



**Gwasanaeth Gwaed Cymru**  
**Welsh Blood Service**

Cyfarwyddwr | Director – Mr Alan Prosser  
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24/09/2025

Dear Bell Ribeiro-Addy MP,

Thank you for your recent letter calling for evidence around the UK donor for UK patient in respect of stem cell transplantation. The Welsh Blood Service would be happy to provide our perspective on the questions you have posed and where necessary provide the appropriate supporting data.

The Welsh Blood Service is part of Velindre University NHS Trust and plays a fundamental role in the delivery of healthcare in Wales and across the globe. It is responsible for the national supply of Blood, platelets and stem cells to hospitals across Wales.

As part of the Welsh Blood Service, the Welsh Bone Marrow Donor Registry (WBMDR) manages the national Welsh stem cell volunteer donor panel and is responsible for the operational activities of the supply of blood stem cells or lymphocytes from donors on the Welsh registry to the University Hospital of Wales and to other UK and international transplant centres. The WBMDR operates its own apheresis stem cell collection facility within the wider organization of Velindre University NHS Trust, which is based in Velindre Cancer Centre in north Cardiff.

The WBMDR is also responsible for distributing required unrelated donor cell products from other UK stem cell registries or importing from overseas registries for patients transplanted in Wales at the University hospital of Wales.

The WBMDR is part of the UK Aligned Stem Cell Registry which was put in place to maintain a single point of contact for unrelated donor searching for English and Scottish transplant centres. Once a donor from the WBMDR panel is chosen by a transplant centre, the management of that donor cell collection and all associated activities is performed by the WBMDR.

The Welsh Blood Service also provides a 'graft identification and advisory service' for the selection of unrelated donors for patients being considered for stem cell transplant at the University Hospital of Wales, Cardiff. This service is provided by highly trained Clinical Scientists in the Welsh Transplantation Laboratory who are experts in HLA genes and factors important in the selection of unrelated donors for stem cell transplantation.

In relation to the posed questions, we have provided responses below. However, please note we found some of the questions very broad given the complexity of stem cell transplantation and donor selection.

Croesewir gohebiaeth yn y Gymraeg. Correspondence is welcomed in Welsh.

gwaedcymru.org.uk  
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0800 252 266



Therefore, if there are any more specific points you would like further information on, please don't hesitate to contact us.

## 1. UK stem cell supply

- **Does the size, composition, or quality of UK registries, or strategies for donor recruitment mean UK donors are less likely to be chosen?**

This is a very broad question with no straightforward answer as there are many factors that are considered when selecting an unrelated donor for an individual patient

From a Registry perspective, we focus on recruiting 'quality' donors to enable as many patients as possible to be able to receive a lifesaving stem cell transplant with the best possible clinical outcomes, alongside providing an efficient service to transplant centres. This forms the basis of our operations and strategy and includes;

- Highest level of HLA testing, with CMV and ABO results on all donors available at search (Quality)
- Recruitment of informed stem cell volunteers under 30 as the age range most selected (and associated with best clinical outcomes). (Size, Recruitment strategy)
- Increasing the ethnic diversity of the Registry through education and recruiting at educational establishments to more closely represent the ethnic diversity in Wales. Note that the WBMDR now recruits donors up to the age of 45 for donors from a Black, Asian, Mixed and minority ethnicity (Composition, Recruitment Strategy).
- Ensure donors on the panel remain informed and committed to stem cell donation while they are on the panel. (Quality)
- Provide responsive service to transplant centres who select WBMDR donors. (Quality)
- Operating our own stem cell apheresis collection centre, to be responsive to meet transplant centre requested collection dates. (Quality)
- Achieving and maintaining accreditation for the Registry services we provide e.g. JACIE (Quality)
- Ongoing engagement with stakeholders to develop and review the WBMDR strategy. (Strategy)

The World Marrow Donor Association (WMDA) manages a global panel of donors that are accessible to all transplant centres across the world and currently there are around 42 million donors on this panel. This is approximately a 13-14 million increase in donors onto the 'global' panel since 2017. With the UK panel growing by 2 million donors in the same timeframe, it would be simple to suggest that UK donors are being outnumbered by international donors on any patient unrelated donor search report.

