

Table 1. Natural history of precursor B acute lymphoblastic leukaemia, in our 24-year-old male patient, from the moment of its diagnosis until his death.

Date	Clinical symptoms	Blood test	Blast's immunohistochemical analysis	Cytogenetic analysis	Cerebrospinal fluid analysis	Diagnosis	Treatment
May 2010	Pleurodynia	WBC: 7.7x10 ⁹ /L (1% blasts), Hb: 8.9g/dL, PLT: 67x10 ⁹ /L, LDH: 1041U/L, albumin 4.73g/dL, CRP: 1.62mg/dL, β2-microglobulin: 2.95 mg/L	40% blasts (bone marrow aspiration) Positive (+): CD45 (100%), CD34 (83%), CD19 (85%), CD10 (93%), CD22 (90%), CD38 (64%), CD13 (42%), Tdt (49%), CD79a (85%), cytIgM (33%) Negative (-): CD20, CD33, HLA DR, MPO, sIg	Normal	Normal	pre-B ALL	hyper-CVAD (8 cycles) and intrathecal infusions
May 2011	Left hip joint pain	WBC: 4.1x10 ⁹ /L Hb 15.5g/dL, PLT: 188x10 ⁹ /L, LDH: 337U/L albumin: 4.87g/dL	Complete remission	N/A	N/A	Bilateral avascular necrosis of the femur head	discontinue corticosteroids of the maintenance chemotherapy
May 2012	Dyspnea and fever (40°C)	WBC: 9.6x10 ⁹ /L Hb 16.6g/dL PLT: 299x10 ⁹ /L LDH: 280U/L, albumin: 4.57g/dL	0.02 blasts (peripheral blood) Positive (+): CD45, CD19 CD10, CD34, CD38	N/A	N/A	Lower respiratory tract infection	linezolid, piperacillin/tazobactam, fluconazole
Dec. 2012	Severe lumbar pain	WBC: 8.8x10 ⁹ /L, Hb: 17.4g/dL (bone marrow aspiration) PLT: 130x10 ⁹ /L, LDH: 404U/L, albumin 5.05g/dL CRP: 4.5mg/dL β2-microglobulin: 3.6 mg/L	9% blasts (bone marrow aspiration) Positive (+): CD19 (100%), CD10 (45%), iCD22 (40%), Tdt (68%), iCD79a (62%), CD34 (100%), CD38 (68%), HLA DR Additional antigens CD11b (12%) CD13 (15%) and iMPO (28%)	46,XY,dup(1) (q21q32), del(8) (p22)[12]/46 XY[8]	Normal	Disease relapse hypercalcaemia and multiple osteolytic lesions bilateral meralgia paresthetica died from sepsis	FLAG-IDA rescue therapy

WBC: white blood cells, Hb: hemoglobin, LDH: lactate dehydrogenase, CRP: C-reactive protein PLT: Platelets, pre-B ALL: precursor B acute lymphoblastic leukaemia, N/A: Not available, CD: cluster of differentiation.