

HKHN Ufuk Turu

Nereye Gidiyoruz=Quo Vadis?

Dr. Mutlu Arat

GROUP FLORENCE NIGHTINGALE
İSTANBUL BİLİM ÜNİVERSİTESİ

Akış

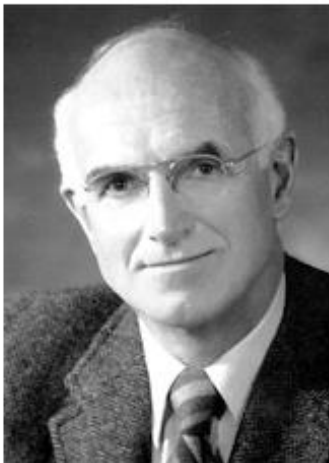
- Tarihçe
- Neredeyiz
 - ABD/Avrupa
 - Türkiye
- Başarılarımız
- Başarısızlıklarımız
- Nereye gidiyoruz?
- Çıkarımlar

2007: Hematopoietik KHN, 50. Yılı



The Nobel Prize in Physiology or Medicine 1990

"for their discoveries concerning organ and cell transplantation in the treatment of human disease"



Joseph E. Murray

🥇 1/2 of the prize

USA

Brigham and Women's
Hospital
Boston, MA, USA



E. Donnall Thomas

🥇 1/2 of the prize

USA

Fred Hutchinson Cancer
Research Center
Seattle, WA, USA

☐ 1: [N Engl J Med](#). 1957 Sep 12;257(11):491-6.

Intravenous infusion of bone marrow in patients receiving radiation and chemotherapy.

[THOMAS ED](#), [LOCHTE HL Jr](#), [LU WC](#), [FERREBEE JW](#).

PMID: 13464965 [PubMed - indexed for MEDLINE]



Josep Carreras
LEUKAEMIA FOUNDATION

Our fight will endure
UNTIL THERE'S A CURE

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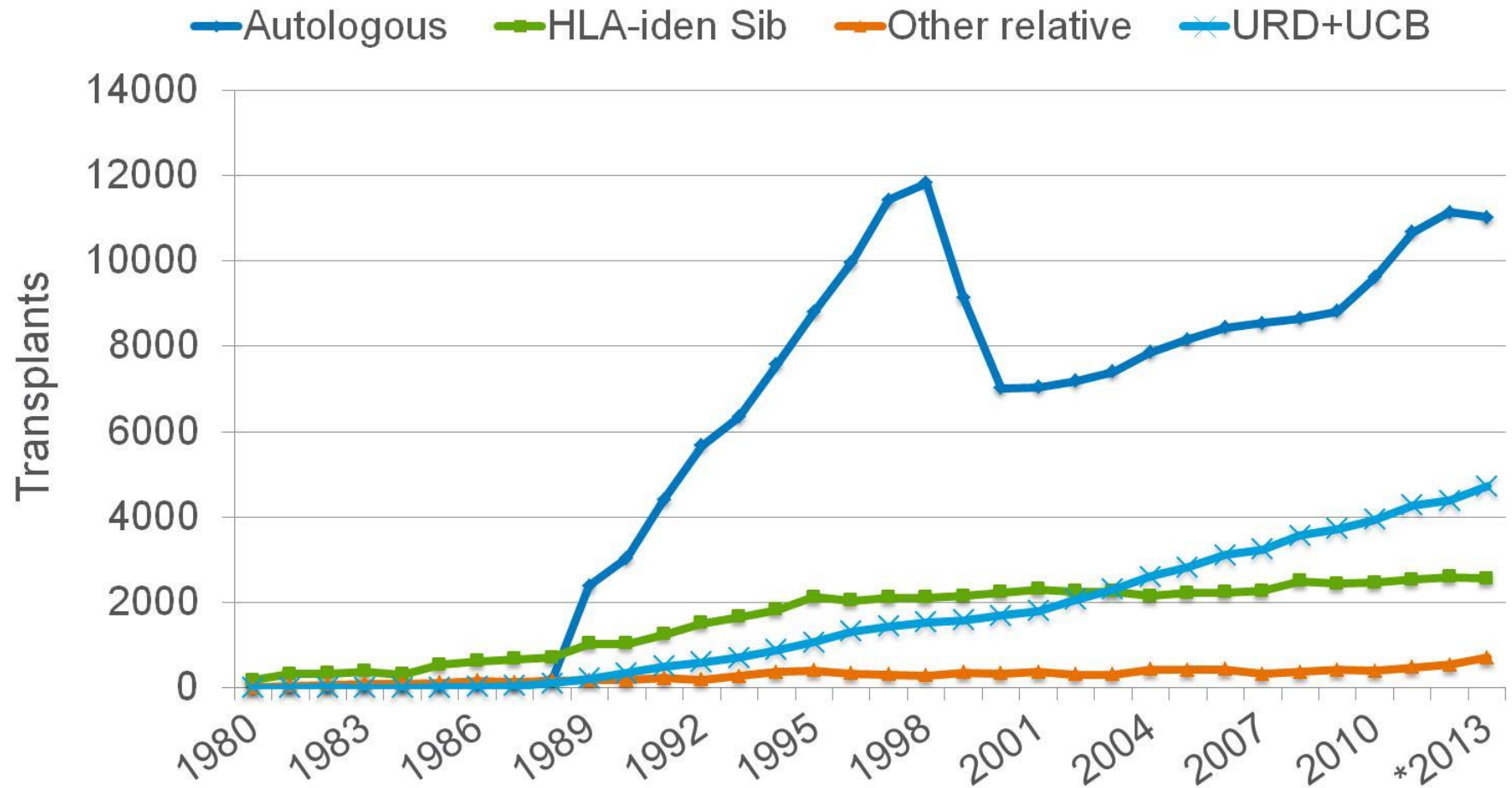
[PATIENTS](#)

[BONE MARROW DONORS](#)

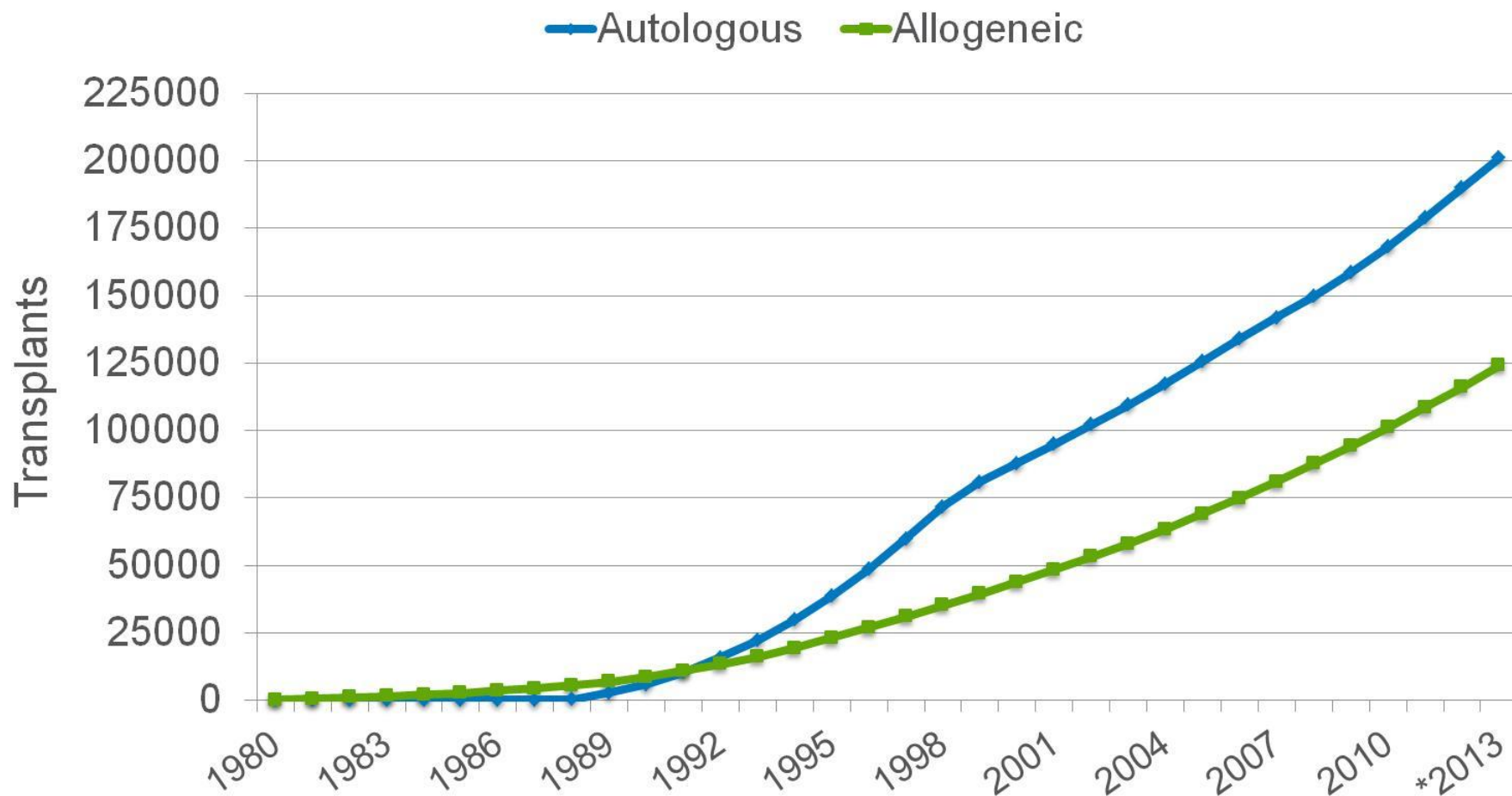
[DONATE NOW](#)

A total of 1 million stem cell transplants
have been performed worldwide

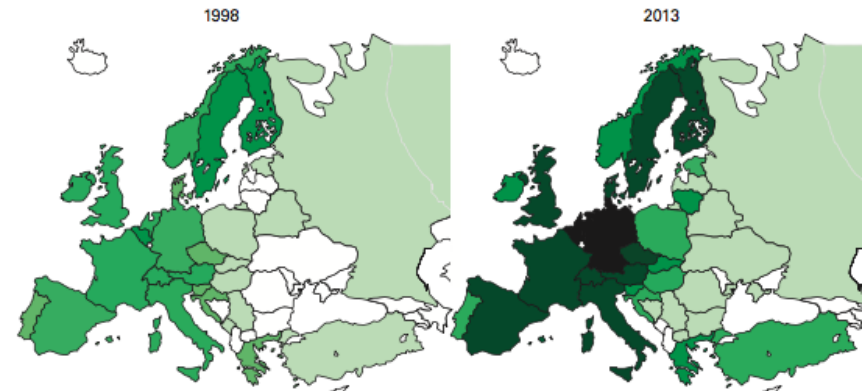
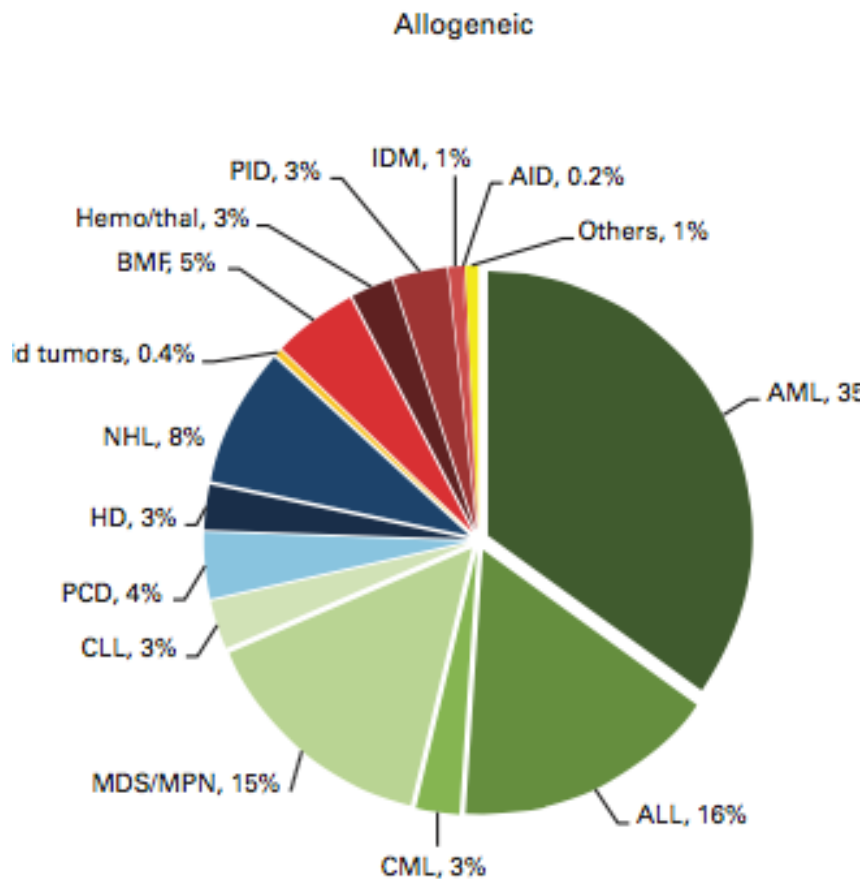
Transplant Recipients in the US, by Transplant and Donor Type



