STATE OF THE REGISTRY 2021–2022

The Anthony Nolan and NHS Stem Cell Registry Annual Review

About this report

The State of the Registry report is an annual report compiled by the members of the Anthony Nolan and NHS Stem Cell Registry (the 'aligned registry').

This report covers the period from April 2021 to March 2022. In it we outline the collective work of the aligned registry to recruit stem cell donors; bank umbilical cord blood donations, and import donor cells from international registries over this period.

The Anthony Nolan and NHS Stem Cell Registry is formed of Anthony Nolan, DKMS UK, NHS Blood and Transplant (NHSBT), and the Welsh Bone Marrow Donor Registry. The aligned registry partners collaborate to streamline and accelerate unrelated stem cell provision and to increase the availability of unrelated donors and cord blood units in the UK.

2021-2022 summary

Between April 2021 and March 2022, 137,000 new donors were added to the UK aligned registry, bringing the total registry size to just over 2.23 million.

95,000 fewer donors were added to the registry in 2021/22 compared to the previous year. The decrease is directly related to the cancellation of face-toface recruitment activity due to the pandemic.

In 2021/22, the Cord Blood Banks moved from the 'growth' phase to the 'enrich' phase. Enriching the bank changes the focus from banking high volumes of cord blood units, to only banking the very highest quality units and those from minority ethnic populations. As a result, 338 new clinical grade umbilical cord blood units were processed and added to the inventory, 38% fewer units than in 2020/21.

For NHSBT, the residual impact of the pandemic meant that all cord blood units collected since March 2020 remained in guarantine during 2021-2022, not yet being made active. For this reason, the overall size of the searchable cord blood inventory remains close to 28,000 units as in 2020/21.

The following charts and figures summarise key statistics related to the recruitment of stem cell donors to the aligned registry, cord blood donations, and provision of donated stem cells to patients in the UK in 2021/22.

Please note: the use of the term 'minority ethnic backgrounds' in this report includes donors from the following groups: Asian/Asian British, Black/African/ Caribbean/Black British, Jewish, Middle Eastern, Mixed/Multiple, Other.



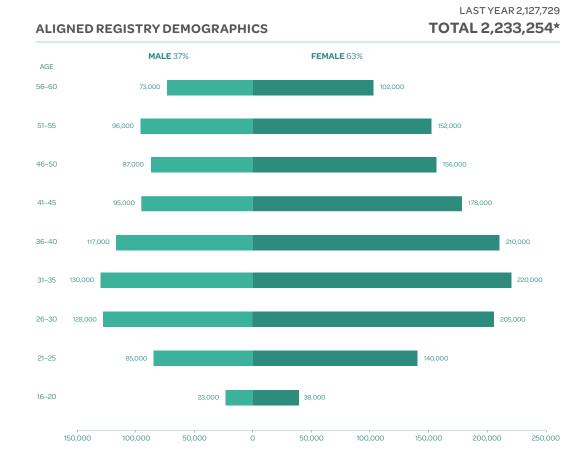




ALIGNED REGISTRY DEMOGRAPHICS 2021-2022

The aligned registry stands at over 2.2 million stem cell donors as of 31 March 2022. The cord blood bank remains at almost 28,000 searchable clinical grade cord blood units.



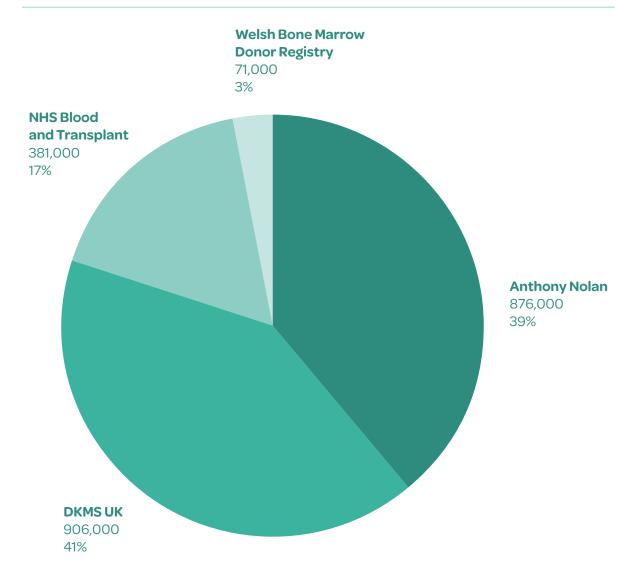


^{*} As donors turn 60, or upon their request, they will be removed from the registry. This means that year-on-year growth of the registry differs from the total number of new donors made active in the year.

