



NEWSLETTER

Welcome to the Winter 2020 edition of the COMPARE Newsletter

A lot has happened since the COMPARE study finished in 2017 and we're excited to tell you how your participation is yielding results and facilitating future studies. **Thank you for all your help!**

COMPARE main study results

Haemoglobin is an iron-containing protein found in red blood cells that carries oxygen around the body. Blood donor services have to measure haemoglobin levels in advance of each blood donation to protect the health of donors (e.g. to prevent anaemia (iron deficiency)) and to ensure the quality of blood products. NHS Blood and Transplant (NHSBT) measures the haemoglobin levels of donors by placing a drop of donor's blood into a copper sulphate solution. If the drop sinks sufficiently, then it is judged that the donor's haemoglobin levels are high enough to donate. If the drop doesn't sink sufficiently, then a more accurate and costly test is used ("HemoCue") measuring haemoglobin from a venous sample. Alternative methods used by other blood services may be more accurate, donor-friendly and less time consuming. However, their comparative merits—and methods used by NHSBT—had never been thoroughly investigated until the COMPARE study.

We are very proud to announce that the COMPARE study has produced **policy-changing research on methods to screen whole blood donors for haemoglobin status**. We have completed the analysis of the COMPARE study, a within-participant study designed to evaluate the optimum method for measuring haemoglobin levels in ~30,000 potential whole blood donors in advance of each donation. Results from the COMPARE study directly led to a change in NHSBT practice, supplementing the original copper sulphate-based test with the finger-prick test in order to test levels of haemoglobin. In addition, the research has improved the efficiency of NHSBT as the revised method is quicker (i.e. takes about a fifth of the time) and cheaper, allowing the Blood Service to run ~10 extra donation slots per session. The impact of this on efficiency is likely to produce a saving of about 5% in blood collection costs. NHSBT has completed rolling out these changes across England, including staff training and updating protocol standards. The manuscript related to these findings is under preparation.

What else is happening?

Linkage with electronic health records

The COMPARE study was designed from its inception to be a multi-purpose study. The initial purpose was related to improving the efficiency and safety of blood donation. Additional purposes include detailed study of the health of blood donors and studies of health-related outcomes. We will conduct such studies by linking data from COMPARE to electronic health records using secure and anonymised procedures.

Invitation to join a national bioresource

COMPARE donors can still join the National Institute for Health Research (NIHR) BioResource, which is a national government-funded research initiative. By joining, you agree to be approached for medical research, in particular 'recall-based' studies in which you will be recruited according to specific characteristics (e.g. genetic, lifestyle, etc.). This approach can rapidly advance understanding of how diseases develop and, ultimately, improve their prevention and treatment. If you are interested in learning more, please visit: <https://bioresource.nihr.ac.uk>

General Data Protection Regulation (GDPR)

You are probably aware of the GDPR, which is a new regulation in EU law on data protection and privacy for all individuals. You will have received numerous emails from organisations, telling you how they have updated their policies. In regard to the COMPARE study, you do not need to do anything as your samples and data will continue to be stored securely, in compliance with the consent form that you signed at the beginning of the study and the GDPR. Your data is anonymised and unique identifiers are stored separately from samples and data. If you have any questions or concerns, however, please do contact us: donorhealth@medschl.cam.ac.uk

Blood and Transplant Research Unit (BTRU) in Donor Health and Genomics

The INTERVAL, COMPARE and STRIDES trials—our blood donor studies—fit under the umbrella of the BTRU in Donor Health and Genomics. Led by Emanuele Di Angelantonio, Professor of Donor Health, the Unit addresses major questions about the health of blood donors and produces evidence-based strategies to enhance donor safety, whilst ensuring a sustainable blood supply in the future.

Find out more about our research: www.donorhealth-btru.nihr.ac.uk

Attend an event/talk: www.donorhealth-btru.nihr.ac.uk/btru_events

Get involved: www.donorhealth-btru.nihr.ac.uk/involved

Follow us on Twitter: @DonorHealthBTRU

As a COMPARE participant we will continue to update you on the study. Published papers will be posted on our website: www.comparestudy.org.uk/publications and we'll let you know, by email, when they are available. To make sure you receive our emails, please let us know, by emailing: donorhealth@medschl.cam.ac.uk, if you change your contact details.