Cumulative Plot of Transplant Recipients in the US by Transplant Type

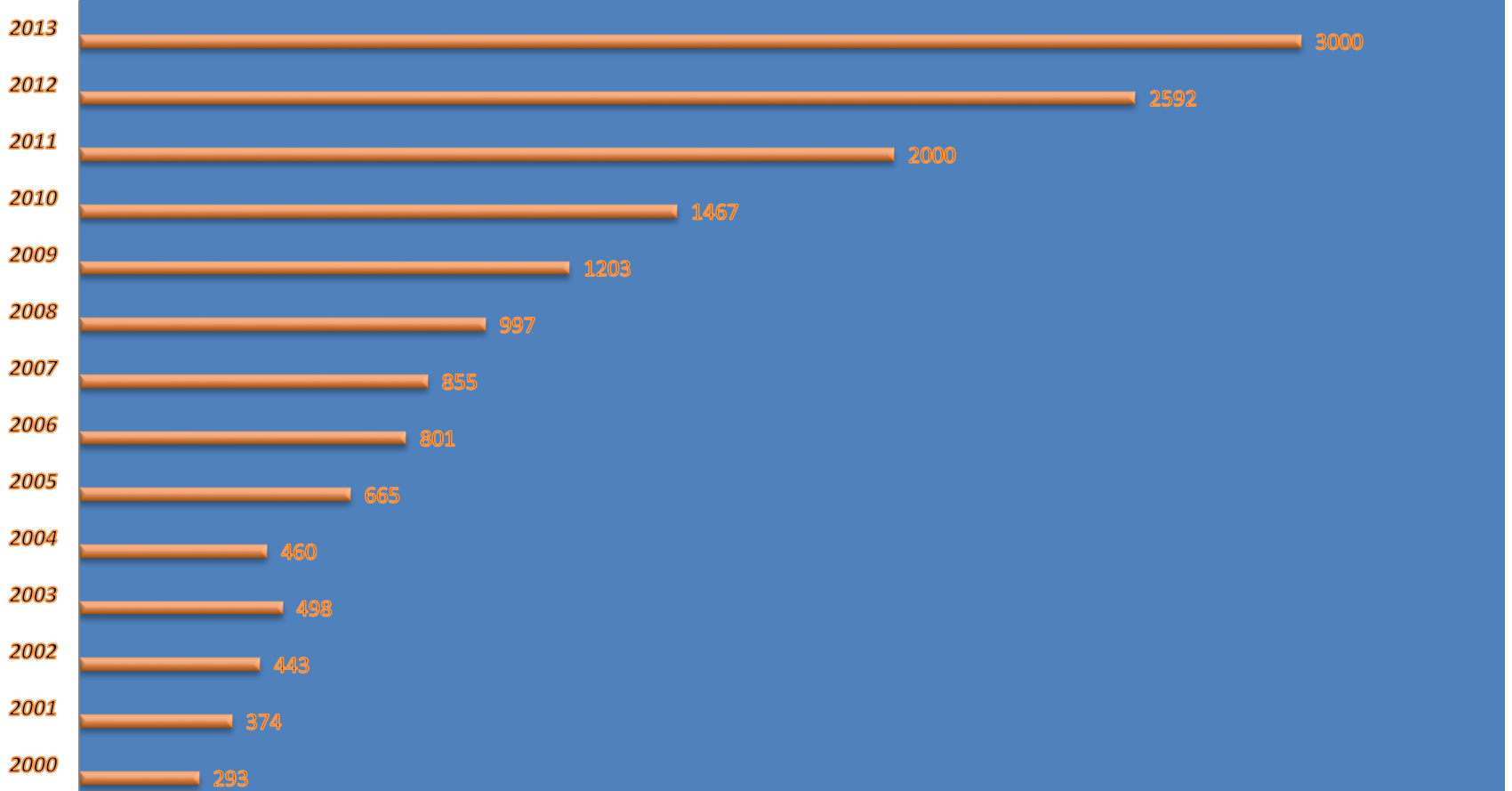


2013 EBMT Avrupa HKHT Etkinlik Raporu



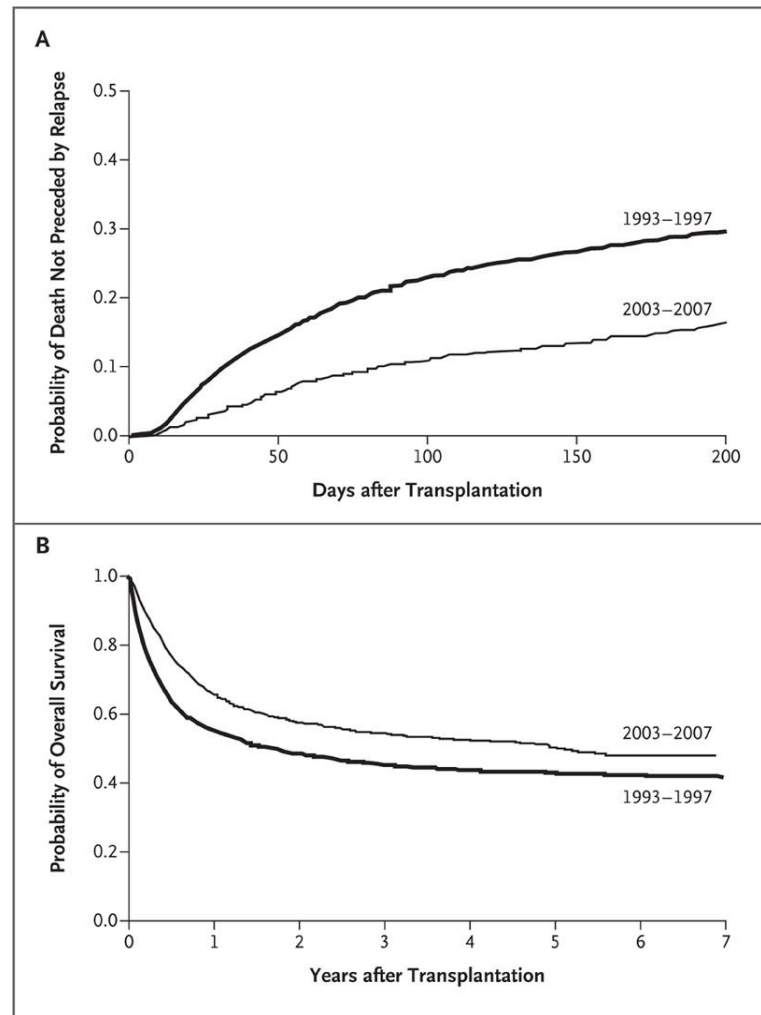
Ulusal HKHT Etkinliđi: YILLAR

2014= 3327



TCSB, Doku ve Organ Nakli

TRANSPLANT BAŞARIMIZ ARTIYOR MU?



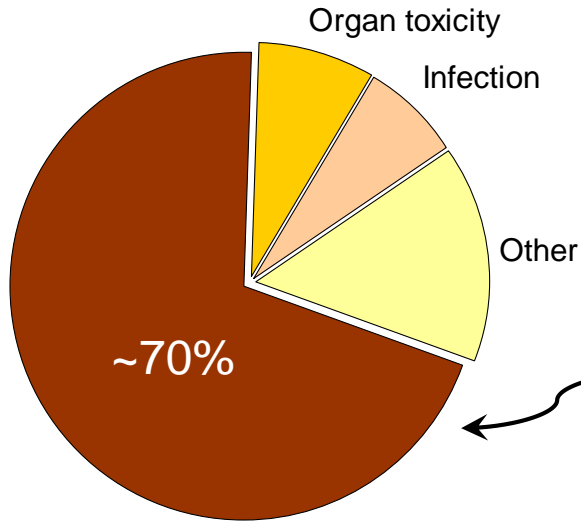
Gooley TA et al. N Engl J Med 2010;363:2091-2101.

