

# ASBMT POSITION STATEMENT

## Collection and Preservation of Cord Blood for Personal Use

Among the primary objectives of the American Society for Blood and Marrow Transplantation (ASBMT) are to:

- Define commonly accepted medical practices
- Develop standards of medical care for autologous and allogeneic hematopoietic stem cell transplants (HSCT)
- Provide recommendations and guidelines to both clinicians and patients about the role of transplantation as a therapeutic approach for treatment of disease

In recent years there has been exponential growth in the use of umbilical cord blood (UCB) as a source of HSC for allogeneic transplant. CB that used to be discarded as medical waste is being collected and stored in CB banks for use when suitably matched to a patient needing a SCT. Expectant parents today may have the option of either donating their baby's CB for public use, storing the CB for personal or private use, or discarding their newborn's CB.

Currently, a stored unit of CB in a public bank is at least 100 times more likely to be released for transplant than a unit that is privately stored. Yet the number of privately stored units in the United States exceeds those in public banks by >3-fold and continues to grow. These seemingly contradictory trends have personal, societal, and economic consequences.

To address these issues and provide advice to expectant parents, the ASBMT Board of Directors appointed a committee to review published studies and interview experts in CB transplantation and banking. The committee was asked to develop a report of its findings and offer recommendations for health professionals and for parents. The committee has completed its report, which has passed through peer review for publication in *Biology of Blood and Marrow Transplantation*, page 356.

The ASBMT Board of Directors also has reviewed and accepted the report, and wishes to thank the committee members for their careful collection of data, analysis, and conclusions. Using the committee's work as a reference, the ASBMT Board of Directors

has adopted the following recommendations for health professionals and expectant parents.

### RECOMMENDATIONS

1. Expectant parents are encouraged to donate their newborn's UCB for public banking, when that option is available. Donation makes the CB, which is rich in HSCs, available for life-saving treatments when there is a suitable match with a patient.
2. Private storage of CB for future use by the newborn is not routinely recommended. The likelihood of the stored blood being used for HSCT is very small, probably as low as 0.04% to 0.001% in the first 20 years of life. If later in life a transplant is required, there likely will be superior sources of suitable stem cells than the child's own CB.
3. Family member banking (collecting and storing CB for a family member) may be recommended for a newborn who has a sibling with a disease that can be successfully treated with HSCT. Family member banking on behalf of a parent with a disease that may be treated successfully with allogeneic transplant is only recommended when there are shared HLA-antigens between the parents.
4. Accurate and complete information about UCB collection and banking should be available to expectant parents so that they can make informed decisions. Parents who choose to store CB for personal use should carefully review their contract and financial responsibilities, and inquire about quality standards, median nucleated cell dose of stored units, and accreditation of the CB bank.
5. The committee acknowledges the potential for an expansion of indications for CB in the future, and these recommendations will be reviewed periodically so that they remain consistent with current medical knowledge.

—Approved by the ASBMT Board of Directors  
September 20, 2007

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