

# CORD BLOOD DONATION

An ever increasing number of diseases (*leukemia, metabolic diseases, thalassemia...*), can be cured by stem cell transplant. Hematopoietic stem cells give rise to different components of blood (*platelets, white blood cells, red blood cells*) and can be found in bone marrow, peripheral blood and in cord blood. Cord blood may therefore represent an alternative source of stem cells so that a greater number of patients may benefit from transplant.

## THE CORD BLOOD COLLECTION

The collection takes place directly in the delivery suite, just after the umbilical cord has been clamped and cut, when the newborn baby is already in the care of an obstetrician or pediatrician. While the placenta is still *in situ*, the umbilical cord is connected, by an obstetrician, under sterile conditions to a special sterile bag to collect cord blood, without any inconvenience to the mother and child. The bag is then forwarded to the Cord Blood Bank where, if eligible, it will be characterized, frozen and kept at below  $-196^{\circ}\text{C}$  to be available to national and international transplant centers.

## HOW TO BECOME A DONOR: REQUIREMENTS

The mother who would like to make a CB donation should be prepared to:

- Meet a physician operating in the "Banca del Cordone" program who, besides giving all the information on the practical aspects of the collection, will obtain mother's and family's medical history to confirm her eligibility for the donation;
- sign the informed consent form to the donation;
- undergo a small blood test at delivery (for infectious disease testing required by law);
- be contacted again, by letter, 6 months after delivery to inform the CB Bank about the donor's state of health and to undergo a final blood test to exclude possible infectious diseases contracted in the last months of the pregnancy. If, within 6-12 months after delivery, you don't receive the letter, this means that the CB unit collected was not suitable for banking and has not been cryopreserved (generally for low volume or low WBC). The CB unit could be used for research or for validation studies.
- release all rights to the donated cord blood (the CB unit remains available, if not assigned, also for related allogeneic and autologous use, if indicated).

## WHO CANNOT BE A DONOR

Several infectious/genetic diseases may be transmitted by cord blood to the Recipient.

Fathers and mothers wishing to donate their son's cord blood, if suffering from infectious diseases (hepatitis B and C, venereal diseases, AIDS), from genetic diseases, immunological diseases or tumors, cannot be accepted as donors.

People at risk of transmitting an infectious disease because of one of the following situations are excluded from donation: *previous recent transfusion, partner's or their own at risk sexual behaviour, tattooing and/or body piercing, drug use.*

## DONATION IS FREE AND ANONYMOUS

### WHO TO CONTACT

For further information or to express your agreement to CB donation:

Banca del Sangue di Cordone di Padova

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