OTO

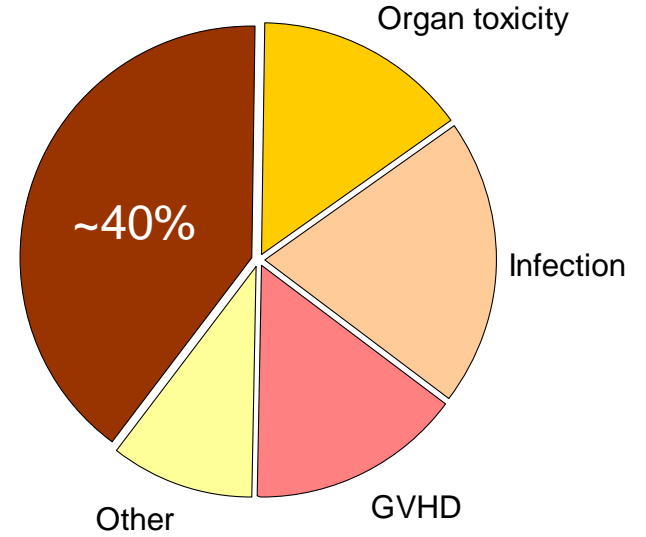
NEDEN

ALLO

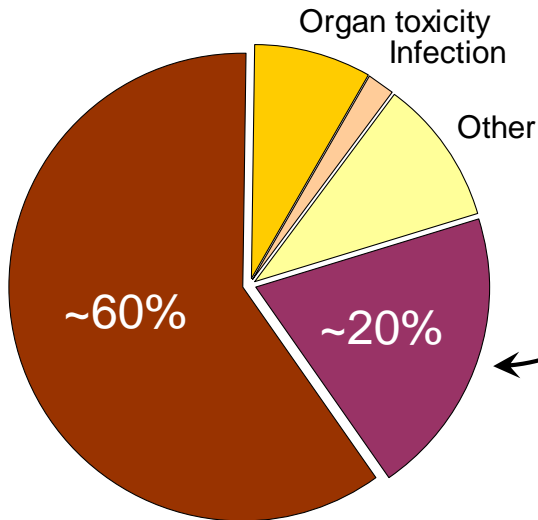
ERKEN ÖLÜMLER



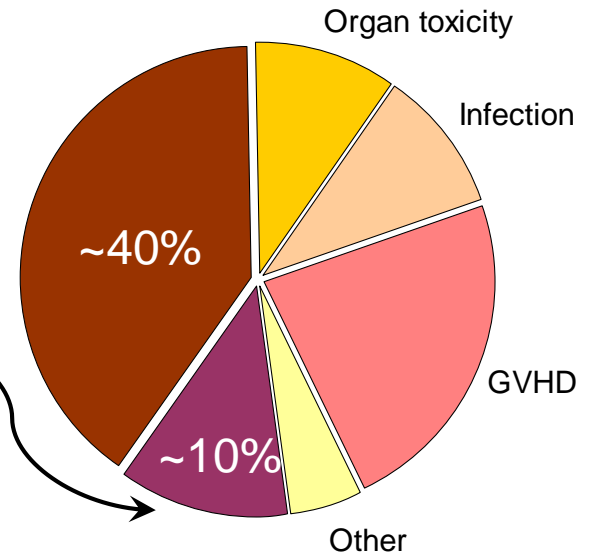
RELAPSE



GEÇ ÖLÜMLER

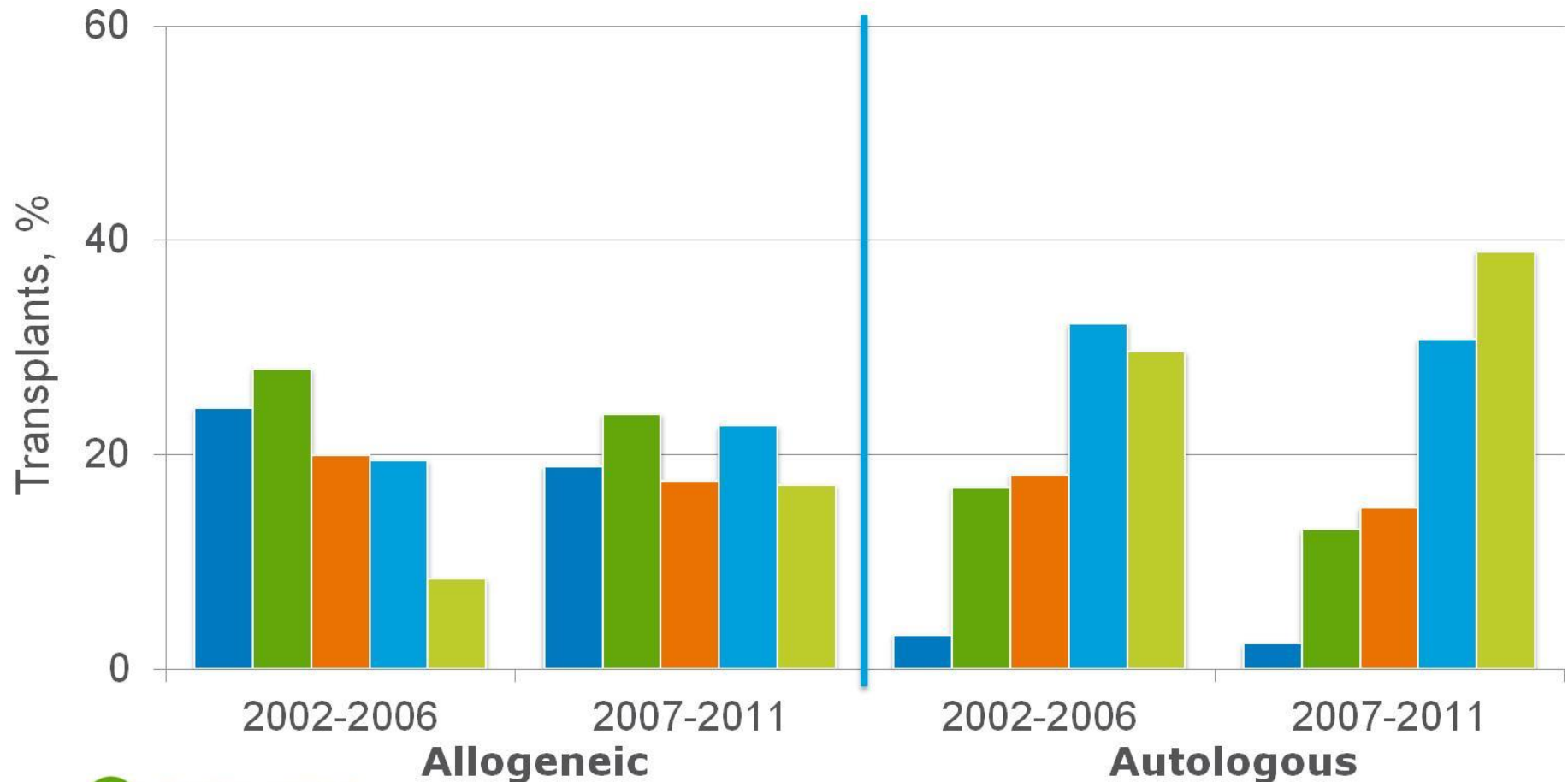


İKİNCİL KANSERLER

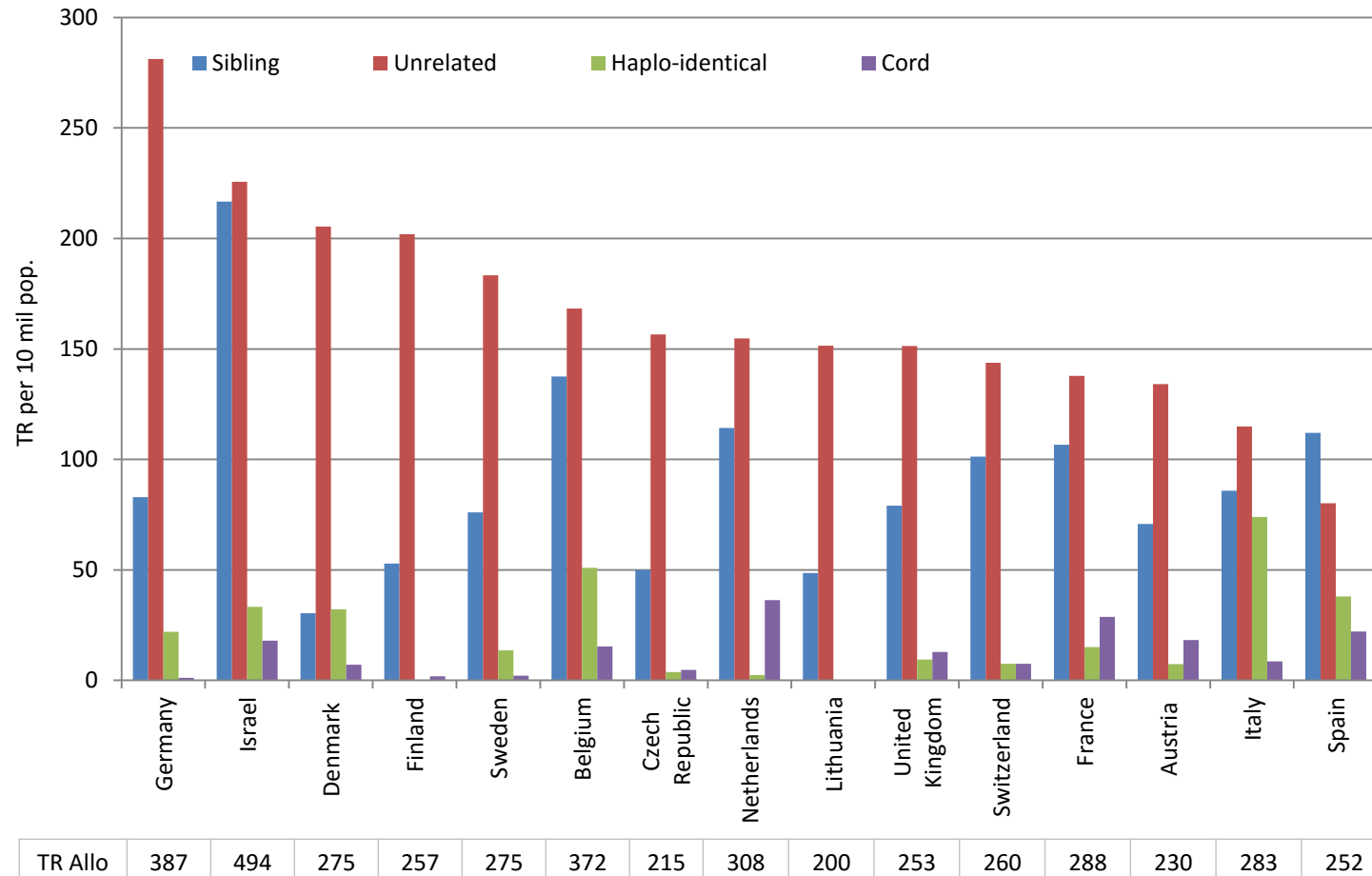


YAŞ SINIRI VAR MI?

■ ≤ 20 years ■ 21-40 years ■ 41-50 years ■ 51-60 years ■ > 60 years



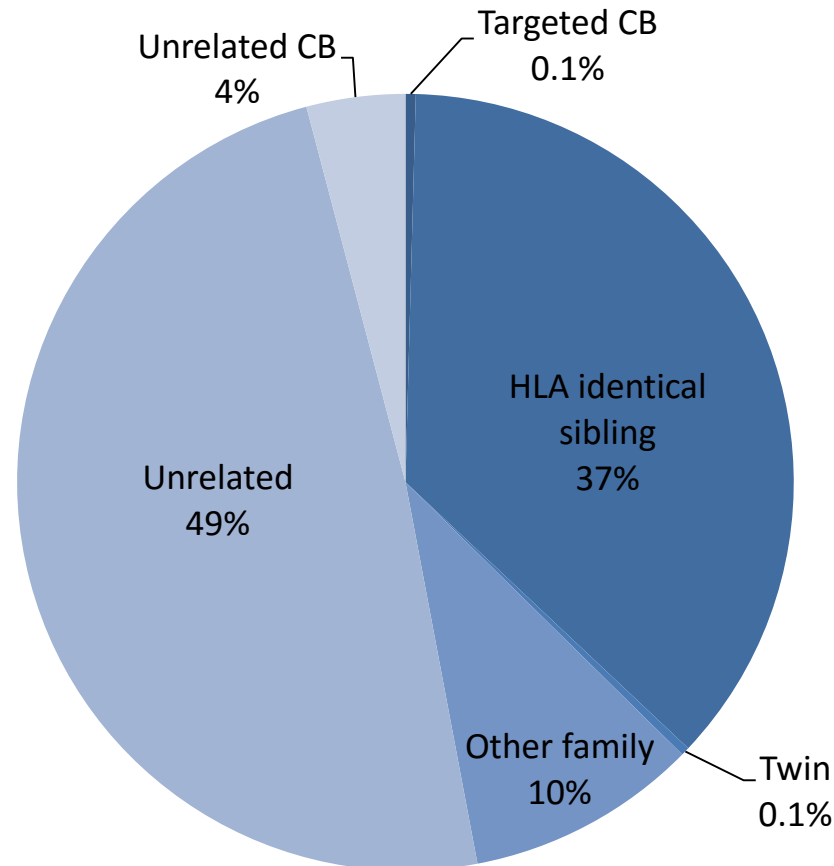
Aktif İlk 15 Avrupa Ülkesi: Verici Seçimi



