

Stem cell collection from the umbilical cord

This information sheet is designed to offer information to families who are considering private (commercial) umbilical cord blood collection following the birth of their baby at St Thomas' Hospital.

What is cord blood?

Cord blood is the baby's blood that remains in the placenta and umbilical cord after birth. Following birth, the blood in the placenta and cord is no longer needed and is usually disposed of carefully. Cord blood contains different cells including stem cells. Stem cells are the building blocks of all other cells in the body and can grow into these different kinds of cells.

Why is cord blood useful?

Cord blood is currently used in the treatment of some blood disorders such as leukaemia, some immune system disorders and metabolic storage disorders. Some scientists claim that in the future, cord blood could potentially be used to treat other diseases but there is no sound evidence as yet to support these claims.

What is stem cell collection?

Stem cell collection is the collection and storage of cord blood for the possible future treatment of a disease or illness.

NHS stem cell collection

You can donate cord blood to a public bank in a small number of NHS hospitals. At present, you cannot do this at St Thomas' Hospital. When there is medical indication for cord blood collection due to a family history of a blood disorder or other relevant condition please discuss this with your obstetrician (a doctor who specialises in childbirth) who will be able to refer you appropriately for arrangement and advice of the process for collection of cord blood for stem cell collection. In those circumstances, it may be possible to arrange for the cord blood to be collected and stored in the NHS Cord Blood Bank (NHS CBB) for future use by your family. You should discuss this further with your obstetrician.

Private stem cell collection

It is possible to store cord blood with a private commercial company and some people decide to do so in the hope that stem cells may be useful if a member of their family develops a condition in the future which could be treated by stem cell therapy. It is important to remember that the chances of your child ever needing to use his or her own cord blood are very small. The Royal College of Midwives (2011) and the Royal College of Obstetricians and Gynaecologists (2008) do not support the private collection of cord blood due to the current lack of evidence to support the procedure.

A number of private companies market their cord blood services through GP surgeries, antenatal clinics and direct contact with the public. These companies charge a fee for the collection of the cord blood and for ongoing storage facilities. The Human Tissue Authority (HTA) regulates the collection of cord blood in the UK and any private bank must hold a licence with the HTA. Like many NHS organisations, we are not licensed by the HTA to collect cord blood and therefore we do not offer this service.

What are the potential risks of stem cell collection?

Collection of stem cells needs to occur within minutes of the baby being born. This is a time when the health of both mother and baby require the full attention of the healthcare professionals looking after them, and it is important that the process of labour and birth take priority.

It is possible that some umbilical cord blood may be needed by the midwives and doctors caring for you, for clinically proven blood tests such as measuring oxygen levels in the baby or to determine your baby's blood group. We also strongly recommend delayed cord clamping for up to three minutes after birth, as this is known to benefit the baby, but this may reduce the total volume of cord blood available for collection. A considerable volume of blood is needed for successful stem cell collection but it is not possible to guarantee that this volume will always be available.

What should I do if I wish to arrange private stem cell collection?

If you wish to arrange for private stem cell collection at your own expense, then we will not prevent this from happening. You will need to engage the services of a private company who will provide a fully trained and licensed person to take the cord blood sample. The company must be registered with the HTA and hold a valid licence for stem cell collection.

You are also responsible for notifying the maternity service of your intention to collect the stem cells. Please contact the office manager for maternity, by email at the earliest opportunity informing her of your name, hospital number (written on the front of your orange maternity notes) and the date that your baby is due, and confirming that you have read and understood the content of this leaflet. See details in the Contact us box. We have strict criteria that must be followed by the private company when carrying out this procedure, including the fact that the procedure may have to be abandoned if an urgent medical need takes priority. The private company will be wholly responsible for the collection, storage and all future management of the blood sample.

Further questions?

If you have any further questions about anything covered in this information sheet, please speak to your midwife.

Useful sources of information

National Blood and Transplant Service www.blood.co.uk

Royal College of Midwives (RCM), position statement on umbilical cord blood collection and banking (2011), [www.rcm.org.uk/sites/default/files/Joint%20Statement%20-%20UCB%20-%20aug%2011%20\(6\)%20v2.pdf](http://www.rcm.org.uk/sites/default/files/Joint%20Statement%20-%20UCB%20-%20aug%2011%20(6)%20v2.pdf)

Royal College of Obstetricians and Gynaecologists (RCOG), *RCOG statement on the new HTA rules for cord blood collection* (2008) www.rcog.org.uk/en/news/rcog-statement-on-the-new-hta-rules-for-cord-blood-collection/

Contact us

The maternity office manager, Sarah Dodds, can be emailed at sarah.dodds@gstt.nhs.uk

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch:

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership

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