

Donor Registry Status Report

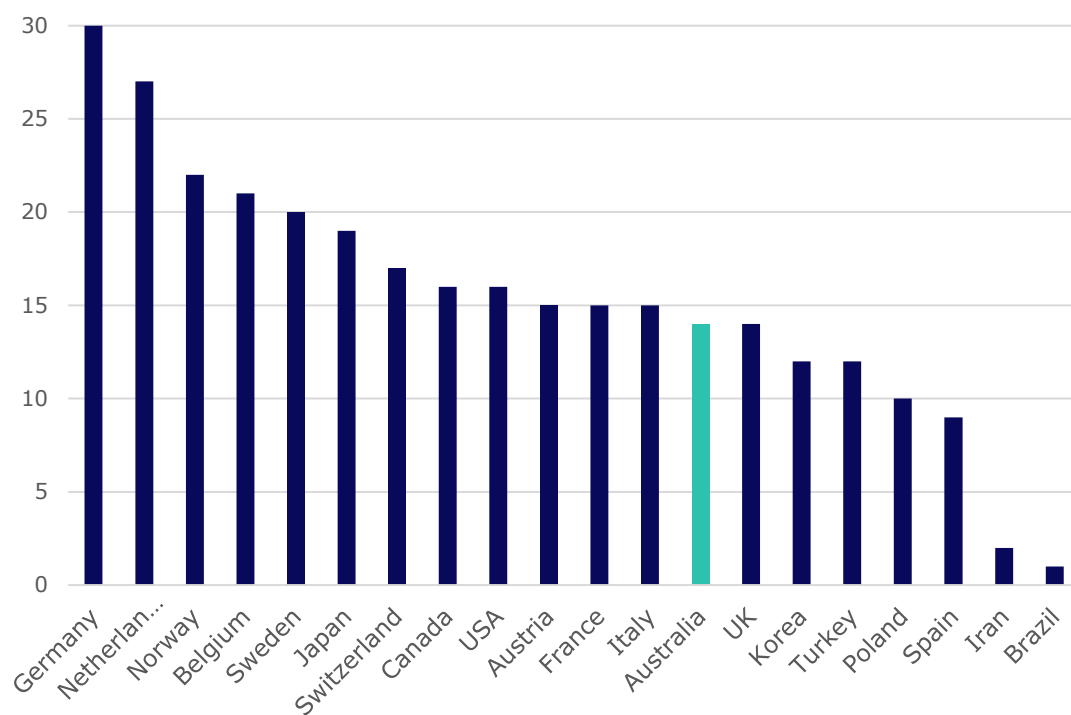
February 2022



Australia remains one of the major transplanting nations globally

Unrelated transplants per million inhabitants

Major Transplanting Countries: 2020¹



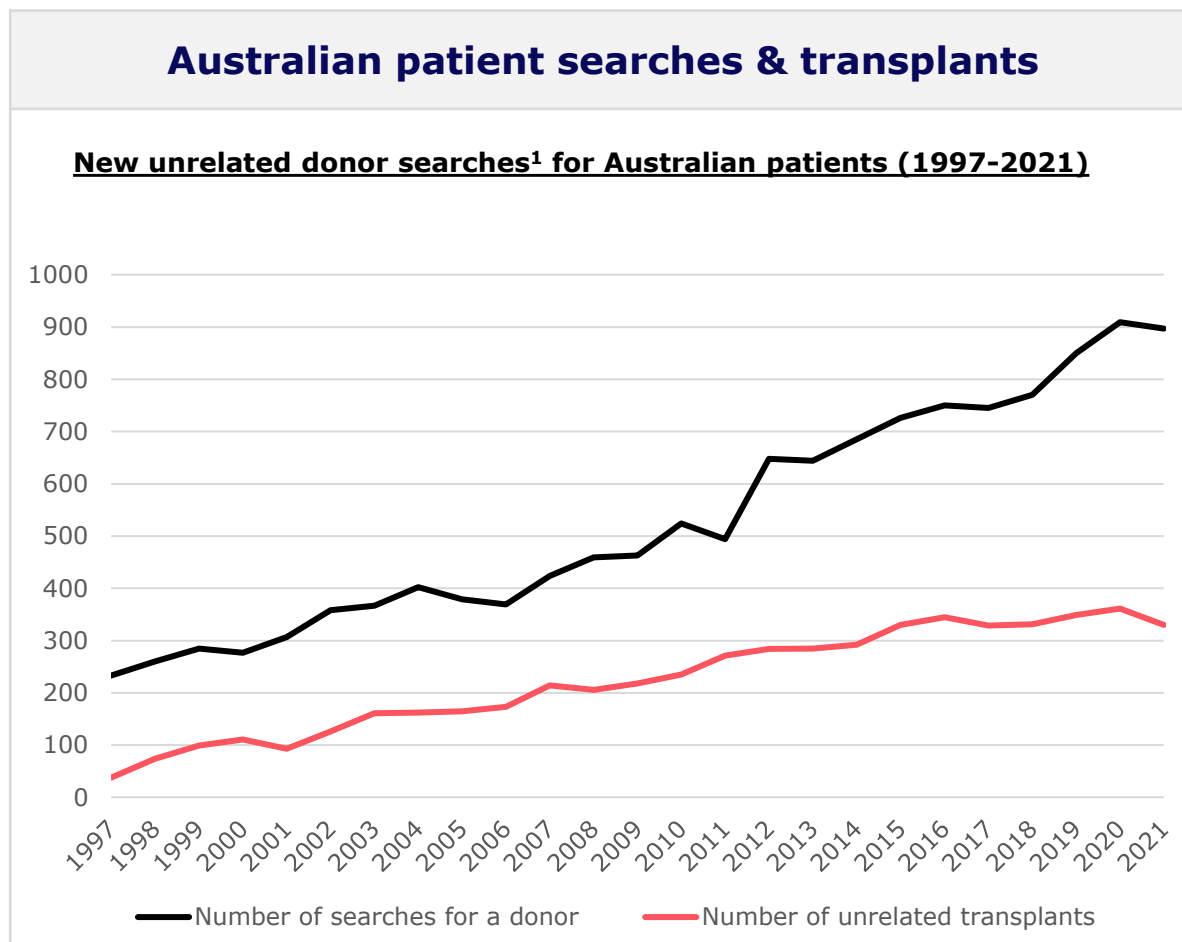
Australia undertakes a significant number of unrelated blood stem cell transplants (per million inhabitants) each year.