Passweg et al,BMT (2015), 1–7

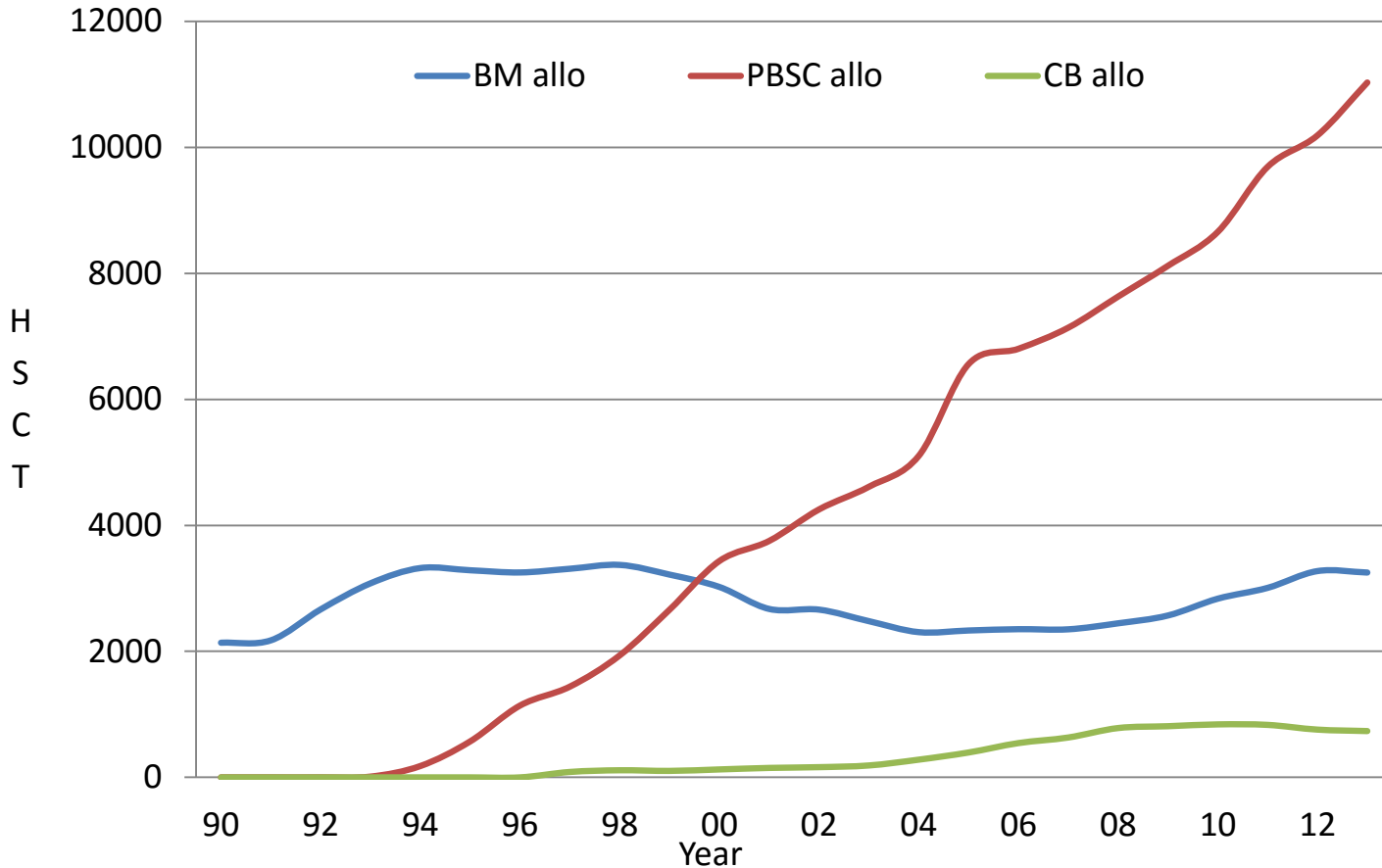
Avrupa 2013 HKHT Etkinliği

Verici Tipi: Tüm Olgular



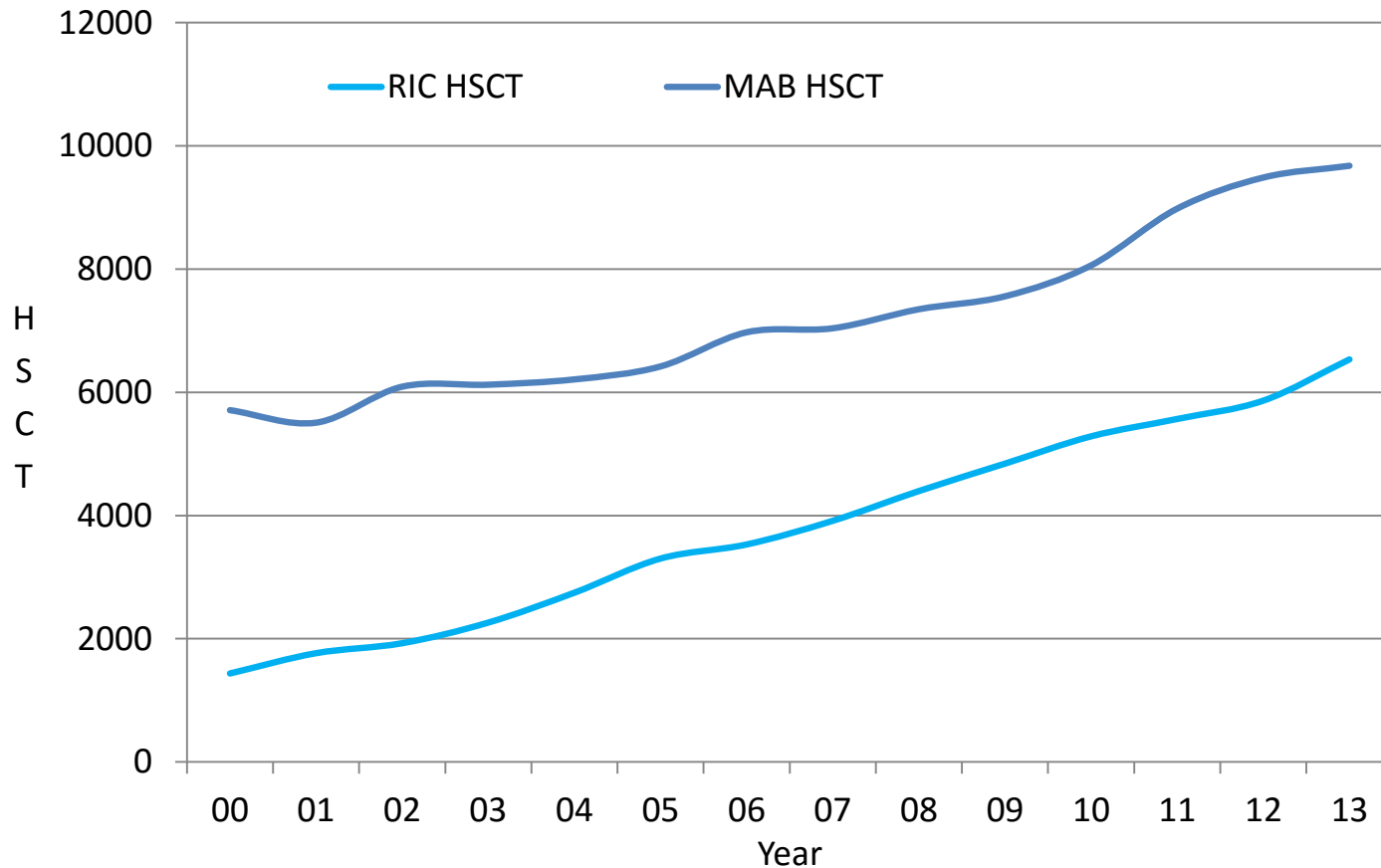
Avrupa 1990-2013 HKHT Etkinliđi

Kök Hücre Kaynađı: 1· HKHT



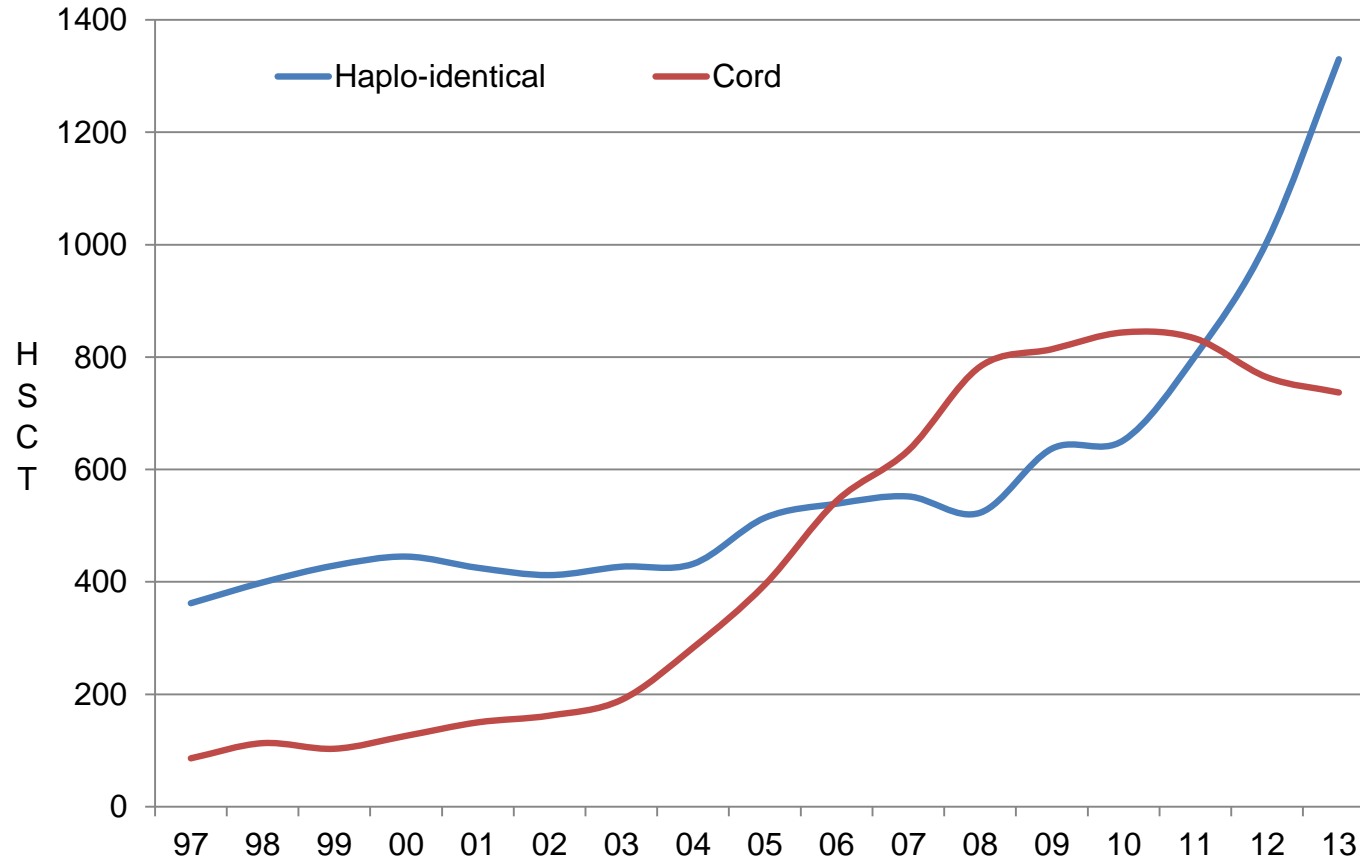
Avrupa 1990-2013 HKHT Etkinliđi

MAB vs RIC: tüm olgular



