

The seventh cord blood transplantation from FamiCord.eu

The recipient of seventh cord blood from FamiCord.eu and sixth from commercial cord blood bank in Poland (Polish Stem Cells Bank SA – PBKM SA) was a boy born in 2006, treated since 2009 because of acute lymphoblastic leukaemia (ALL), with the early bone marrow relapse (02/2011).

In this case, the cord blood was collected in November 2010 from 6/6 HLA matched younger brother. Preparation, freezing and storage of CB units was done in PBKM SA in Warsaw.

The conditioning regimen in the boy with above pre-B, ALL in second complete remission was consisted of fractionated total body irradiation and vesepide (VP-16). The Graft versus Host Disease (GvHD) prophylaxis consisted only of cyclosporine A (CsA).

The transplantation was performed: 30nd of June 2010, in Department and Clinic of Pediatric Oncology and Haematology and Bone Marrow Transplantation, Medical University in Wrocław.

Patient received $4,1 \times 10^7$ MNC/kg body weight. The number of haematopoietic stem cells was $0,61 \times 10^5$ CD34+/kg patient's body weight. The cord blood unit leukocytes viability were very good and were 98%.

The neutrophils engrafted at day +20 and platelets at day +39 after transplantation. Temporarily (from +5 to +13 day), the symptoms of peri-engraftment syndrome occurred (hepatomegaly, oedema, tachycardia) which subsided after corticosteroids therapy. In boy have been observed toxicities (due to CsA) and infection (due to St. haemolyticus) complications. The donor chimerism after transplantation was 98%.

Today at the time of writing, almost 6 months after transplantation, the patient is alive and remains in complete remission of ALL and in good health condition.