



Public Cord Blood Bank – Present and Future

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Banking of umbilical cord blood is not only having clinical values in saving patients' lives through unrelated haematopoietic stem cells transplantation, but also growing more popular in the private market to serve as a biological insurance. Dr Lee went through the latest development in a public cord blood bank. Around the world, there were more than 530,000 units of umbilical cord blood units stored in public banks and about 100,000 were kept in various private ones in Asia in 2009. In the same year however, only 3749 units were used for unrelated haematopoietic stem cells transplantation of which one third was used in paediatric patients. Nevertheless, there was a trend of growing popularity in the use of umbilical cord blood.

Hong Kong has its public cord blood bank run by the Hong Kong Red Cross Blood Transfusion Service and stores more than 3600 units. More than 50 patients have received unrelated cord blood from this public bank and a number of them have been successfully treated and

are free from disease. With a growing need in looking for alternative sources of haematopoietic stem cells for adult patients and double units of umbilical cord blood for transplantation, the public cord blood bank has recently revised its target inventory size aiming to provide better matched umbilical cord blood units (5 out of 6 HLA antigen matched) to more than 90% of patients.

Dr Lee expressed his view on the future position of the public cord blood bank that it will still focus on transplantation application but noted that other potential clinical applications were emerging and should be actively monitored. The latter might have a significant impact on the umbilical cord blood units demand if clinical efficacy is proven of value. However, he stressed that the emerging clinical applications of the use of the stem cells derived from umbilical cord blood remains experimental. It was too early to conclude the value of biological insurance.