Avrupa 1997-2013 HKHT Etkinliği

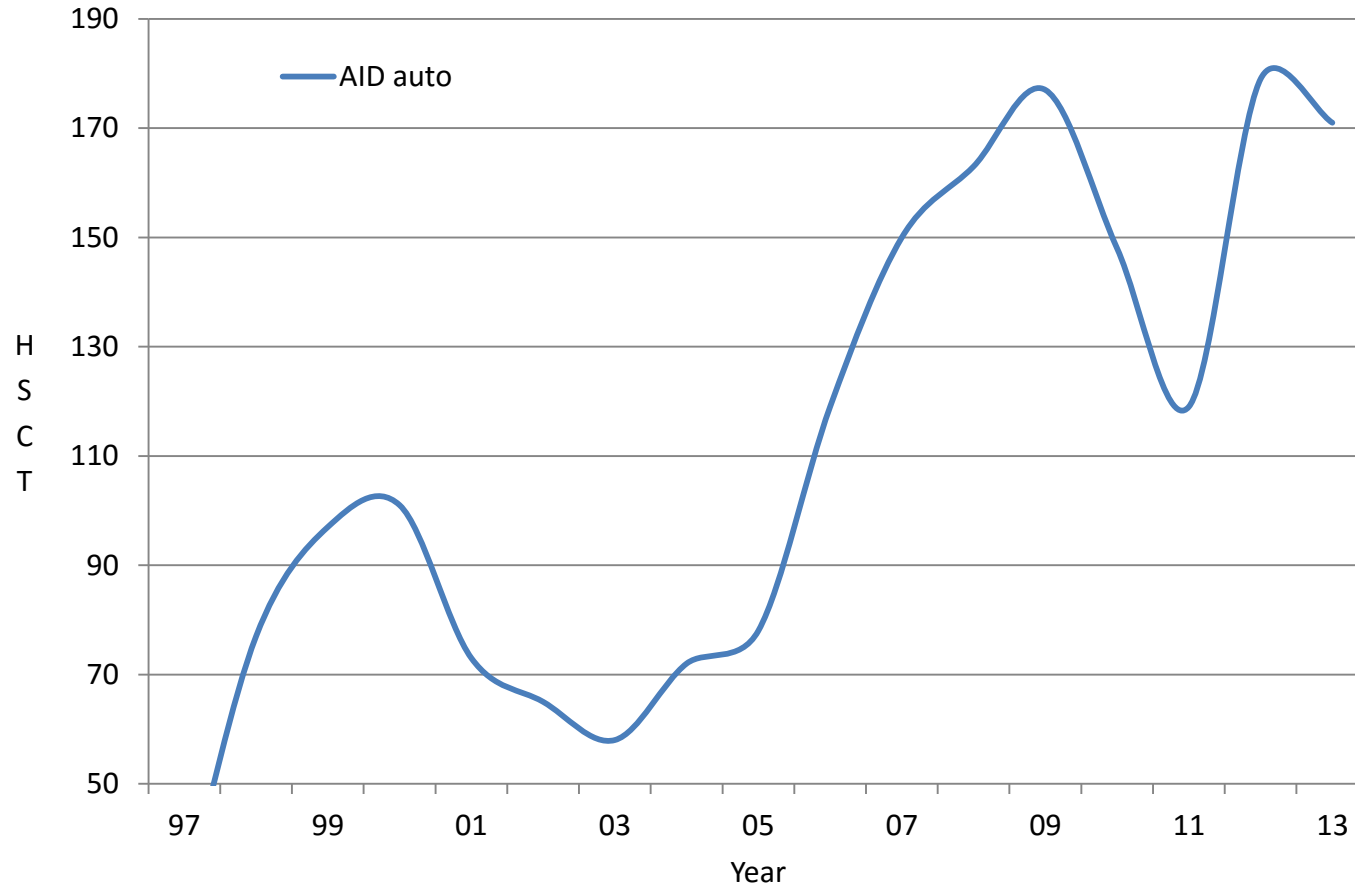
Kord vs haplo-identik 1. HKHT



Passweg et al, BMT (2015), 1–7

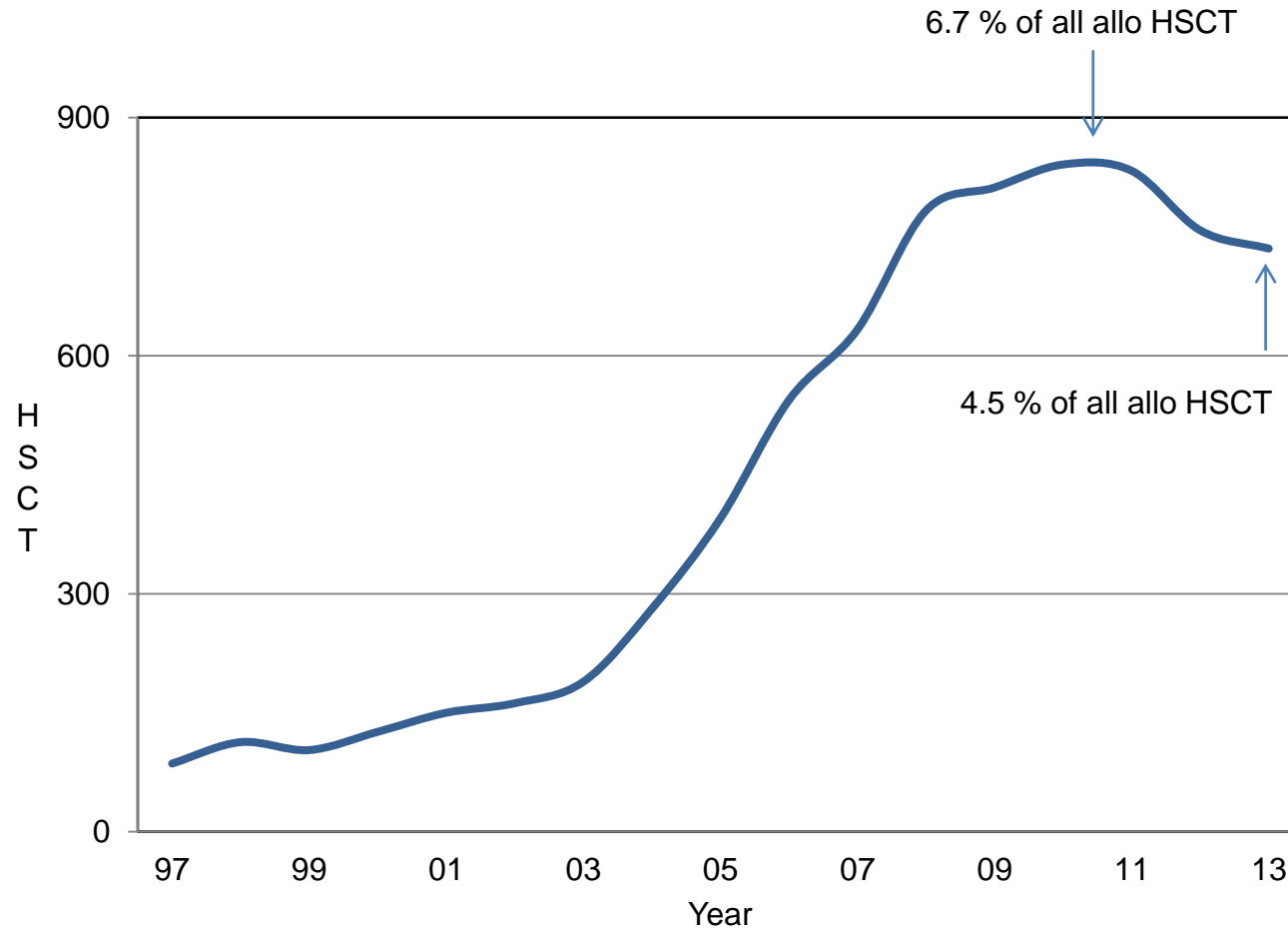
Avrupa 1997-2013 HKHT Etkinliği

Oto Immün Hastalıklar



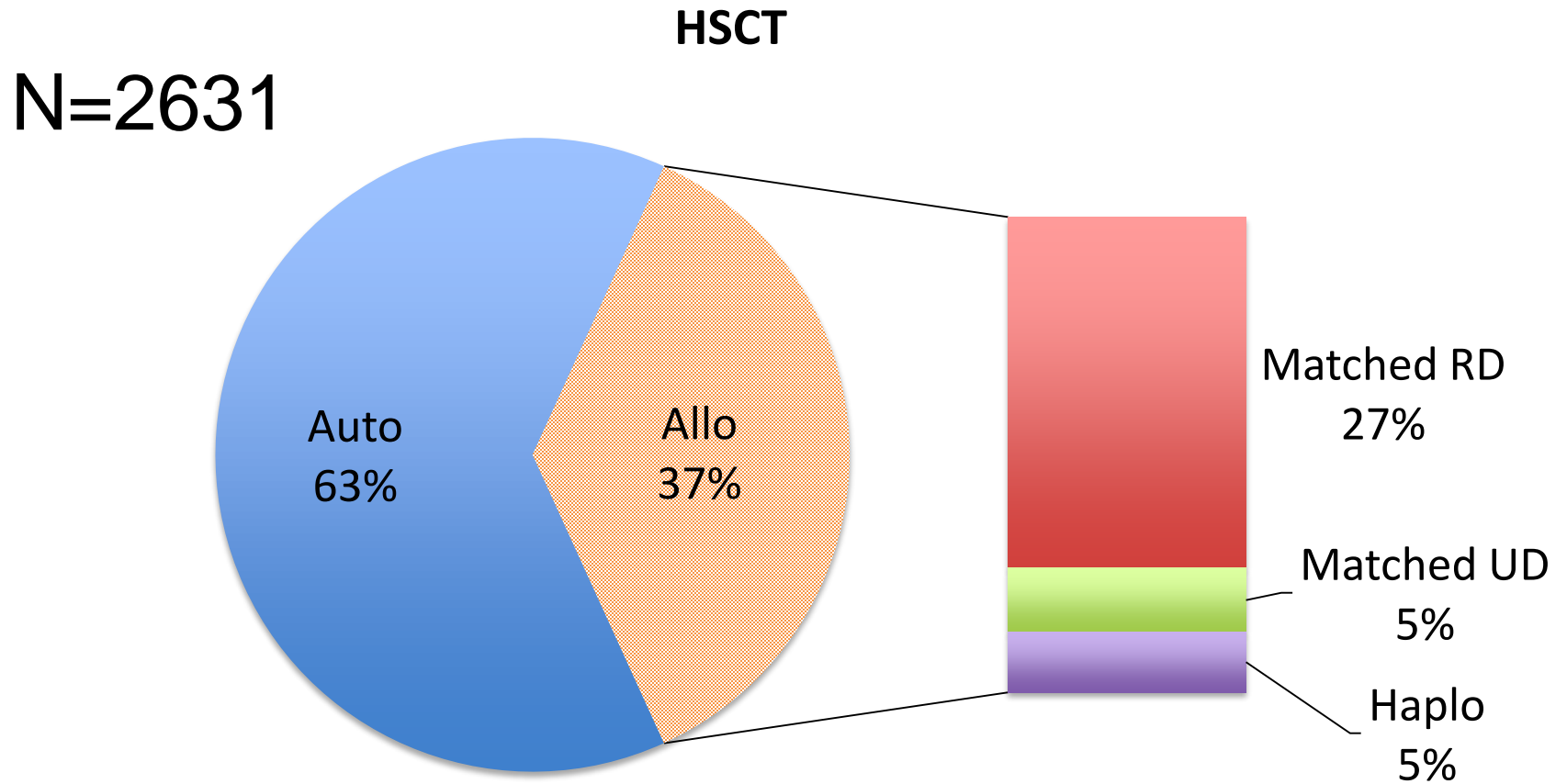
Avrupa 1997-2013 HKHT Etkinliđi

Kordon Kanı HKHT tüm olgular

