

# The South African Bone Marrow Registry

## Helping the People of Africa

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South African Bone Marrow Registry, Cape Town



# History & Functions

- **Established 1991**
- **First matched unrelated donor (MUD) transplant 1997**
- **Hub Centre for SA – liaison between registries worldwide**
- **Provides MUD's for haematopoietic stem cell (HSC) transplantation:**
  - **SA Patients**
  - **Patients referred from other African countries**
  - **Worldwide**
- **Donor recruitment:**
  - The Sunflower Fund**



# History & Functions, cont'd

- ❑ **Member of WMDA**  
Guidelines for donor care and collection & transfer of products
- ❑ **BMDW Participant**  
Universal search tool to identify potential donors worldwide
- ❑ **SABMR database:**  
±67 000 donors



# Responsibilities of the SABMR as Hub Centre

- ❑ **Link between the patient's doctor and donor registry.**
- ❑ **Responsible for the transport of stem cells from donor to patient.**
- ❑ **Responsible for well-being of own donors:**
  - ❑ **5 year post-donation follow-up.**
- ❑ **Responsible for payments to local service providers and international registries.**



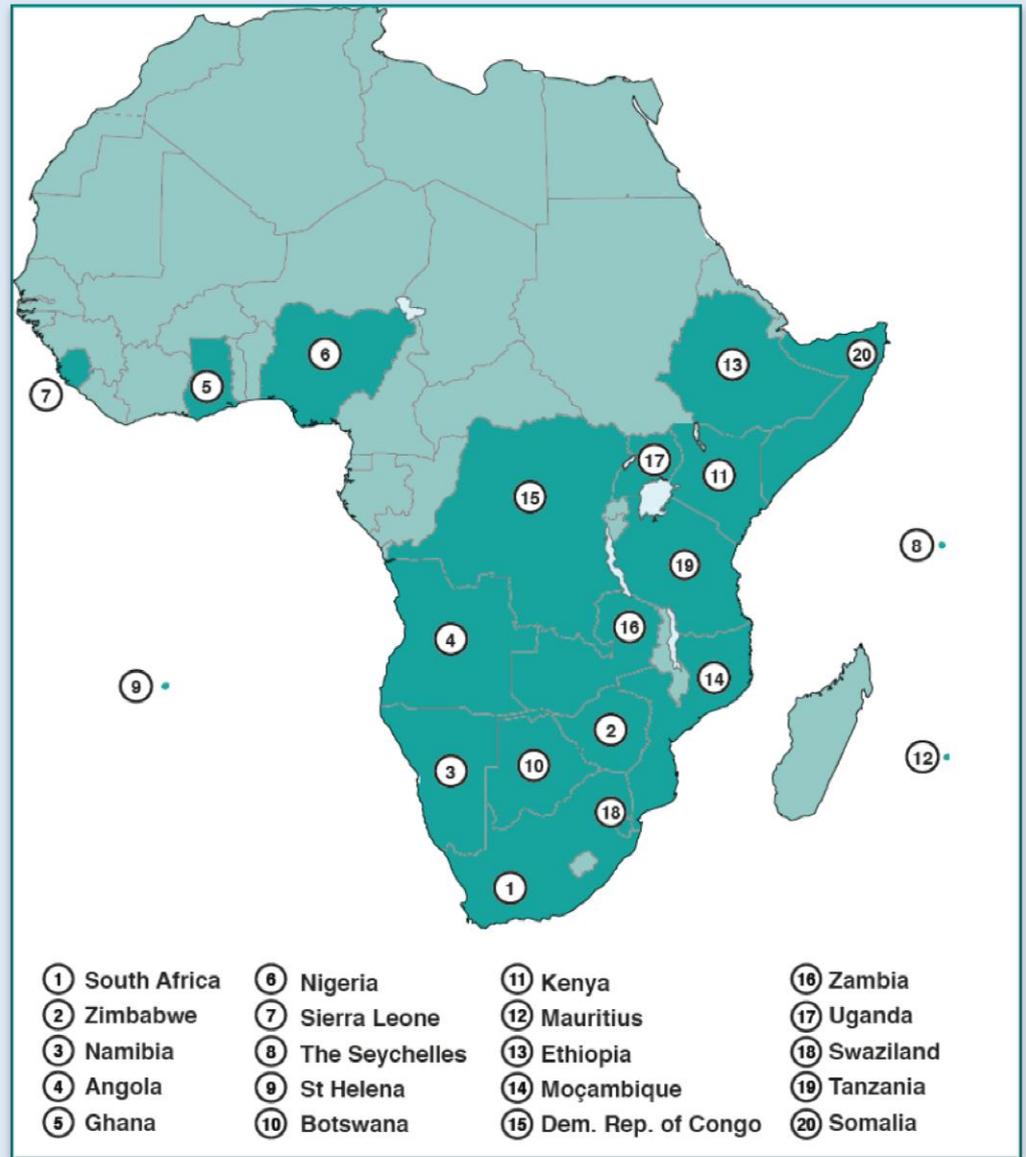
# HLA typing

- ❑ Matching is required for ALL organ transplants
- ❑ For bone marrow transplantation the patient and donor must be like *identical twins*.
- ❑ Therefore molecular matching essential.



