



NEWSLETTER

Welcome to the Spring 2022 edition of the COMPARE Newsletter

It is vital that we share our learnings with blood donors and that we listen to you when planning our research. We hope you find these newsletters and our other activities informative and interesting. **Thank you for working with us and being an important part of COMPARE!**

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

For six and a half years our ‘Blood Donors Studies’—INTERVAL, COMPARE and STRIDES—were managed by the Blood and Transplant Research Unit (BTRU) in Donor Health and *Genomics*. The funding for that Unit has now ended and we are delighted to announce that we have secured five years of funding for the BTRU in Donor Health and *Behaviour*. The Unit is a partnership between the University of Cambridge and NHS Blood and Transplant (NHSBT), working in collaboration with the Universities of Oxford, Nottingham and Queensland and the Australian Red Cross Lifeblood.

The Unit will continue investigating ways to improve blood donor health and ensure a steady supply of blood to the NHS. It will conduct research to address major challenges identified by NHSBT, such as finding ways to encourage a more ethnically diverse range of people to donate blood, developing new methods for recruiting and retaining donors, promoting safe and effective donation practices and identifying risks of adverse health effects on blood donation.

We will be updating the website (www.donorhealth-btru.nihr.ac.uk) over the next few months and we encourage you to visit to learn more about who we are, what we are researching and how you can work with us.

Read the press release about the five new BTRUs: <https://tinyurl.com/7fpz5a6z>

Animation about the COMPARE Study

The COMPARE study recruited over 28,000 blood donors aged 18 years and upwards from 10 centres in England between 2016 and 2017. The aim was to test different methods for measuring haemoglobin—a protein in red blood cells that carries oxygen around the body—before



blood donation and determine the best method, or combination of methods, for NHSBT. The study reviewed: (1) the copper sulphate test, (2) an electronic analyser (HemoCue), (3) a non-invasive photospectrometry device and (4) estimate of haemoglobin measurement taken from the previous blood donation. The study is incredibly important because it showed that the best methods for NHSBT were the low-cost copper sulphate test followed, if necessary, by measurement using an electronic analyser. As a direct result, NHSBT updated their procedures and retrained staff, saving an estimated ~30,000 donors every year from anaemia and iron deficiency, which can otherwise have negative consequences for their health.

We have created an animation to help more people understand the study and its impact. We hope you enjoy it! [YouTube, ~2 min]: <https://tinyurl.com/2uee5r3v>

Blood Donors Studies BioResource – did you know?

- The BioResource includes information linked to health outcomes for blood donors recruited into the INTERVAL, COMPARE and STRIDES studies.
- Participants in our Blood Donors Studies agreed for their de-personalised data to be used for health-related research purposes.
- The BioResource supports population health and biomedical research by providing access to de-personalised data from this large group of healthy volunteers.
- It includes information collected from questionnaires and retrieved from NHSBT and electronic health records, and data on physical activity, cognitive function, DNA sequencing and measurements of iron, haemoglobin, proteins, metabolites and lipids.
- Requests to access the de-personalised data are reviewed by a Data Access Committee that includes members of the public.

Find out more about our BioResource, including the Data Access Policy and research projects using the data: www.donorhealth-btru.nihr.ac.uk/project/bioresource

Linking COMPARE data to electronic health records

To help understand the health of participants in the COMPARE study, and to track how this changes over time, we use medical and other health-related records. We currently receive data about hospital treatment and information on Deaths and Cancer diagnoses. We are also receiving General Practice (GP) records, Stroke Audit data and COVID-19 Vaccination and Antibody testing data for COVID-19 research. For example, linkage to health data will allow researchers to evaluate the long-term impact of COVID-19 infection, vaccination and antibody levels in participants that have been hospitalised due to COVID-19 infection or long-term illness.

TRACK-COVID study

In May 2020 we began recruiting individuals into our new study, TRACK-COVID (www.trackcovid.org.uk), which aims to: (1) determine the risk factors for infection of the new coronavirus (SARS-CoV-2) and (2) investigate why only some people have symptoms. The primary aim is to understand the frequency and

evolution of symptoms compatible with COVID-19, the disease caused by the coronavirus. The secondary aim is to define and monitor the evolution of antibodies to SARS-CoV-2 infection and vaccines. ~20,000 individuals previously recruited into the INTERVAL, COMPARE and STRIDES studies have consented and provided COVID-19-related information using an online questionnaire. Participants answered this questionnaire on a monthly basis until December 2021, which will generate useful data for analysing symptoms associated with new COVID-19 variants (i.e., Alpha, Delta, etc). A subset of ~15,000 participants provided six weekly capillary blood samples which will be analysed for COVID-19 antibodies.

TRACK-COVID is participating in the UK Longitudinal Linkage Collaboration (UK LLC; <https://ukllc.ac.uk>). This collaboration brings together de-identified study information linked to routine health and administrative records. The data is stored securely in the UK LLC Trusted Research Environment (TRE). Our researchers have recently obtained approval to access the TRACK-COVID data in the UK LLC TRE. This will enable access to a wide range of datasets for COVID-19 research.

BTRU in Donor Health and Behaviour – Patient and Public Involvement and Engagement (PPIE)

PPIE is an important part of our research activities. *Involvement* means that activities and research are carried out ‘with’ or ‘by’ members of the public or patients, rather than ‘to’, ‘about’ or ‘for’ them. *Engagement* means that information and outcomes from research or activities are disseminated to patients and the public. Promoting equality, diversity and inclusion (EDI) in research will help ensure that everyone has a voice and will improve healthcare for all.

We currently work with blood donors, regularly transfused patients and members of the public to ensure that our research is answering the right questions and appropriate for the public, as well as the blood service. Our ‘Public Contributors’ sit on study and management committees and working groups for specific projects; they provide feedback on study materials (such as Patient Information Leaflets) and animations; and they help us with events and other activities. If you are interested in working with us, please email Sarah: donorhealth@medschl.cam.ac.uk

Find out more about the Unit and our studies: www.donorhealth-btru.nihr.ac.uk

Visit our YouTube channel to learn more about our research:
www.youtube.com/channel/UCeS9CPB2_QGcBsnORnNQyjQ

Follow us on Twitter: @DonorHealthBTRU

If you would like to learn more about getting involved in research in general, please visit this new Starting Out Guide from the National Institute for Health and Care Research (NIHR):
www.nihr.ac.uk/documents/Starting-Out-Guide/30145

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.