

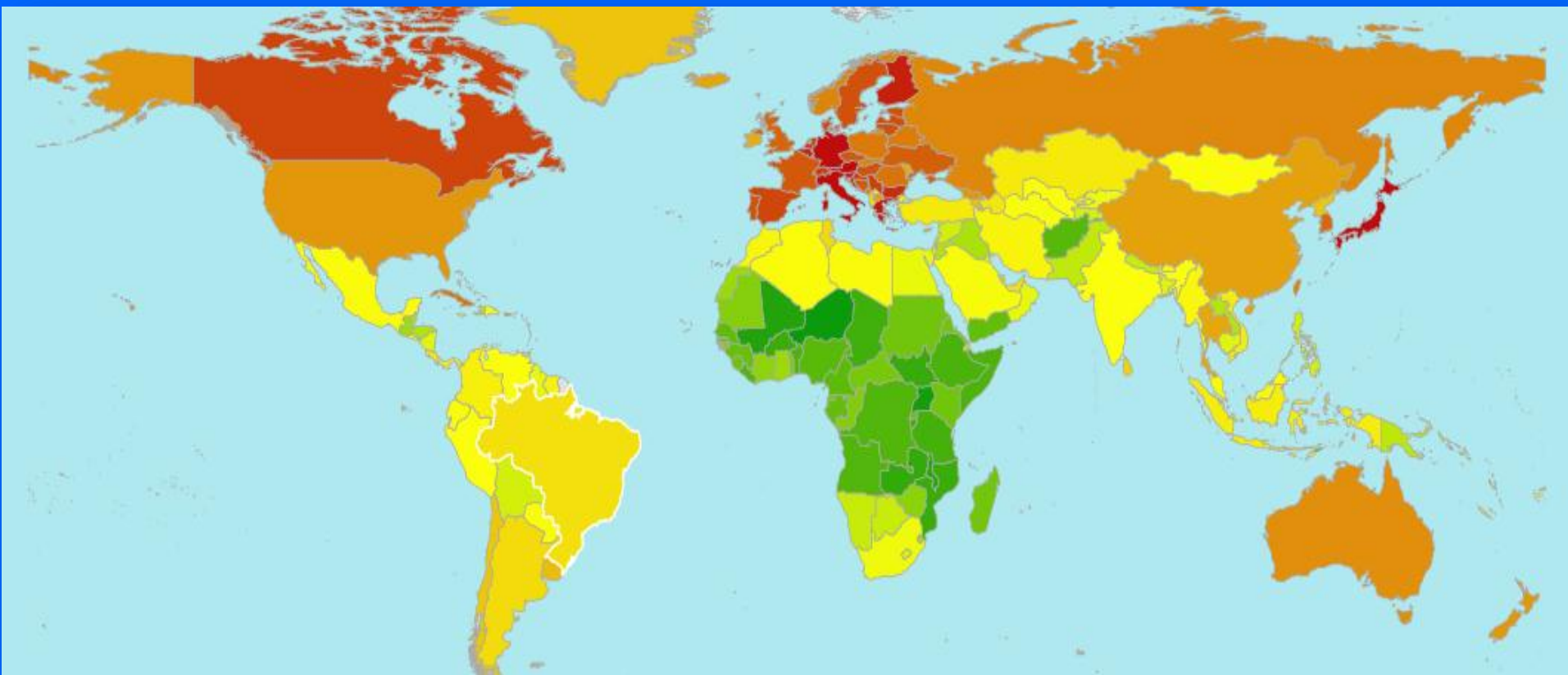
AUTOLOGOUS VS ALLOGENEIC HSCT TO GET STARTED

Relative cost of HSCT: Non-industrial vs. Industrial

	NON-INDUSTRIAL (Lower Income)	INDUSTRIAL (High Income)
Cost of Manpower	Low	High
Equipment/Contract (Automation)	High	Lower
Blood bank products	Lower	High
Relative cost of medicine	Same	Same

Allogeneic or Autologous HSCT: Demand vs. Choice

- **Pediatric Median age**
- **Inherited disorders**
- **Hemoglobinopathies (Africa, Asia, Middle East)**
- **Bone Marrow failure (Asia, Middle East)**