However, there are numerous factors that will play into the final donor selection, including HLA match, age, CMV serostatus, sex, ABO group, date of last donor contact, donor history (e.g. pregnancies, allergies), donor availability, donor weight, registry accreditation status, registry reputation (speed and responsiveness), donor willingness for donate peripheral blood



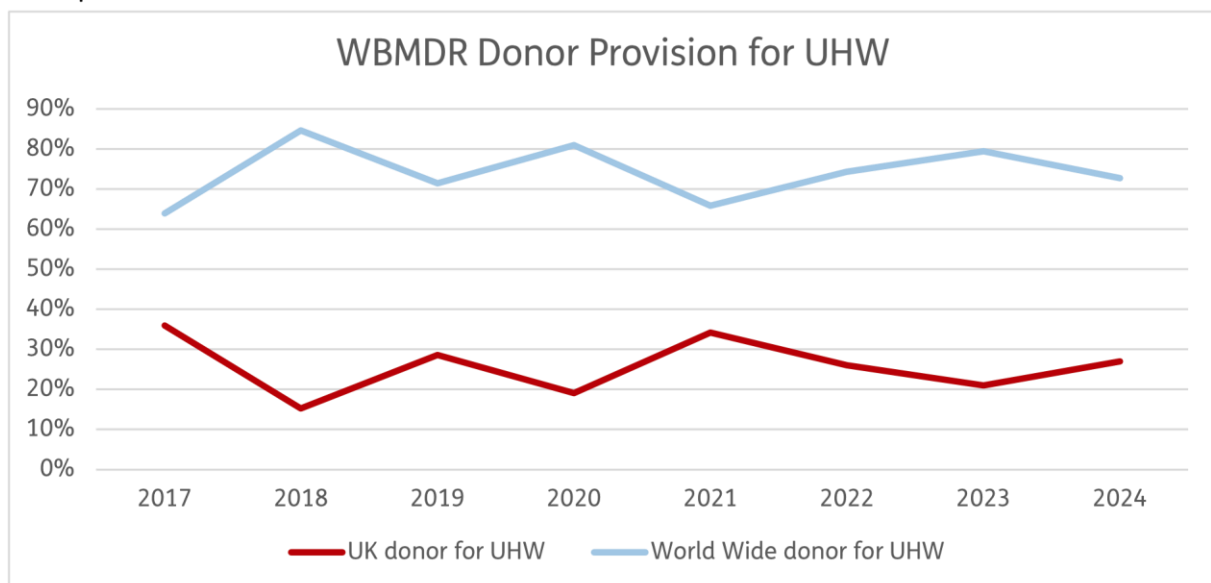
stem cells v bone marrow, patient urgency to transplant, geographic location. The final selected donor is therefore very individualised to the patient requiring the transplant and the donor options available to them.

In Wales, patient unrelated donor searches are performed by highly experienced clinical scientists under policies that require them to prioritise UK donors where they are equivalent to an international donor. The Clinical Scientists provide a donor shortlist, which is discussed at an multi-disciplinary team meeting and the final choice of donor(s) lies with the transplant Haematology Consultants.

Overall, from both a Registry and donor selection perspective, we do not feel that equivalent donors on the Welsh Registry would be less likely to be chosen than an international donor.

- **Have there been changes in overseas registries that increase their chances of being chosen as suppliers?**

The expansion of some international panels does out compete the growth of the UK panel. However, the choice of donors from international panels vs UK panels depends on the number of potential matched donors on the search report and expertise of the individual performing the search and selection. In Wales unrelated donor searching is performed by highly qualified Clinical Scientists, who interrogate the entire search report. We are not familiar with the international registry policies to comment on any differences. Our data shows that the selection of donor cells from the UK sourced for the University Hospital of Wales, Cardiff has fluctuated year on year, but overall remained fairly constant from 2017 (36%) to 2024 (27%), not signalling any major change in practice for UK v international donor selection for this one transplant centre.