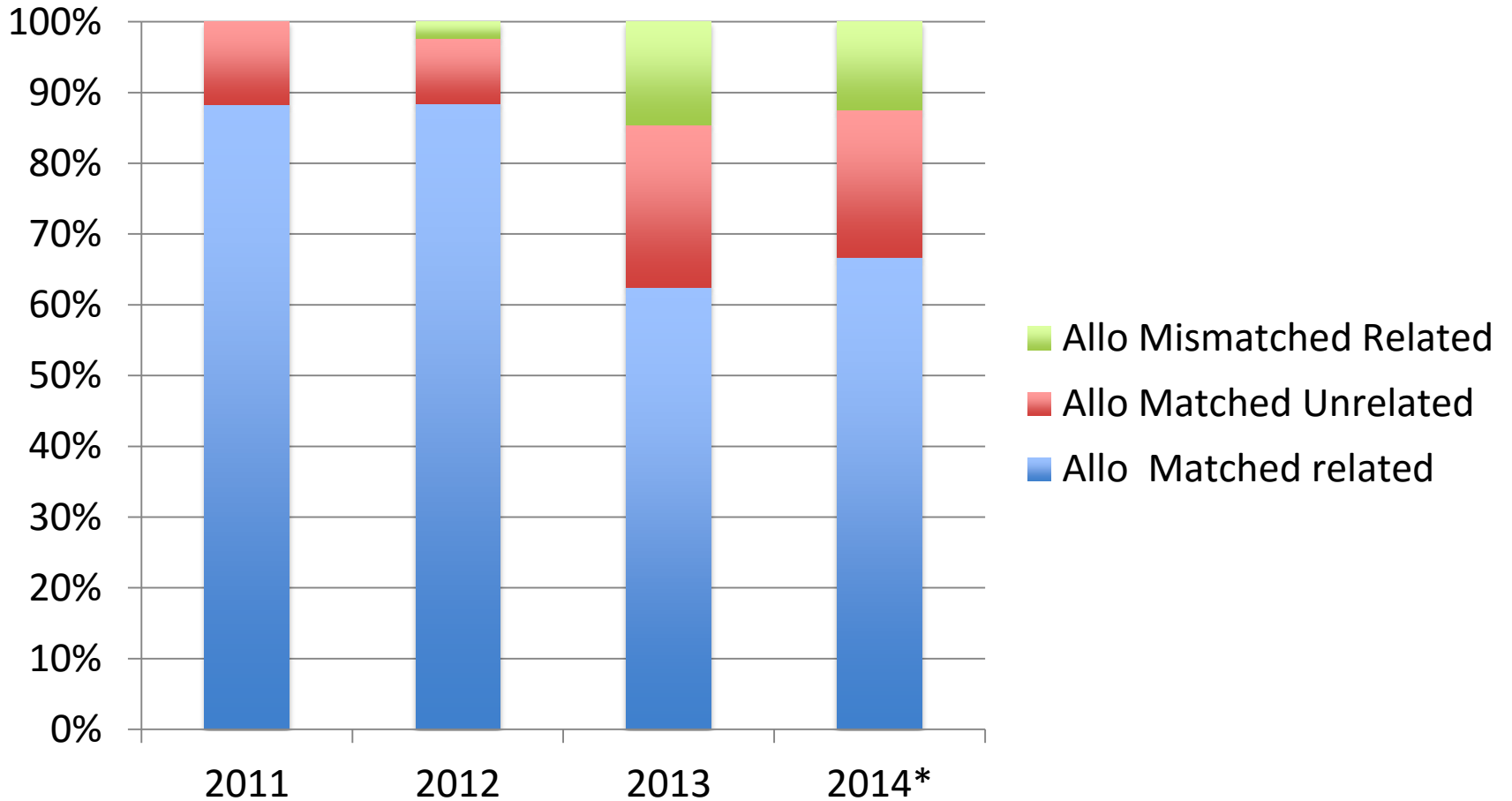


Ulusal Etkinlik: 2014

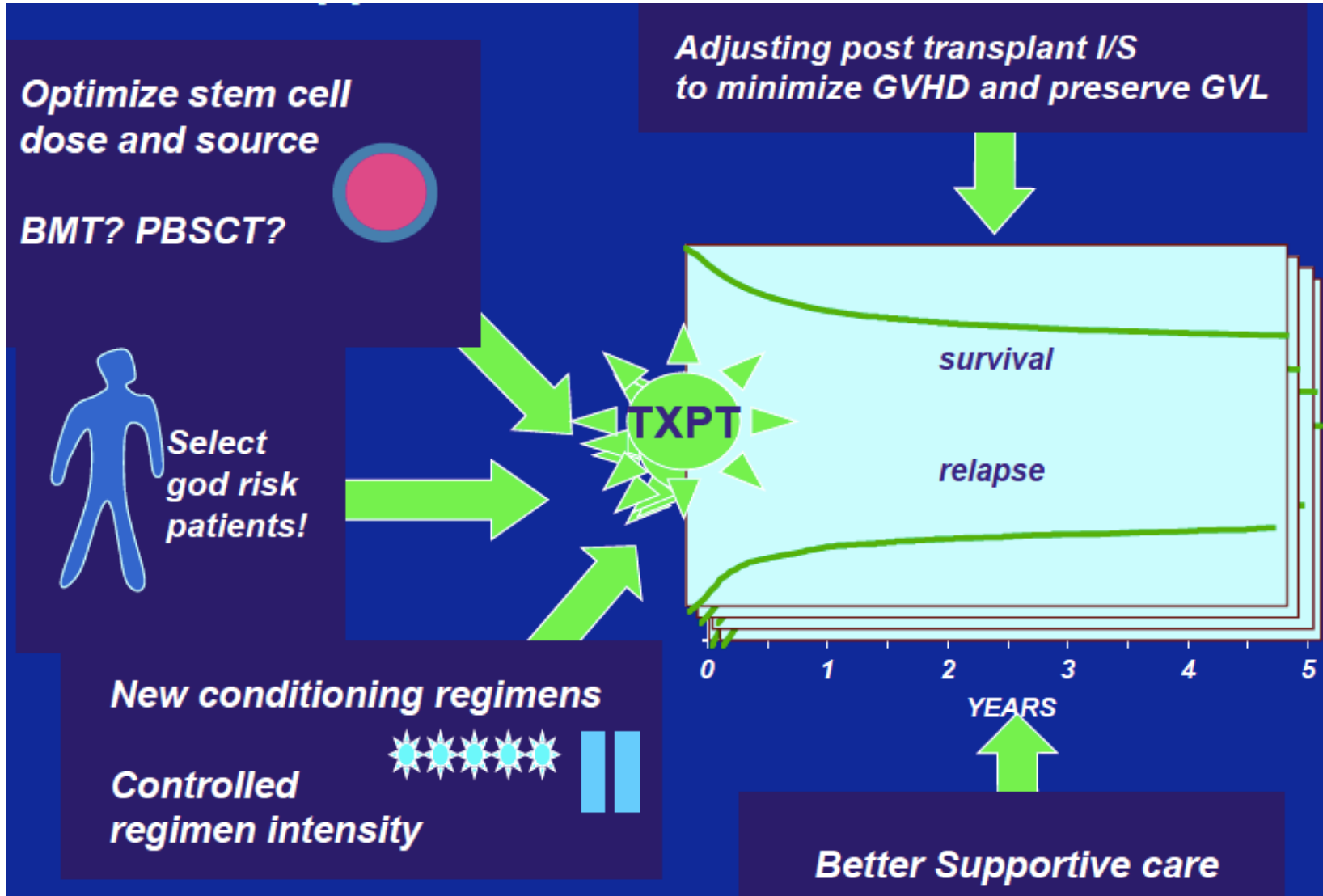
Erişkin Merkezler: 47



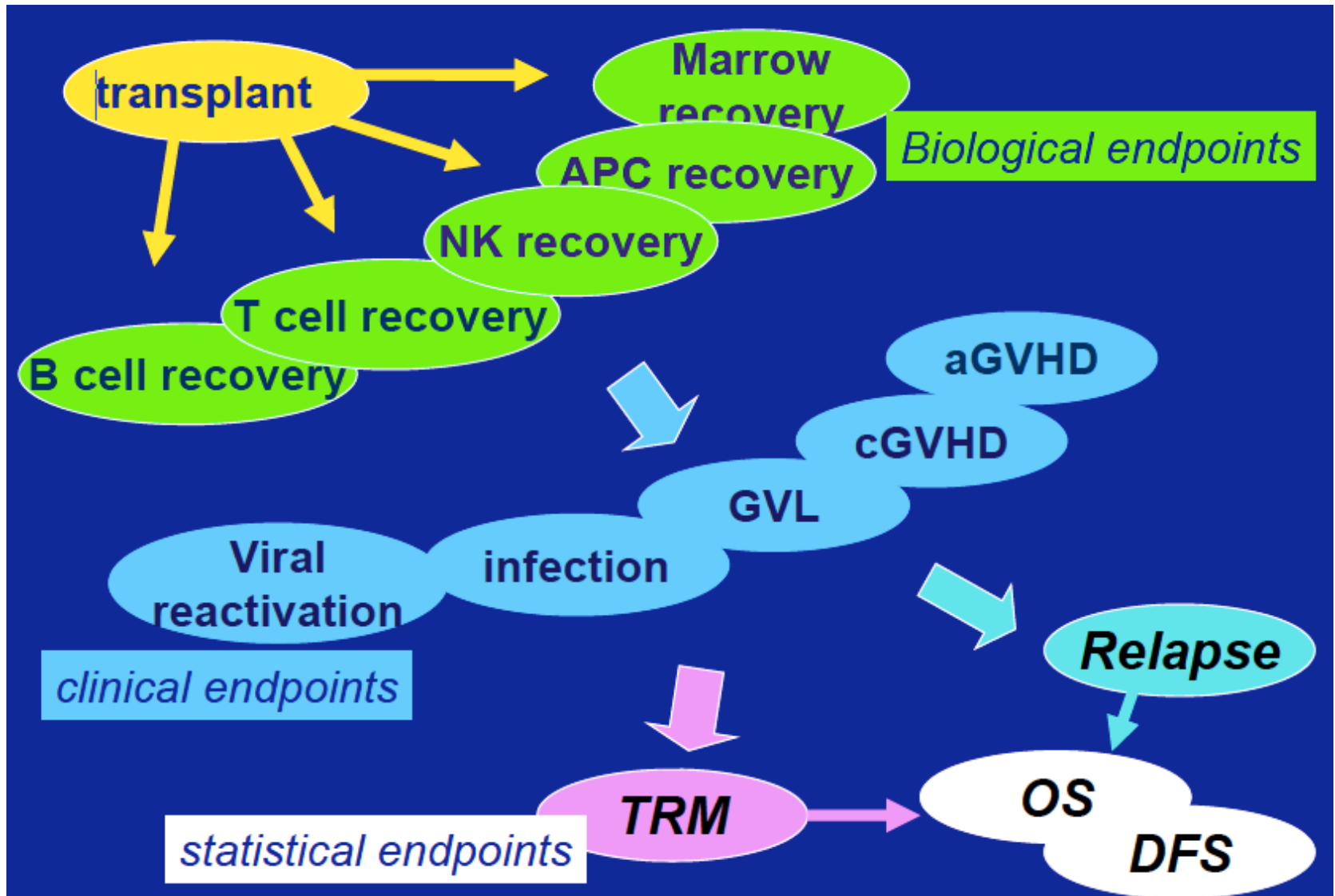
Şişli FNG HHKTU Verici Kullanımı



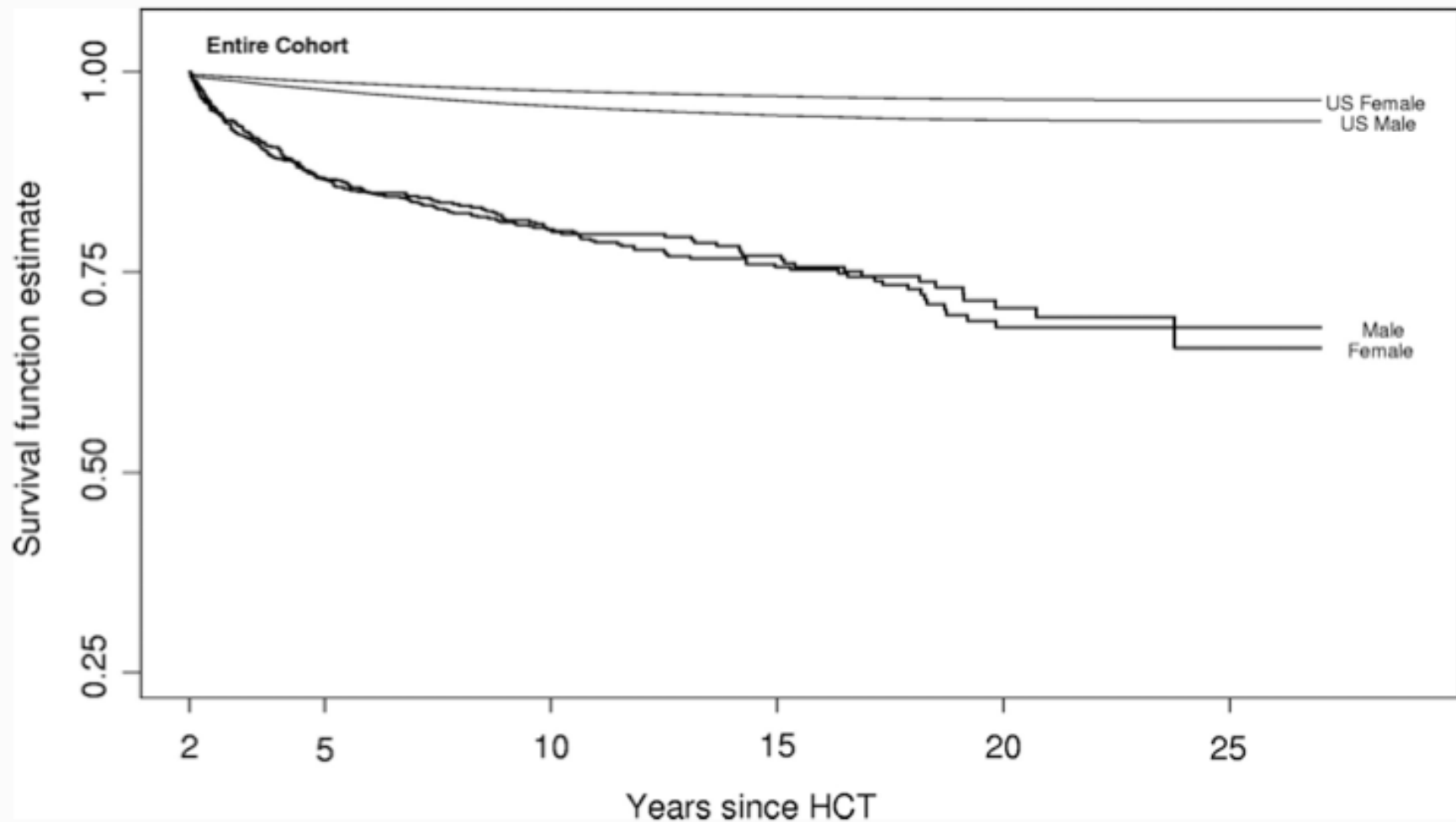
Güncel Başarıda Unsurlar

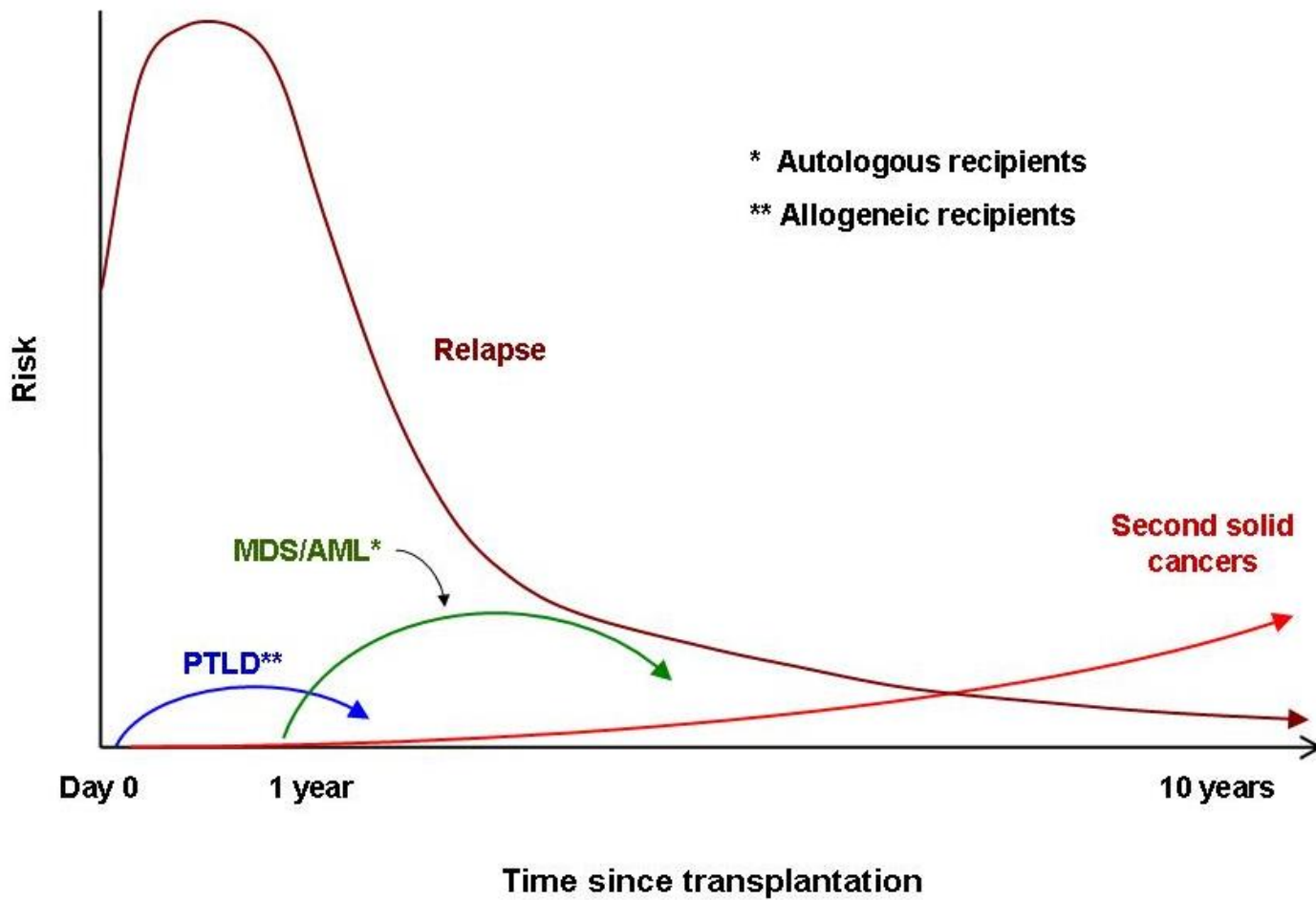


Başarıyı Nasıl Ölçüyoruz?