# Patients Referred

- ❑ Preliminary Search: >1400 since 1991
- ❑ Not all from South Africa
- ❑ Search progression:
  - ❑ Search Activation: 50%
  - ❑ Donor Identification: 30%
  - ❑ HSC Transplantation: 25%



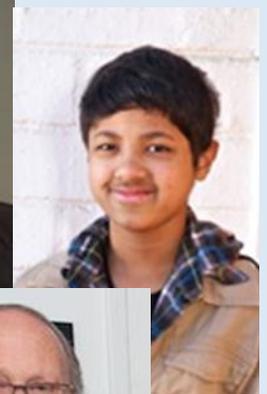
# Patients Transplanted

□ **Adults** 277

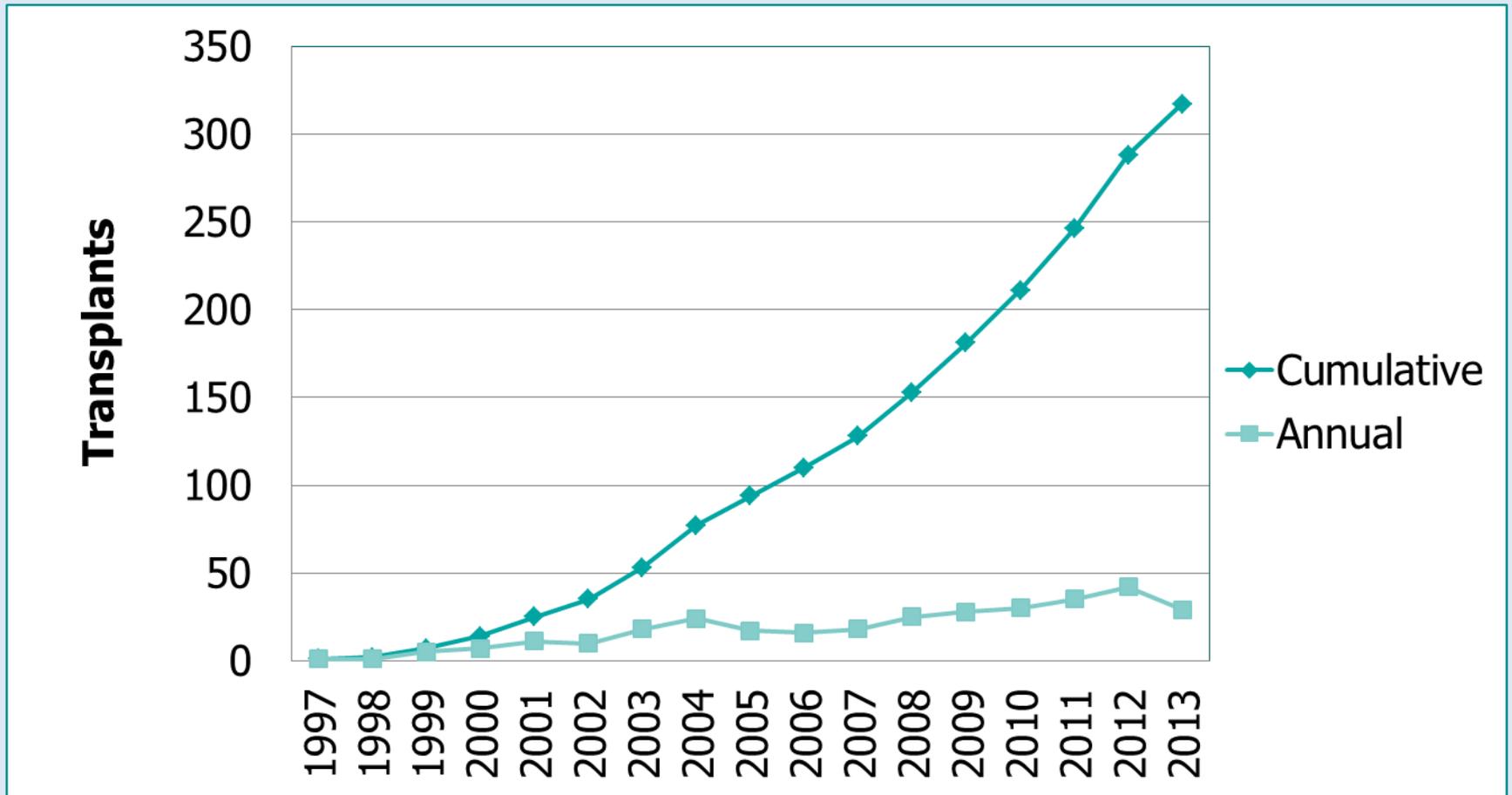
□ **Children** 57

□ **SA citizens** 324

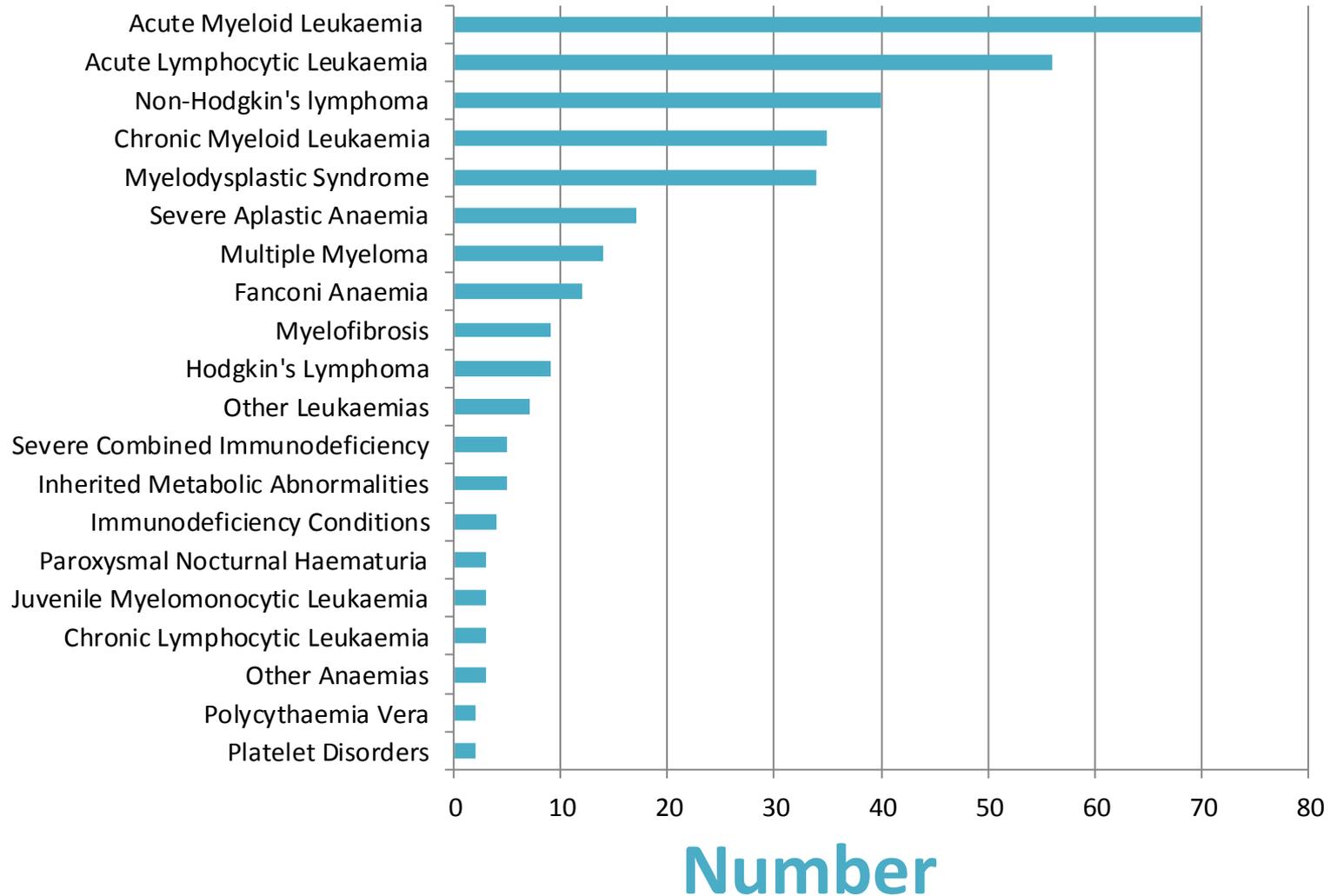
□ **Other African Countries** 10



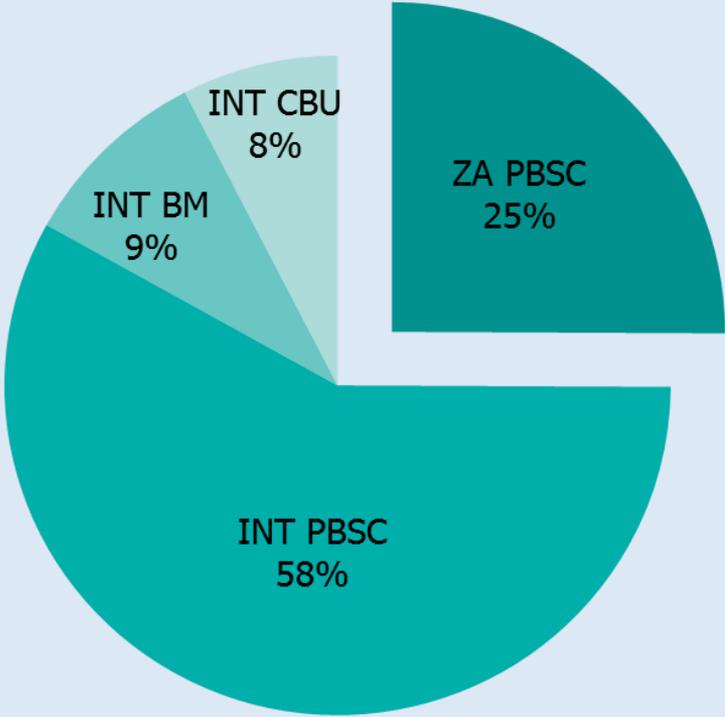
# Patients Receiving MUD BMT in South Africa: 1997 - 2013



# Diagnoses



# Unrelated HSC Products for Patients Transplanted in SA





# Countries of origin of donors for South African Patients



# Patients from other African countries receiving MUD BMT in South Africa

**Angola (1)**

**Ethiopia (1)**

**Kenya (1)**

**Namibia (4)**

**Sierra Leone (1)**

**Somalia (1)**

**Uganda (1)**

The donors for these patients came from:

Italy (1)

Israel (1)