Key: WBMDR – Welsh Bone Marrow Donor Registry, UHW – University Hospital of Wales

- **Does the availability of key UK support services for stem cell donation such as apheresis (there is a DHSC review being undertaken of apheresis services) affect the likelihood of UK donors being chosen?**



For the WBMDR, apheresis stem cell collections are performed within the Trust and therefore we do not have capacity issues in Wales for the collection of cells from unrelated donors. However, this is a known and current issue for the wider UK Aligned Stem Cell Registries. The transplant centre will have a preferred date and any deviation from that date may cause a different donor to be used e.g. if a UK collection centre was not available for the collection of cells from a UK donor but an equivalent German donor was able to be collected nearer the transplant centre's requested date then this may cause the UK donor to be switched to a backup donor. The main reason for deviation from the transplant centre date is the availability of the donor and our experience is that this has become more of an issue in recent years that it was pre-covid. The exact reasons for change in donor availability is unknown.

- **Is availability and training of key staff that support the UK stem cell transplantation pathway influencing choice of donor?**

To our knowledge, this is not currently an issue in Wales that affects choice of donor. Our experience is that the availability of specialist nurses with apheresis experience is limited. This often necessitates careful succession planning and delivery of training for new nursing staff who do not have prior apheresis training. Similarly, Clinical Scientists in histocompatibility and immunogenetics who undergo extensive training in stem cell transplantation donor selection, are also a limited resource and often we recruit trainees and develop them using the British Society for Histocompatibility and Immunogenetics (BSHI) Diploma or Scientist Training Programme (STP) in Histocompatibility and Immunogenetics. A lack of specialist apheresis nurses (reduced apheresis capacity limiting ability to meet transplant centre collection dates) or Clinical Scientists with donor selection expertise (resulting in less optimal donor selection) could impact donor choice.

- **Have there been changes in behaviour of UK adult stem cell donors on the UK Aligned Registry that make them less likely to donate?**

Verification Typing (VT) blood sample data indicates that donors are either less available than they were pre-COVID or less altruistic (or both). The current UK VT bleed rate is far below the WMDA key performance indicator and sits at around 52-53% rather than the 65% target rate.

- **The UK system for stem cell provision has evolved over decades. What are the pros and cons of the current system and what system changes could provide a more resilient and sustainable stem cell transplant system?**

The UK Aligned Stem Cell Registry works to coordinate transplant centre (outside Wales) unrelated donor searching and this benefits each UK registry by having all UK donors on one panel. Access to the international donor panel is also a benefit as it provides the full range of donor options, impacting patient access to transplant in a positive manner.

The WBMDR acts as the national stem cell registry for Wales and are mostly self-contained with only bone marrow collection outsourced to the 'The London Clinic', whereas the 3 other UK registries have historically used NHSBT facilities for stem cell procurement and this logistical coordination with NHSBT benefits these registries and pool expertise, but does lead to capacity issues. In times of stress such as COVID and BREXIT the coordination between all



4 UK registries was essential to allow cell collection and transport logistics to take place, which ensured minimal disruption to stem cell transplantation in the UK

Ethnic diversity of the UK panel currently does not represent the ethnic base of the UK, however the WBMDR are now consistently recruiting between 15% and 20% of donors from a Black, Asian, mixed or minority ethnic background each month against a Wales base ethnicity of 6.2% of the population. This change in recruitment forms part of our ongoing strategy to help address the health inequality in stem cell transplantation.

The emergence of advanced and targeted cancer treatments such as CAR-T cell and gene therapy adds another dimension to the blood cancer patient treatment strategy which may alter demand patterns for unrelated donors. This could cause funding pressures for traditional transplantation provision and may impact funding that stem cell registries acquire for their programme of work. However, the WBMDR does not receive any operational funding (outside the commissioning of costs sufficient to HLA type 4000 donors), it is entirely self-funded on a cost recovery model. Stem cell registries have the opportunity to use their expertise to increase their portfolio of work to include the collection of Advanced Therapy Medicinal Products as advancements in this field may eventually substitute traditional transplantation strategies.