<http://world.bymap.org/MedianAge.html>

Allogeneic or Autologous HSCT: Demand vs. Choice

- **Pediatric Median age**
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Autologous HSCT

MAIN OBSTACLES:

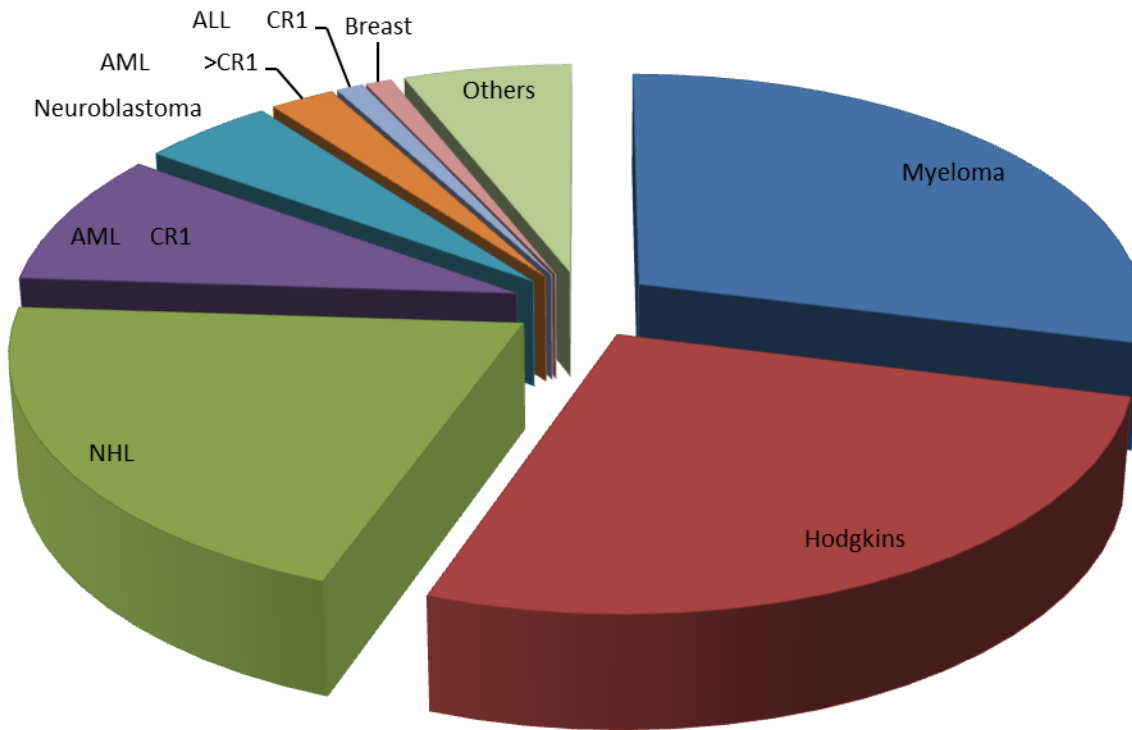
- **Cryopreservation**
- **Cryopreservation quality control**
- **Stem cells collection**
- **Logistics: Equipment and trained staff**
- **Long term storage and Bio-archiving**

Autologous HSCT Indications

- **Hodgkin's Lymphoma**
- **Non-Hodgkin's Lymphoma**
- **Multiple Myeloma**
- **Others**

AUTOGRAFTS 1984-2010

-Indications



Indications

- Myeloma 29%
- Hodgkins 27%
- NHL 21%
- AML CR1 9%
- Others 17%

ORIGINAL ARTICLE

Cyclophosphamide, etoposide and carboplatine plus non-cryopreserved autologous peripheral blood stem cell transplantation rescue for patients with refractory or relapsed non-Hodgkin's lymphomas

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Extended Storage of Liquid-Preserved Stem Cells at 4°C Results in Good Engraftment in Patients of Multiple Myeloma Undergoing Autologous Stem Cell Transplantation

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review

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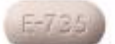










Feasibility and safety of autotransplants with noncryopreserved marrow or peripheral blood stem cells: a systematic review

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Reduce the cost and improve availability of Allogeneic HSCT

TBI	Non-TBI based regimen
IV Busulfan	Oral Busulfan
Cyclosporine	Generic
Growth factors	Generic
ATG	Use Fludarabine
New Antifungals	?

