBC ($\times 10^{12}$/L)	3.53 ± 0.48	4.71 ± 0.84	0.000
Hemoglobin (g/dL)	8.30 ± 0.86	10.41 ± 1.77	0.000
Hematocrit (%)	27.13 ± 2.93	32.76 ± 4.64	0.000
MCV (fL)	77.30 ± 5.09	70.12 ± 5.24	0.000
MCH (pg)	23.70 ± 2.38	22.24 ± 2.18	0.011
MCHC (g/dL)	30.69 ± 2.46	31.77 ± 2.72	0.150
Reticulocyte (%)	3.10 ± 3.81	2.69 ± 2.33	0.377
IBIL (μmol/L)	40.78 ± 22.42	39.98 ± 29.44	0.670
LDH (IU/L)	288.27 ± 103.44	213.45 ± 52.99	0.007
Haptoglobin (mg/dL)	25.0 (25.0-76.3)	25.0 (25.0-88.2)	0.401
PFH (mg/L)	187.45 (126.33-800)	190.65 (106.60-529.92)	0.961
EPO (mIU/mL)	87.40 (25.60-750.00)	45.85 (20.40-302.60)	0.033

TT: thalidomide treatment; RBC: red blood cell; MCV: mean corpuscular volume; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; IBIL: indirect bilirubin; LDH: lactate dehydrogenase; PFH: plasma free hemoglobin; EPO: erythropoietin.

Table S2. Serum iron parameters before and after thalidomide treatments.

	Before TT	After TT	*p* value
Hepcidin (ng/mL)	25.22 (1.75-117.69)	27.68 (3.66-117.69)	0.654
sTFR (mg/L)	15.16 ± 5.84	14.41 ± 5.02	0.555
SF(ng/ml)	1716.3 (575.4-12671.86)	1232.1 (13416.94)	0.178
SI (μmol/L)	36.72 ± 10.16	32.12 ± 13.35	0.018
TIBC (μmol/L)	46.97 (27.45-144.36)	57.86 (32.08-138.99)	0.236
Tf saturation (%)	71.59 (33.39-96.65)	56.17 (22.95-98.11)	0.039
UIBC (μmol/L)	10.25 (1.80-95.60)	24.15 (0.80-91.40)	0.085
Tf (g/L)	1.89 ± 0.29	2.06 ± 0.37	0.030

TT: thalidomide treatment; sTFR: soluble transferrin receptor; SF: serum ferritin; SI: serum iron; TIBC: total iron-binding capacity; Tf: transferrin; UIBC: unsaturated iron-binding capacity.

Table 3S. Correlation between changes in erythropoiesis and iron-status parameters and hemoglobin increment.

Factors	Change of the value median (range)	r value	p value
RBC (×10^{12}/L)	1.04 (-0.19-2.61)	0.839	0.000
Hematocrit (%)	4.47 (-5.29-15.00)	0.813	0.000
MCV (fL)	-7.2 (-16.3--0.1)	-0.288	0.194
MCH (pg)	-1.98 (-5.17-3.12)	0.247	0.267
MCHC (g/dL)	0.46 (-6.55-8.65)	0.371	0.089
Reticulocyte (%)	0.02 (-7.33-3.22)	0.018	0.935
IBIL (μmol/L)	-3.55 (-42.0-64.4)	0.035	0.876
LDH (IU/L)	-28 (-287-48)	-0.257	0.249
Haptoglobin (mg/dL)	0.0 (-10.37-12.08)	0.047	0.835
PFH (mg/L)	-4.08 (-287.26-282.40)	-0.099	0.660
EPO (mIU/mL)	-28.15 (-526.0-79.3)	-0.097	0.669
Hepcidin (ng/mL)	0.65 (-48.94-71.90)	0.439	0.041
sTFR (mg/L)	-0.59 (-10.92-10.88)	-0.261	0.240
SF(ng/ml)	-275.79 (-1502.03-1086.52)	0.036	0.874
SI (μmol/L)	-2.91 (-19.35-21.07)	-0.536	0.010
TIBC (μmol/L)	4.66 (-69.4-76.87)	0.037	0.870
Tf saturation (%)	-6.37 (-69.77-53.68)	-0.292	0.187
UIBC (μmol/L)	5.30 (-60.91-79.89)	0.145	0.519
Tf (g/L)	0.13 (-0.58-1.12)	0.168	0.456

RBC: red blood cell; MCV: mean corpuscular volume; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; IBIL: indirect bilirubin; LDH: lactate dehydrogenase; PFH: plasma free hemoglobin; EPO: erythropoietin; sTFR: soluble transferrin receptor; SF: serum ferritin; SI: serum iron; TIBC: total iron-binding capacity; Tf: transferrin; UIBC: unsaturated iron-binding capacity.