Countries with the **highest demand** for unrelated blood stem cell donors **have the highest ethical obligation** to be as donor self-sufficient as possible.

Australian governments have **committed to improving Australia’s donor self-sufficiency**, to reduce risks and improve patient outcomes

1. Analysis excludes countries with <100 transplants p.a.
Source: WMDA (2021) *Global Trends Report 2020*.

The pandemic has slowed growth in Australian patients relying on unrelated blood stem cell donations



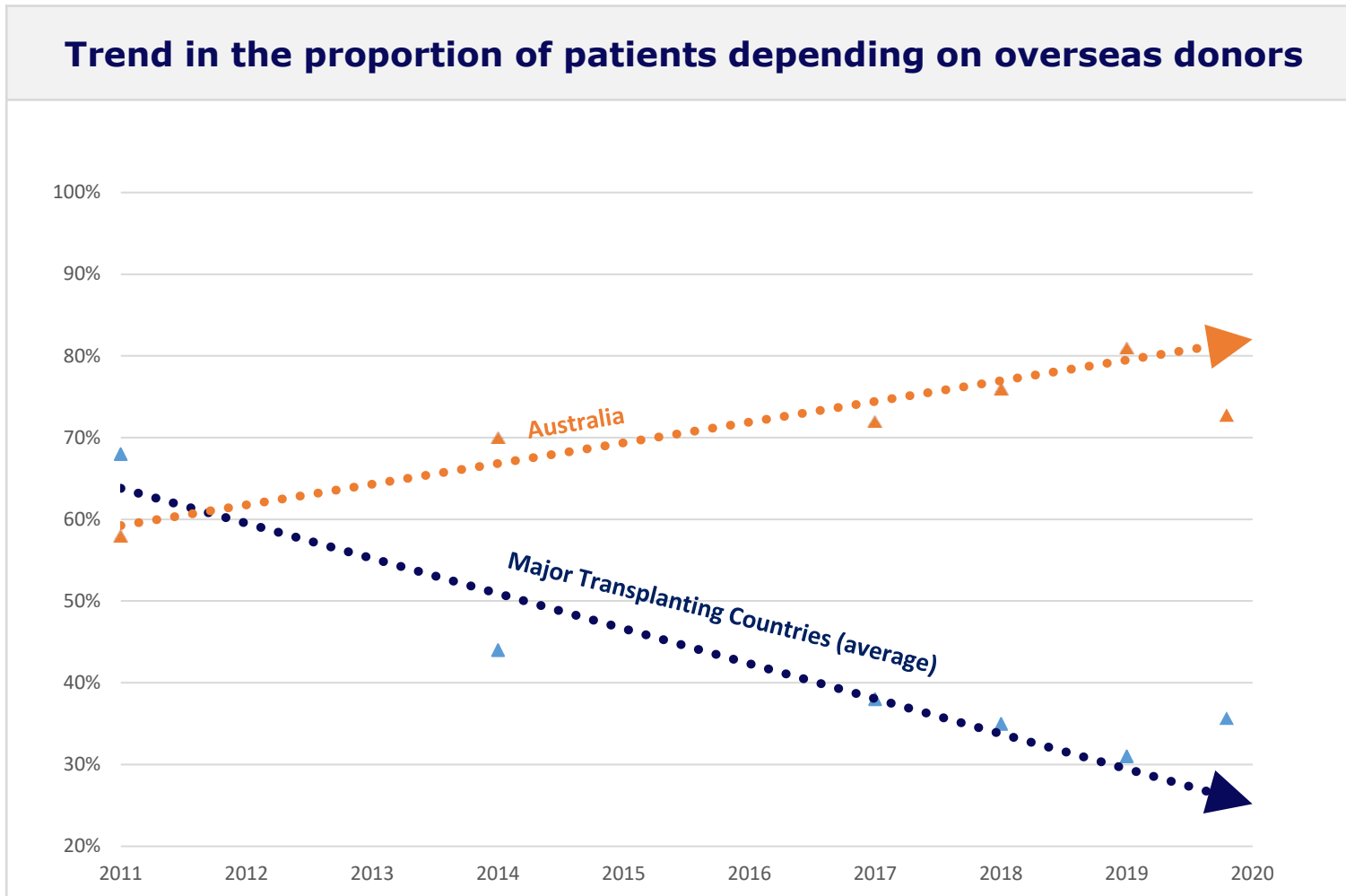
In the 3 years prior to the pandemic in 2020, searches for Australian patients needing a transplant grew at an average rate of 4.7% p.a.; and completed transplants for Australian patients grew at an average of 2% p.a.