Cellcept® (Mycophenolate Mofetil)			
Manufacturer	250 mg Capsule		500 mg Tablet
Roche			
Generic Mycophenolate Mofetil			
Mylan / UDL			
Apotex			
Roxane			
Sandoz			
Teva			
Zydus			
Accord			
Endo			
Prograf® (Tacrolimus)			
Manufacturer	0.5 mg capsule	1 mg capsule	5 mg capsule
Astellas			
Generic Tacrolimus			
Sandoz			
Dr Reddy's Laboratories			
Mylan	Hard-shell gelatin capsule with a light orange opaque cap and a gray opaque body filled with white to off-white powder, axially printed with MYLAN over 2045 in black ink on both the cap and the body.	Hard-shell gelatin capsule with a light blue opaque cap and a gray opaque body filled with white to off-white powder, axially printed with MYLAN over 2046 in black ink on both the cap and the body.	Hard-shell gelatin capsule with a rubine red opaque cap and a gray opaque body filled with white to off-white powder, axially printed with MYLAN over 2047 in black ink on both the cap and the body.
Watson			

Alternate Donor Allogeneic HSCT

- **Haploidentical HSCT**
- **Cord Blood Transplantation**
- **Matched Unrelated Donor HSCT**

Other issues to consider

- **Duration of isolation**
- **Care for Central lines**
- **Living and care after discharge from the hospital**
- **Compliance with medications**

Original article

Annals of

Hematology

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**Frozen vs. nonfrozen bone marrow for autologous transplantation
in lymphomas: a report from the Spanish GEL/TAMO
Cooperative Group***

**J. Sierra, E. Conde, A. Iriondo, S. Brunet, J. Marín, J. Pérez de Oteiza, D. Caballero, F. Martínez, A. León,
J. García-Conde, F. Hernández-Navarro, A. Domingo, D. Carrera, J.C. Reverter, C. Richard, J. Zuazu, J. Baro,
J. Rifón, C. Solano, J. Díaz-Mediavilla, C. Rozman, E. Montserrat,
and the Spanish Cooperative Group GEL/TAMO****

Author	Year	Country of origin	Source	Peer-reviewed source (Y/N)	Type of article
1 Kingston et al. [38]	1984	UK	British Journal of Haematology	Y	Retrospective review of a multicentric case series
2 Carella et al. [42]	1985	Italy	European Journal of Cancer and Clinical Oncology	Y	Retrospective review of a multicentric case series
3 Russell et al. [41]	1989	Canada/UK	Bone Marrow Transplantation	Y	Phase II, multicentric
4 Ahmed et al. [28]	1991	USA	Acta Haematologica	Y	Retrospective, single-center cohort comparison
5 Carey et al. [37]	1991	UK	Blood	Y	Retrospective review of a single-center case series
6 Köppler et al. [43]	1991	Germany	Bone Marrow Transplantation	Y	Phase II, single center
7 Sierra et al. [40]	1993	Spain	Annals of Hematology	Y	Retrospective, multicentric cohort comparison
8 Taylor et al. [44]	1993	UK	British Journal of Cancer	Y	Retrospective review of a single-center case series
9 Ager et al. [45]	1995	UK	Bone Marrow Transplantation	Y	Retrospective review of a single-center case series published as correspondence
10 Jones et al. [39]	1996	UK	European Journal of Cancer	Y	Retrospective review of a single-center case series
11 Papadimitriou et al. [29]	1999	Greece	Transplantation Proceedings	Y	Retrospective review of a single-center case series
12 Holowiecki et al. [36]	2002	Poland	Transplantation Proceedings	Y	Retrospective review of a single-center case series
13 Holowiecki et al. [46]	2002	Poland	Blood, abstract from 2002 ASH meeting	Y	Retrospective review of a single-center case series
14 Ruiz-Argüelles et al. [33]	2003	Mexico	Acta Haematologica	Y	Retrospective review of a single-center case series
15 Cuellar-Ambrosi et al. [32]	2004	Colombia	Journal of Clinical Apheresis	Y	Retrospective review of a single-center case series
16 Mabed and Al-Kgodary [47]	2006	Egypt	Bone Marrow Transplantation	Y	Retrospective review of a single-center case series