ALIGNED REGISTRY DEMOGRAPHICS 2021–2022

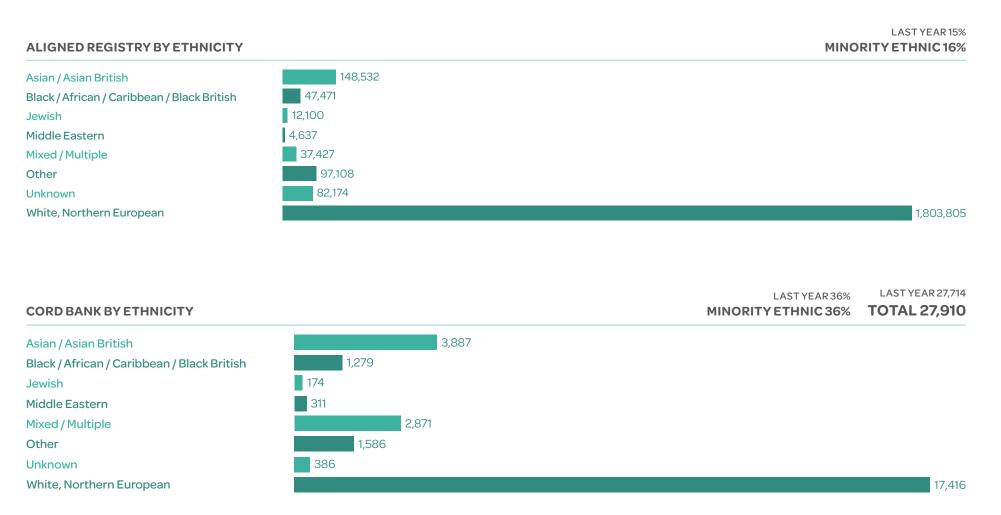
ALIGNED REGISTRY BY REGISTER

TOTAL 2,233,254*



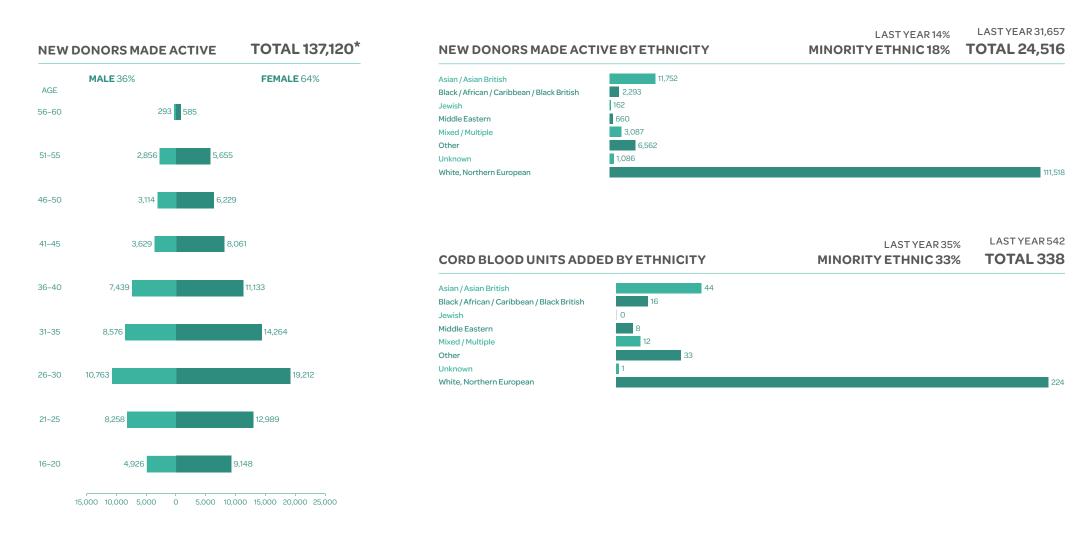
^{*} The total aligned registry for 2021/22 is 2,233,254. However, the rounding of data presented in this graph will cause a small deviation in the calculated total.

ALIGNED REGISTRY DEMOGRAPHICS 2021-2022



NEW DONORS MADE ACTIVE 2021–2022

The data represents donors added to the aligned registry between 1 April 2021 and 31 March 2022, during which time over 137,000 new donors were added to the aligned register. This is in comparison with 232,000 in 2020/21. While there was a decrease in overall donors recruited, the percentage of donors added from minority ethnic backgrounds rose from 14% (2020/21) to 18%. In 2021/22, 33% of cord blood units processed were donated by mothers from minority ethnic backgrounds, a slight decrease compared to 35% in 2020/21. Although this is still achieving our target level, work continues to encourage more mothers from ethnically diverse populations to donate, including language and translation tools.



^{*} As donors turn 60, or upon their request, they will be removed from the registry. This means that the total number of donors made active in the year does not equate to the year-on-year growth of the registry.

STEM CELL PROVISION 2021-2022

The aligned registry helped 1,045 UK patients in 2021/22, a 3% increase on the previous year. This small increase is reassuring following the dip in provisions during the first wave of the pandemic, when many non-urgent transplants were postponed.