Yours sincerely,



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Dear Christopher,

Thank you for the Welsh Blood Service's written contribution to our Inquiry "Ensuring a resilient and sustainable stem cell supply for all".

After considering the written contributions we have received and holding the Evidence Session on Monday 27th October, we have some supplementary questions which we are sending to each member of the UK Aligned Stem Cell Registry.

### **Sustainability of the UK Aligned Stem Cell Registry**

It was highlighted in the written evidence to our Inquiry that there has been a marked reduction in the numbers of donors recruited to the UK Aligned Stem Cell Registry since 2018-19.

Fiscal Year	Registered Donors Year-over-Year	Increase %
2018/19	1,627,069	
2019/20	1,924,120	18.25
2020/21	2,127,000	10.54
2021/22	2,233,254	5.00
2022/23	2,317,065	3.75
2023/24	2,374,212	2.47
2024/25	2,441,358	2.83

We would like to understand the implications for sustainability of the UK stem cell supply for transplant and would like to ask these follow up questions.

1. Reduced provision leads to a reduced income, is that impacting on investment in the Registry from your organisation's perspective?

WBS Response: Not applicable to the Welsh Blood Service who operate the stem cell registry on a cost recovery basis but has, however, invested heavily and at risk in donor recruitment including targeting more donors from ethnic diverse backgrounds. This investment has successfully returned more than double the Welsh base ethnicity percentage of recruited mixed and minority ethnic donors regularly at schools and events (monthly average of around 14.5% with a high of 24%).

2. If not, what are the reasons for the reduction in recruitment?

WBS Response: The WBMDR has increased donor recruitment over the last two years by over 150%.

3. If UK donor to UK patient provision continues to decline, will further reduction in income lead to continued lack of investment from your organisation's perspective in new donor recruitment and threaten the sustainability of the Registry?



WBS Response: Stem cell Donor Registries are in place as the legal barriers between the transplant centre and the donor. This ensures that unrelated healthy donors are not coerced in any way and that all legal and regulatory licencing requirements are met independently of the transplant centre. This is not only for UK-to-UK provision but also for exporting cells and importing cells for UK patient transplant. The

WBMDR has made great strides in increasing its donor panel, especially the 'fit' panel of donors between 17 and 30 which are most frequently requested by transplant clinicians. The WBMDR also has an excellent reputation for reliability and efficiency that rivals their larger international partners. Essentially the WBMDR is playing a significant role in increasing the UK donor panel, but the final donor selection decision lies with the transplant centre and that may be where this reduction in UK donor utilisation needs to be addressed.

4. Has your organisation done any modelling to support a business case for investment in the UK Aligned Registry using the cost savings driven by reduced imports to pay for this investment?

WBS Response: Not at this time. It would also be difficult to access the relative savings in Transplant Centre budgets as reduced costs would most likely lead to more transplants being undertaken rather than investment in the registry, from a TC and general NHS point of view. To offset the cost of import for UHW the WBMDR charges an extremely low facilitation fee to the Transplant Centre.