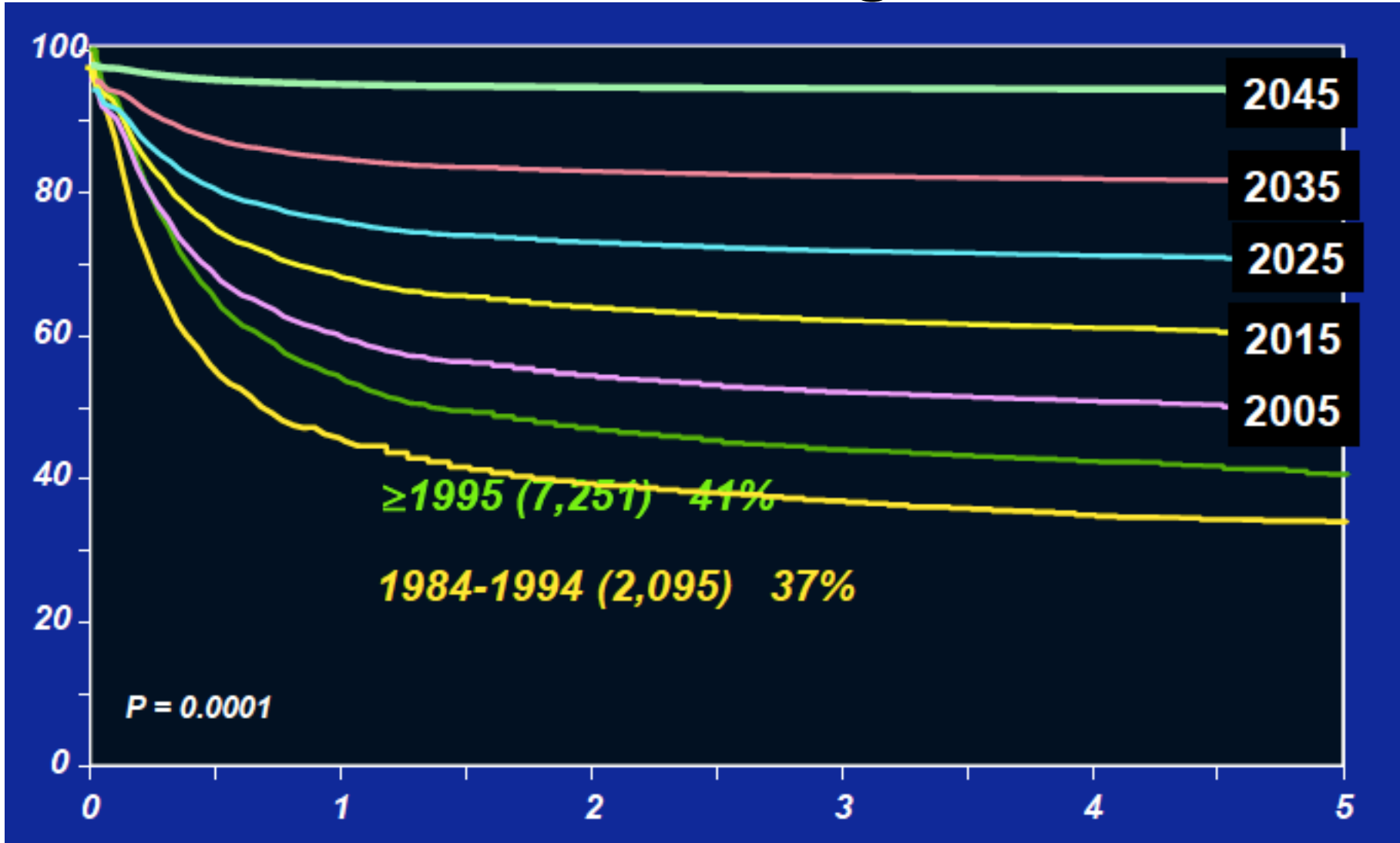
SAĞ KALANLARI, RELAPS GELİŞMESE DE TAKİP EDELİM Mİ?





Başarı Öyküleri: Devamı Gelecek mi?

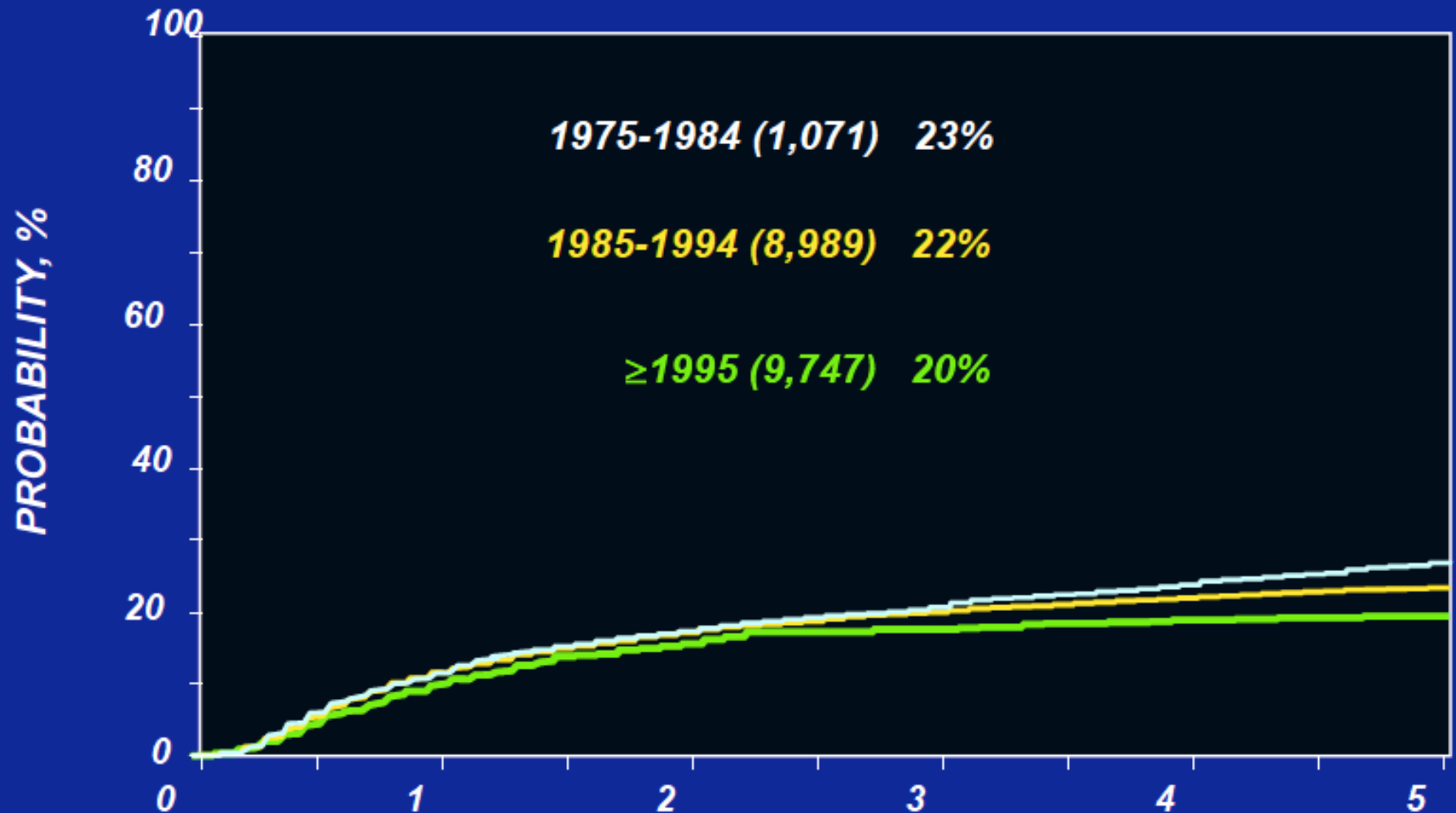
AD Allo HHT: Sağkalım



Başarısızlıklarımız

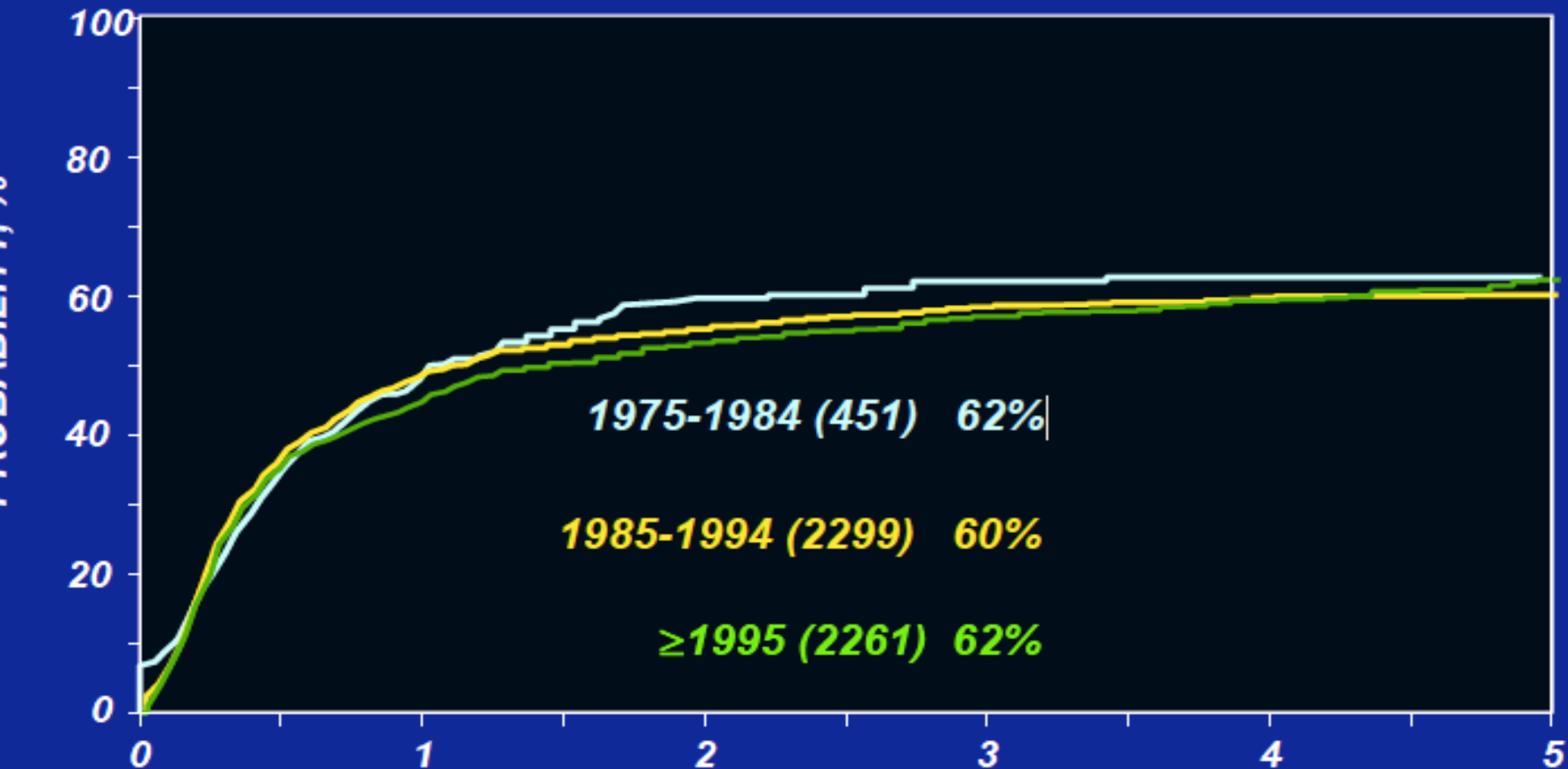
NO CHANGE IN RELAPSE AFTER HLA-IDENTICAL SIBLING
MYELOABLATIVE TRANSPLANTS FOR **EARLY LEUKEMIA***