The pandemic has caused some disruption to these longer-term trends; this is expected to be temporary, as the underlying disease burden remains.

The number of completed transplants involving unrelated blood stem cell donors was down 10% in 2021 compared to the year prior.

¹ Financial years. Excludes subsequent searches i.e., when a patient relapses (approx. < 10% of patients per financial year)
Source: ABMDR (2021).

But Australia is increasingly dependent on overseas donors, unlike comparable countries



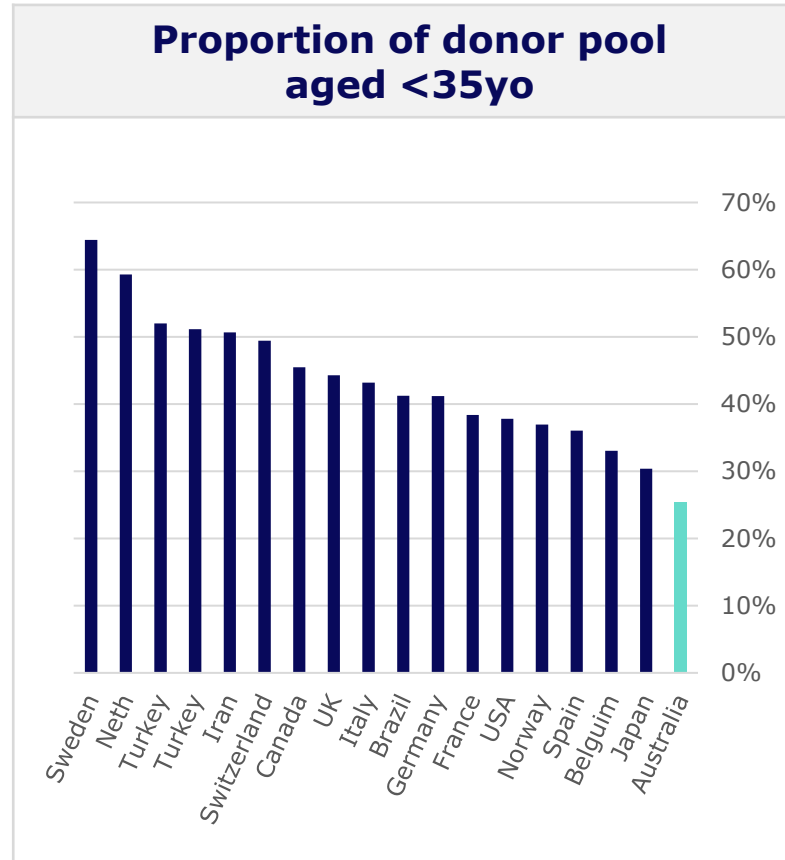
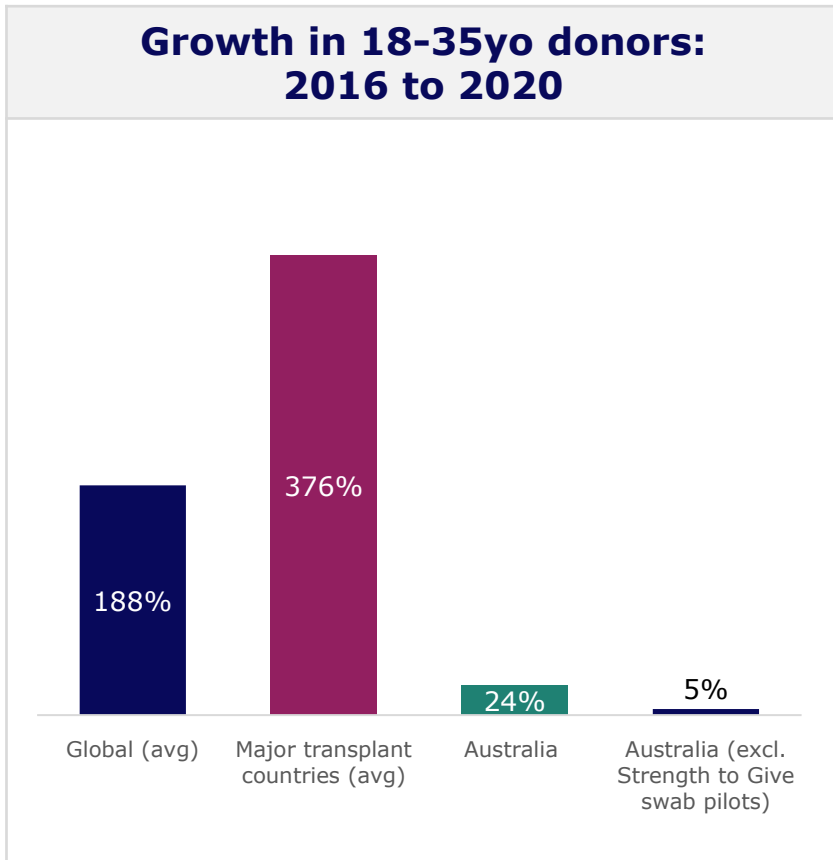
Australia has the **highest dependency** on overseas donors of comparable transplanting countries, despite the logistical difficulties.