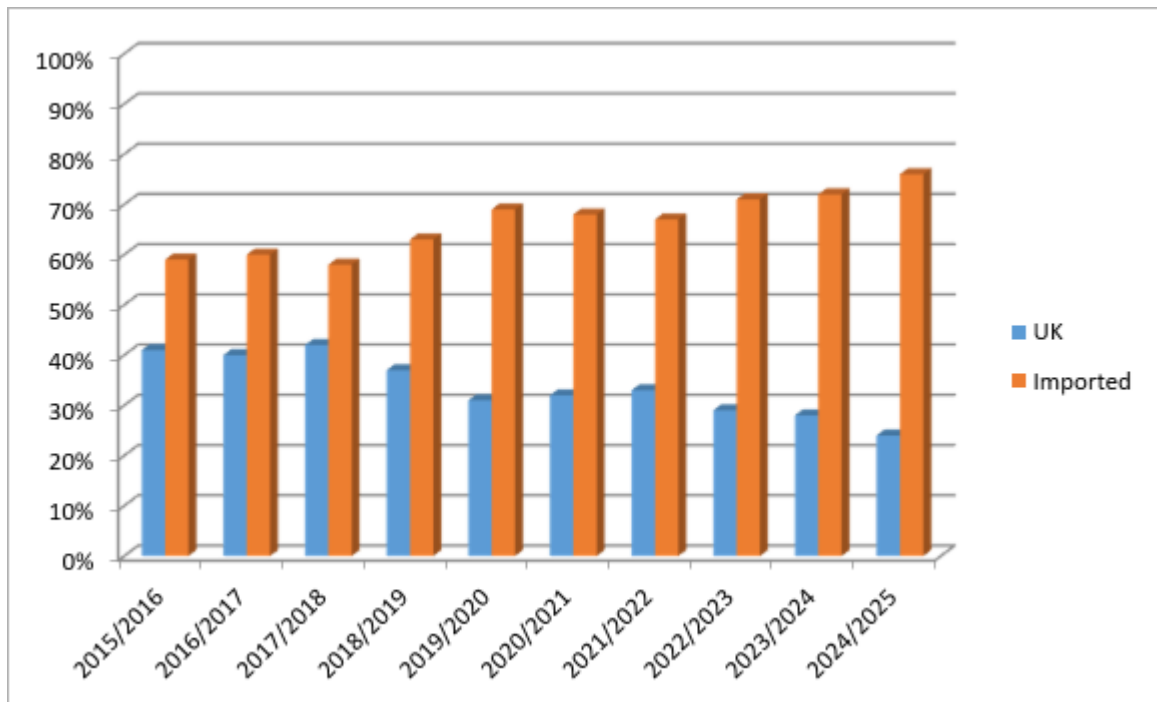
5. Was any mitigation for the continuing health inequity faced by minority ethnic and mixed heritage patients included in a business case?

WBS Response: This was addressed at the local (Welsh) setting for moving at risk to increase recruitment, as health is devolved in Wales. No combined UK Aligned Registry business case has been drafted. Please bear in mind that Wales has a far reduced ethnicity base than the rest of the UK and hence faces markedly different challenges including competing with donor recruitment from DKMS and AN within Wales.

## **Resilience of the UK Stem Cell Registry**

There is an escalation in the reliance on imported stem cell provisions as demonstrated in the graph below. We live in an increasingly unstable world with recent examples of disruption or potential disruption including Brexit, COVID 19 pandemic, war in Ukraine and continuing cyber-attacks on supply chains and healthcare systems.





6. With Germany now supplying 42% of UK stem cell transplants and the US providing a significant number of stem cell provisions are contingency plans in place by the UK Aligned Stem Cell Registry for disruption to this supply of life-saving transplants? WBS Response: We are required to have contingency plans in place for the delivery of stem cells, and this includes gaining evidenced assurances of contingencies provided by overseas registries under their local regulations. Stem cell transplants are generally based on selecting the optimum donor often based on minor differences that provide very minimal increase in overall survival. The WMDA require that a second donor is selected and progressed to a position where that donor can take the place of the primary donor with minimal disruption to the transplant schedule. The point being that in many cases UK donors would have provided lifesaving cells but are now back up donors due to very small differences in donor characteristics. It should also be understood that a donor can refuse to donate cells at ANY time during the process even when they are in the donating chair and stem cell registries and transplant centres have to have contingency plans in place for these (extremely rare) events and that will include moving to the backup donor who has a very good chance of being a UK donor under current selection policies.

Thank you for your organisation's work on supporting our effort to shine a light on the longterm risks to patients.

Sincerely,

*Bell Ribeiro-Addy*

**Bell Ribeiro-Addy MP**

Chair APPG on Ethnicity Transplantation and Transfusion



Member of Parliament for Clapham and Brixton Hill