Germany (2)

USA-NMDP (4)

USA-GOL (1)

South Africa (1)

# International Collaboration

**SABMR donors for  
International patients:**

**Austria (1)**

**France (1)**

**Germany (2)**

**Italy (2)**

**Portugal (1)**

**Sweden (1)\***

**The Netherlands (1)**

**United Kingdom (3)**

**United States of America (5)**



HLA-A\*43:01 → Sweden

# Case Report: SABMR helps Nigerian sibling donor

- ❑ Patient in USA – (male/25/ALL)
- ❑ Sister a match, but lived in Nigeria – USA visa refused
- ❑ SABMR approached by NMDP to help
- ❑ Managed as if an unrelated donor
- ❑ Donor travelled to SA to donate, accompanied by her father
- ❑ From arrival in SA for medical examination, to PBSC collection – 11 days



**Keeping in touch after  
the donation - donor  
Follow-up by SABMR**



**SABMR was delighted to receive  
photographs of the donor's  
wedding which took place in  
November 2012**

# Helping hand to Nigerian registry

- ❑ **SABMR approached by DKMS in America following donor drive in Nigeria for law student studying in USA**
- ❑ **Donors could not be listed in USA**
- ❑ **SABMR agreed to temporarily host donors**
- ❑ **Donors given unique identifier: ZA-NGA**



**Seun Adebisi**

# Helping hand to Nigerian registry, cont'd

- ❑ **Bone Marrow Registry Nigeria (BMRN) establishes own infrastructure in 2012**
- ❑ **Donors transferred from SABMR to BMRN and listed separately in BMDW: 347 donors, March 2014**



**From left: Dr. Sunday Ocheni, Dr. Anthea Nwandu of the University of Maryland, Seun Adebisi, Professor Ifeoma Okoye, and Liana Schapiro celebrate a successful launch!**

# Unrelated Haematopoietic Stem Cell Transplantation in Africa: Considerations

- ❑ **Skills & Facilities to offer BMT**
- ❑ **Unrelated Donor Registry –**
  - ❑ ? Each country
  - ❑ ? Regional
- ❑ **Resources –**
  - ❑ Private
  - ❑ State
  - ❑ Sponsored
- ❑ **Collaboration –**
  - ❑ International
  - ❑ Within Africa