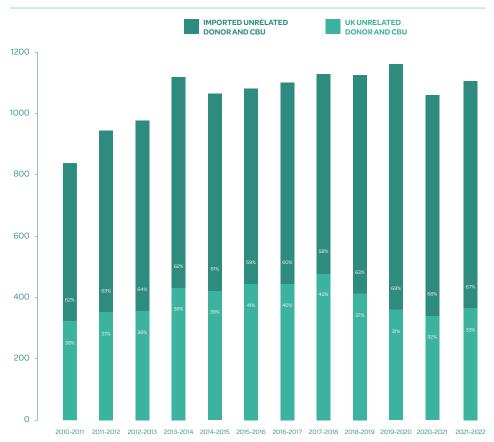
The proportion of imported stem cell products fell slightly to 67% (from 68% in 2020/21). The complexity of importing during the pandemic underlined the importance of meeting as much UK patient need as possible with UK donors and cord blood units. Increasing the usage of UK donors for UK patients helps to support a sustainable UK registry, reduces risk of international disruption and minimises cost to the NHS. However, this is only in the case where a suitable donor or cord blood option is available within the UK, as finding the best possible match for patients is always the priority.

The number of cord blood units used to help UK patients increased this year. This can be seen in both domestic provisions, which increased by 22% from 32 in 2020/21 to 39 in 2021/22 and imported provisions, which increased by 14% from 71 in 2020/21 to 81 in 2021/22. This is a continuation of the trend seen at the start of the pandemic. Cord blood units are protected from the risks around donor availability and international transport disruption, both of which were impacted by Covid-19. This increase in use is also a reflection of the work of the aligned registry Cord Support Programme, providing hands-on education and support around the selection and use of cord blood units.

Thirty three percent of UK cord blood units used for UK patients in 2021/22 were donated by mothers from a minority ethnic background. Donation via cord remains a vital method of meeting the needs of patients from minority ethnic backgrounds.

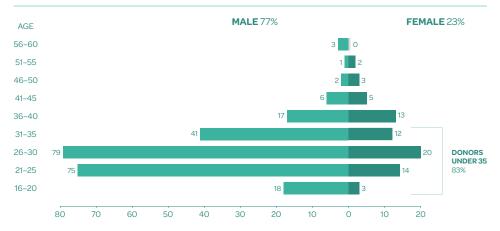
STEM CELL PROVISION 2021–2022

PROVISIONS FOR UK PATIENTS OVER TIME (IMPORTS VS UK)

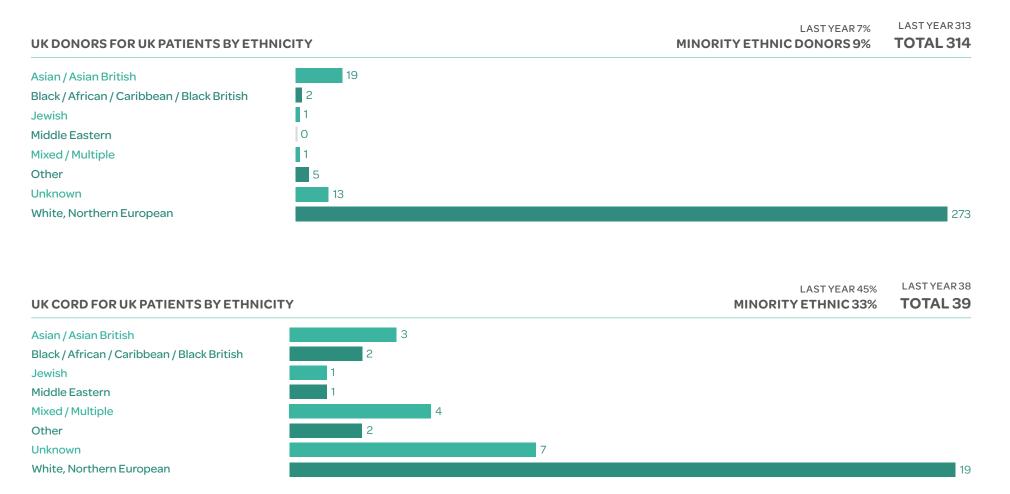


UK DONORS FOR UK PATIENTS

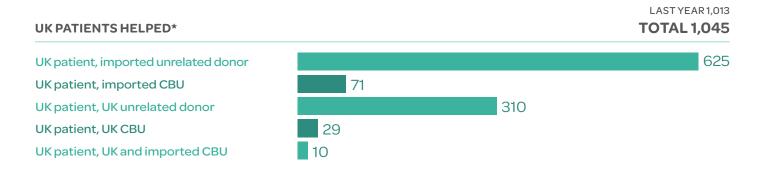
LAST YEAR 313 TOTAL 314



STEM CELL PROVISION 2021-2022



STEM CELL PROVISION 2021-2022



UK DONORS FOR UK PATIENTS (SEARCH REQUESTS VS BLOOD SAMPLES REQUESTED)



^{*} For UK patients who received more than one provision for transplant within the year, the source of the first provision only is represented in this breakdown.