Australian clinicians report “relief” at finding matching overseas donors.

The pandemic has highlighted the **risks to patients** from this dependency in terms of reduced access to overseas donors and increased risk of transport delays and damage.

Australian clinicians have tried to minimize these risks by choosing higher numbers of **less optimal local donors** for patients (i.e. older donors); slightly improving Australia’s self-sufficiency in 2021.

Australia's donor pool does not meet patient needs; significantly more donors need to be recruited



The goal of Australia's governments to **improve blood stem cell self-sufficiency** can only be achieved by significantly increasing the number of (clinically preferred) donors under 35.

Unlike Australia, comparable countries have **significantly grown their donor pools** via low-cost swab recruitment.

Our target is for the donor pool to contain **3% of Australia's 18-35 population** (~180,000 young donors) within 5 years¹ of funding approval.

¹2016 Australian Census data.
Source: ABMDR (2021); WMDA (2017 & 2021) *Global Trends Report 2016 & Global Trends Report 2020*

Governments have committed to improving Australia's self-sufficiency

Governments' joint *National HPC Framework* (2021) notes improving Australia's donor self-sufficiency will:

- **reduce transplant risks** and better meet the needs of Australian patients
- **improve equity of health outcomes** as many Australian patients cannot find suitable matching donors through overseas registries
 - Indigenous patients may not be matched through global donor pools
 - patients with ethnicities common in Australia are often not well represented in the global donor pool
- **lower expenditure** on blood stem cell importation
 - Importing costs \$30,000-\$50,000 vs \$1,500-\$3,500 for Australian donor collections
- **protect blood stem cell supply** during crises
 - COVID has highlighted the risks of dependency on imported cells: a prolonged need for cryopreservation, international collection delays and capacity fluctuations, complexity of transport logistics
- **uphold Australia's ethical obligations** to the global community

Recruiting blood donors can continue; but **isn't enough on its own** to meet Australian patient needs.

Around 80% of Australian **patients already rely on swab-recruited donors** from overseas. Swabs have been used to recruit around 20+ million donors globally over the past 10-15 years.

No new funding is required to deliver swab recruitment in Australia; but approval from Commonwealth, State and Territory governments is needed.

“There are few more devastating conversations than telling a patient that their best – or only – chance of cure is an allogeneic bone marrow transplant, but that they have no suitably matched donor available.

In some cases, this means dashing their hope of cure altogether, and in other cases, it can mean adopting an inferior treatment option.

In an era where international borders are increasingly opaque, the logistics of international travel more challenging, and the global geopolitical landscape fraught with complexity, we cannot continue to rely almost exclusively on overseas donors for Australian bone marrow transplants.”

Source: Cliff ERS, Szer J. We must grow the Australian Bone Marrow Donor Registry. Internal Medicine Journal 2021; 51: 1771–1772