

5PS-33-03

FRENCH CORD BLOOD REGISTRY : A 6 YEAR EXPERIENCE

I. Desbois¹, V. Lapierre², B. Dazy³, M. Benbunan⁴, E. Marry⁵, C. Gerdil⁶, C. Raffoux⁵, P. Herve¹

¹ *Etablissement Français du Sang, Paris, France*

² *EFS Bourgogne Franche Comté, Besançon, France*

³ *EFS Aquitaine Limousin, Bordeaux, France*

⁴ *Hopital Saint Louis, Paris, France*

⁵ *FGM Agence de la Biomedecine, Paris, France*

⁶ *EFS Rhône Alpes, Annemasse, France*

In 1988, the first cord blood (CB) graft was successfully achieved by E. Gluckman in Saint Louis hospital (France). Ten years later, two french institutions, decided to mutualize their efforts to create a network: the French Blood Service and the Biomedecine Agency created an organization with 4 banks (Paris, Besançon, Bordeaux and Annemasse). The objective of this limited organization was to store only CB with a good quality defined by following specifications: more than 80 ml (without anticoagulant), and more than 2×10^6 CD34 cells. 5000 CB units (CBU) have been stored within 5 years. CB were collected in 3 maternity hospitals. All women involved signed an informed consent. The CB was collected in bags with CPD anticoagulant (MACOPHARMA France), and cryopreserved within 24 hours with HES and DMSO 10% in final in 2 bags. Since 2002 the SEPAX technique (BIOSAFE Switzerland) for miniaturizing the units was used and the BIOARCHIVE system (THERMOGENESIS USA) was used for cryopreservation and storage in the same tank. All units are tested for transmissible diseases (HIV, hepatitis B and C, HTLV, syphilis, CMV, EBV), microbiological contamination, and HLA AB DR typing. They are secured with quarantine of 3 months, mothers were re tested and babies examined by pediatrician. The 5000 UCB registered came to end in June 2005. More than 70% of the units collected were discarded because of non conformity. But more than 50% of the UCB can be used for 70kg recipients. In conclusion even if the french bank is at the 7th position for total number of units stored, the ratio for cessions is quite good about 3%. For the next 10 years, the perspective is to improve to 50 000 the total number of UCB stored with the same quality.