



**Gwasanaeth Gwaed Cymru
Welsh Blood Service**

Research Development & Innovation Report

October 2021



Foreword

I want to introduce this latest update on the research and innovation activity in the Welsh Blood Service.

As we move to Autumn, we are looking forward to supporting the Component Development Research Laboratory launch.

We also present our contributions to the British Blood Transfusion Society conference. This conference is at the forefront of transfusion practice in the UK. We were able to represent the NHS Wales in several different areas of excellent practice.

We thank you for reading this update and, as ever, thank you for your donation and support of the Welsh Blood Service.

Sian James
RD&I Facilitation Lead
Welsh Blood Service

About this document

This document has an up-to-date summary of all planned, ongoing or completed research, development and innovation activity within the Welsh Blood Service.

This version of the document has been specially adapted so the donors, patients and the public can see the Research, Development and Innovation activity they support through the gift of blood, stem cell and organ donation.



Launching the Component Development Research Laboratory

This Autumn, the Welsh Blood Service will launch a new facility. The **Component Development Research Laboratory** will provide us with the facilities and capacity to realise our ambition of being a centre of excellence in blood component advancement.

The launch marks an investment that has been made to provide dedicated capacity to deliver such work. Manufacturing space has been transformed into a dedicated facility and state-of-the-art equipment has been commissioned. Formal staffing will also develop over 2021, with several new and evolving posts being added to the laboratories.

The laboratory will perform a wide range of functions. It will lead the service on the implementation of changes to components regulations. It will also research and develop innovative technologies for blood manufacturing, investigating new methodologies, and producing novel components.

The laboratory work will also be able to advise the organisation on horizon scanning and potential future strategies for component development.

Even though this is a formal launch the laboratory already has a history of success. It has been delivering the Products theme of the Welsh Blood Service's RD&I Strategy for some time now.



Welsh Blood at



The British Blood Transfusion Society conference (BBTS) 2021 was held virtually this year. Many Welsh Blood Service staff attended the conference and we also exhibited eight posters. The conference provided a great opportunity to share some of the brilliant RD&I that the WBS has produced over the last year.

The image displays a collage of eight posters from the Welsh Blood Service, presented at the BBTS 2021 conference. Each poster features the Welsh Blood Service logo and title. The posters are:

- HEV Pool Testing Review at the Welsh Blood Service** (Poster P-13) by Jones A, George C, Blackmore S.
- A one year review following implementation of a new policy and management process for the provision of HLA selected Platelets at the Welsh Blood Service.** by L Williams, E Burrows, J Birchall, M T Rees.
- PLATELET CONCENTRATES FOR NEONATES SUSPENDED IN 80:20 RATIO OF PLASMA TO PLATELET ADDITIVE SOLUTION** by K McShane, L Williams, K Perera, J Birchall, D Pritchard, M T Rees.
- Challenges of Platelet Refractoriness in the Highly Sensitised Patient** by K McShane, L Williams, K Perera, J Birchall, D Pritchard, M T Rees.
- Transfusion based patient information - Are we getting it right?** by J Gregory, A. Dickinson, D. Underwood.
- Virtual SSA - interactive distance learning in Wales** by A. Jones, D. Underwood, L. Park.
- Sprinting Ahead - a new way of working for the Blood Health Team** by A. Jones.
- Do deferred blood donors with low haemoglobin or low iron stores seek medical care?** by Ailín Shookooji, Sian Elizabeth James, Nicholas O'Sullivan, Victoria Sacher, & Nigel Kirby.

We have 14 open projects

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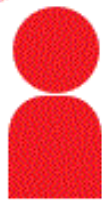
in
Transplantation



Includes solid organ and stem cell transplantation, histocompatibility, immunogenetics and donor registries

2

in Donor Care &
Public Health



Includes donor recruitment and retention, eligibility and care and public health surveillance

8

in Products



Includes blood components, which include immunohematology, testing, component and product manufacturing, quality management, and the evaluation of equipment and materials

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in Therapies



Includes topics surrounding cellular and other blood therapies

45 Staff involved in research



Staff who undertake WBS research or provide service support of others' research. This also includes those performing research as part of a qualification. We also collaborate with other organisations globally, working with universities and international blood services in shared areas of interest.



25 Publications* including conference presentations and journal articles

WBS publishes in journals and presents at conferences to share our findings and build our reputation within the research community. Producing publications also provides our staff with opportunities to develop their skills and build professional reputations.

**in the last rolling 12 months*

Publications

Impactful publications from the Welsh Blood Service colleagues and our collaborators in the previous 3 months.

Journal Articles

Lessons learnt from syphilis-infected blood donors: a timely reminder of missed opportunities

Stuart Blackmore *in the journal* Sexually Transmitted Infections

Citation: Harvala H, Reynolds C, Blackmore S, Fabiana A, et al. (2021) Lessons learnt from syphilis-infected blood donors: a timely reminder of missed opportunities. *Sexually Transmitted Infections*. Published online first: 11 August 2021. doi: 10.1136/sextrans-2021-055034

BSHI / BTS Guidance on Crossmatching before Deceased Donor Kidney Transplantation

Tracey Rees *in the journal* International Journal of Immunogenetics

Citation: Peacock S, Briggs D, Rees T, et al. (2021). BSHI/BTS Guidance on Crossmatching before Deceased Donor Kidney Transplantation. *International Journal of Immunogenetics*, 00, 1–8. <https://doi.org/10.1111/iji.12558>

Conference Proceedings

HEV Pool Testing Review at the Welsh Blood Service (Poster)

Ann Jones *at the conference* SHOT Symposium 2021 and
British Blood Transfusion Society Annual Conference 2021

Verification of Patient Triplicate Tests in FMH Estimation by Flow Cytometry (Poster)

Lynne Porter *at the conference* British Blood Transfusion Society Annual Conference 2021

Do deferred blood donors with low haemoglobin or low iron stores seek medical care? (Poster)

Sian James *at the conference* British Blood Transfusion Society Annual Conference 2021

Platelet Concentrates for Neonates Suspended in 80:20 Ratio of Plasma to Platelet Additive Solution (Poster)

Christine Saunders *at the conference* British Blood Transfusion Society Annual Conference 2021

Transfusion Based Patient Information – are we getting it right? (Poster)

Joanne Gregory *at the conference* British Blood Transfusion Society Annual Conference 2021

Virtual SSA – interactive distance learning in Wales (Poster)

Alister Jones *at the conference* British Blood Transfusion Society Annual Conference 2021

Sprinting Ahead – a new way of working for the Blood Health Team (Poster)

Alister Jones *at the conference* British Blood Transfusion Society Annual Conference 2021

A one-year review following implementation of a new policy and management process for the provision of HLA selected Platelets at the Welsh Blood Service (Poster)

Laura Williams *at the conference* British Blood Transfusion Society Annual Conference 2021

Challenges of Platelet Refractoriness in the Highly Sensitised Patient (Poster)

Kim McShane *at the conference* British Blood Transfusion Society Annual Conference 2021

Establishing Serosurveillance of COVID-19 in Wales

Sian James *at the conference* 4th European Conference on Donor Care and Management

This report is prepared by





We thank the blood, platelet and transplant donors who make possible everything we do



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