IBMTR, 1975-2002



Başarısızlıklarımız

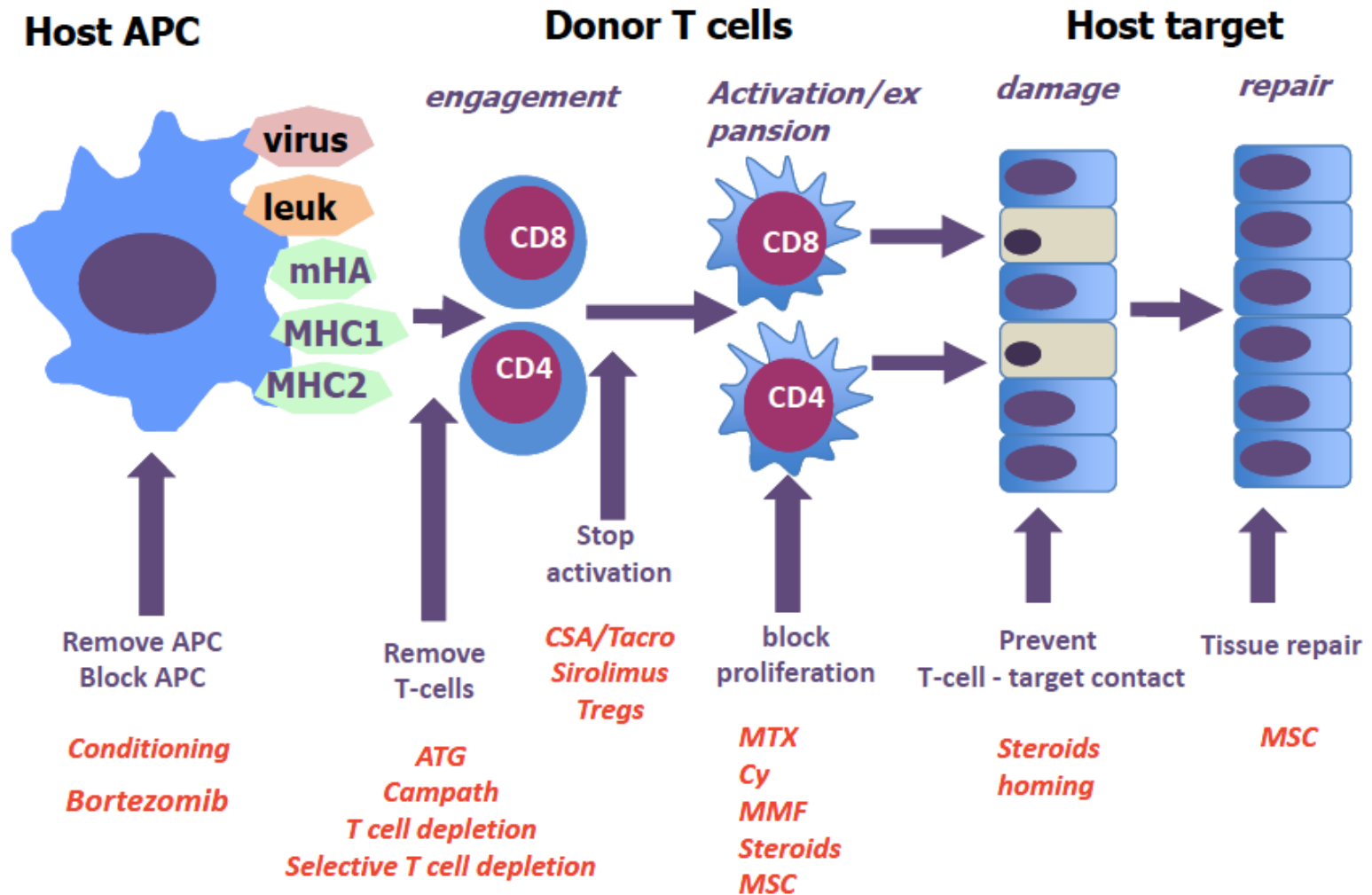
NO CHANGE IN RELAPSE AFTER HLA-IDENTICAL SIBLING
MYELOABLATIVE TRANSPLANTS FOR **ADVANCED LEUKEMIA***
IBMTR, 1975-2002



Başarımızı Sınırlayanlar

- RELAPS
- GVHH
- İNFEKSİYONLAR
- REJİME BAŞLI TOKSİSİTE
- HASTALIK KONTROLU

GVHH Korunma



Hücresel Tedaviye Bakış:2015

Transplant CD34 cells unmanipulated / T cell depleted

engraftment

>90% survival

Relapse

DLI, T cells and NK cells

Infection

Virus specific T cells

Organ toxicity

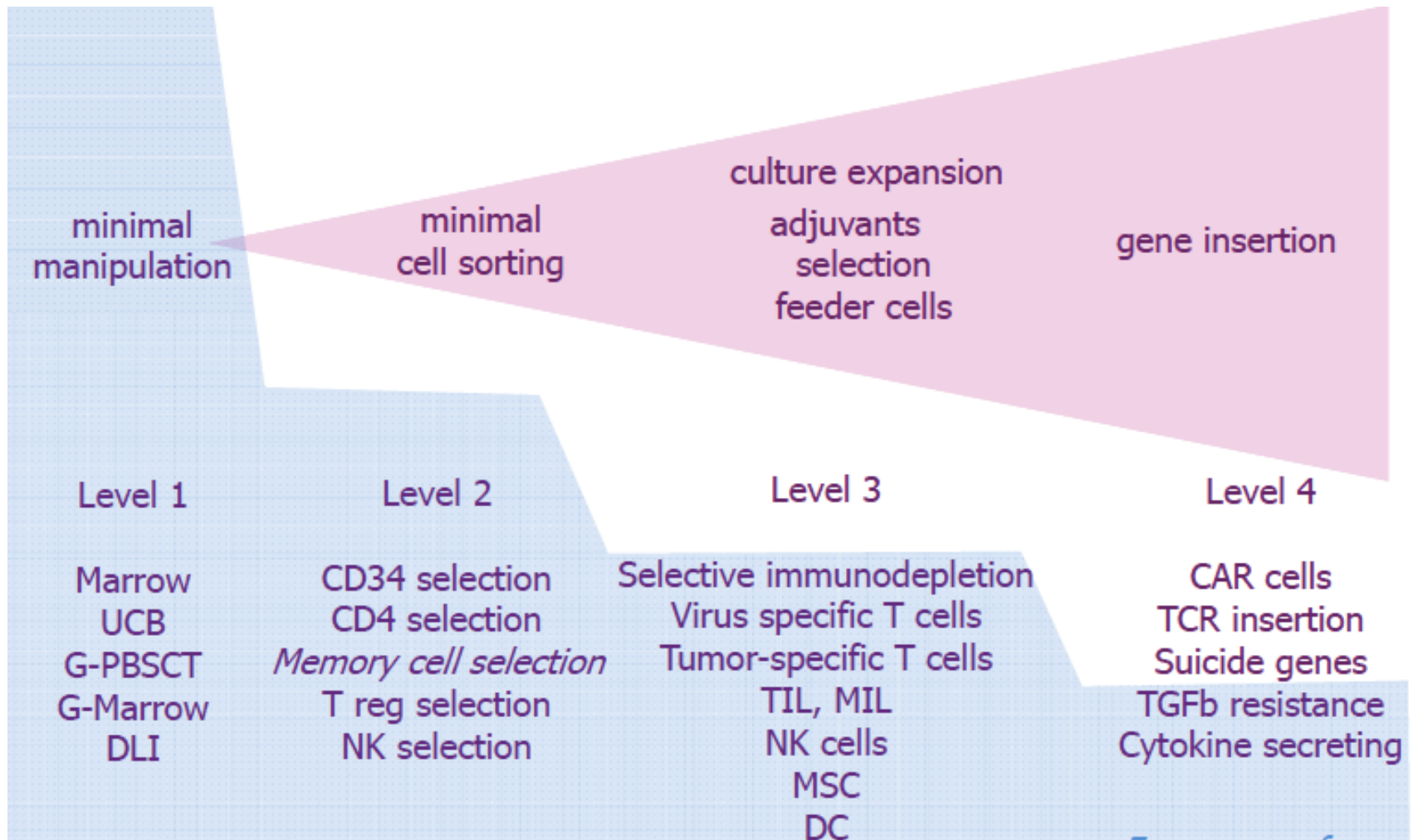
MSC

GVHD

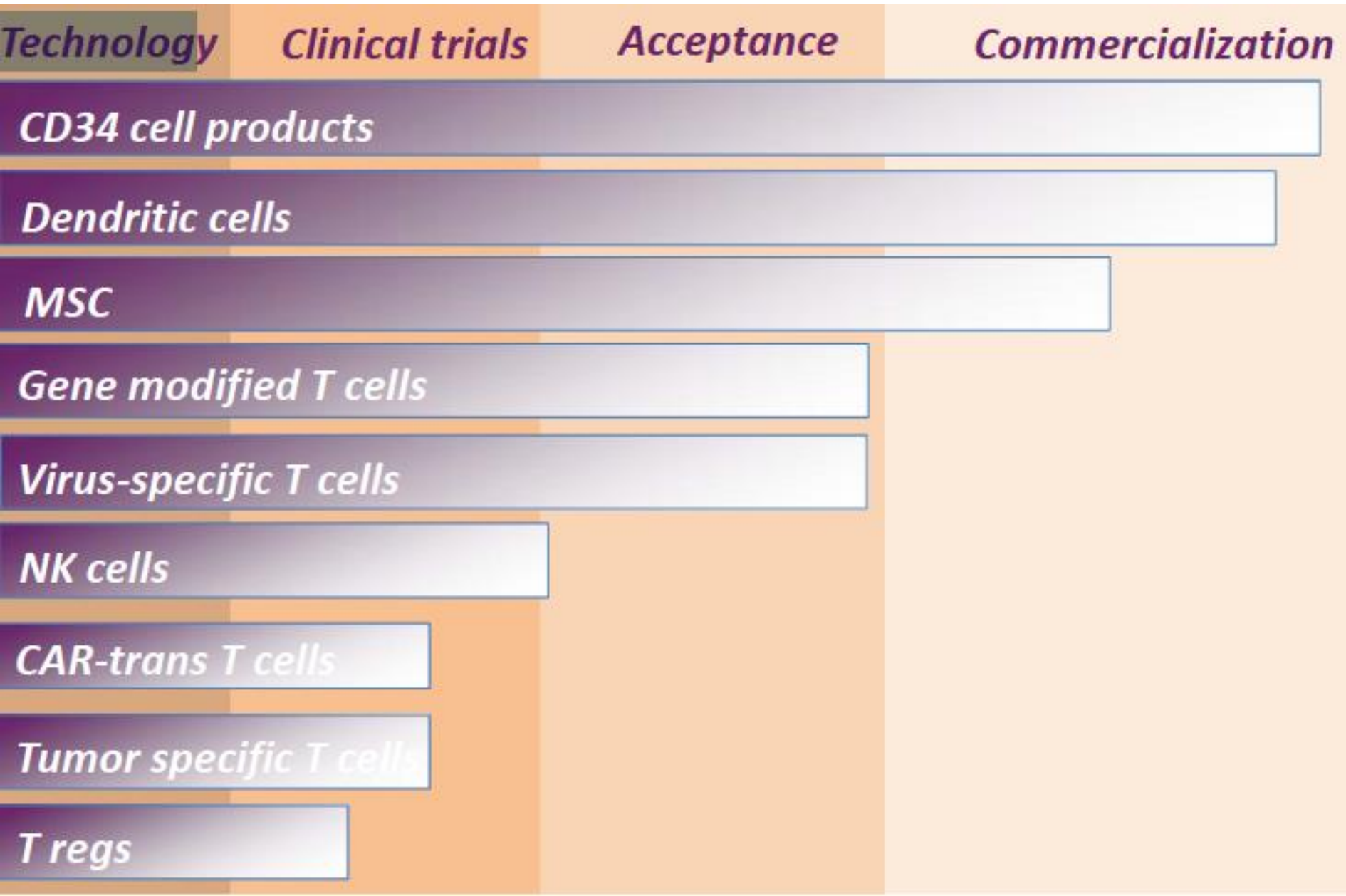
MSC / Tregs

Sources: Allogeneic
Marrow
Blood
Cord blood

Hücresel Tedaviler: Basitten Karmaşığa



Hücresel Tedaviler: Uygulamada Neredeyiz?



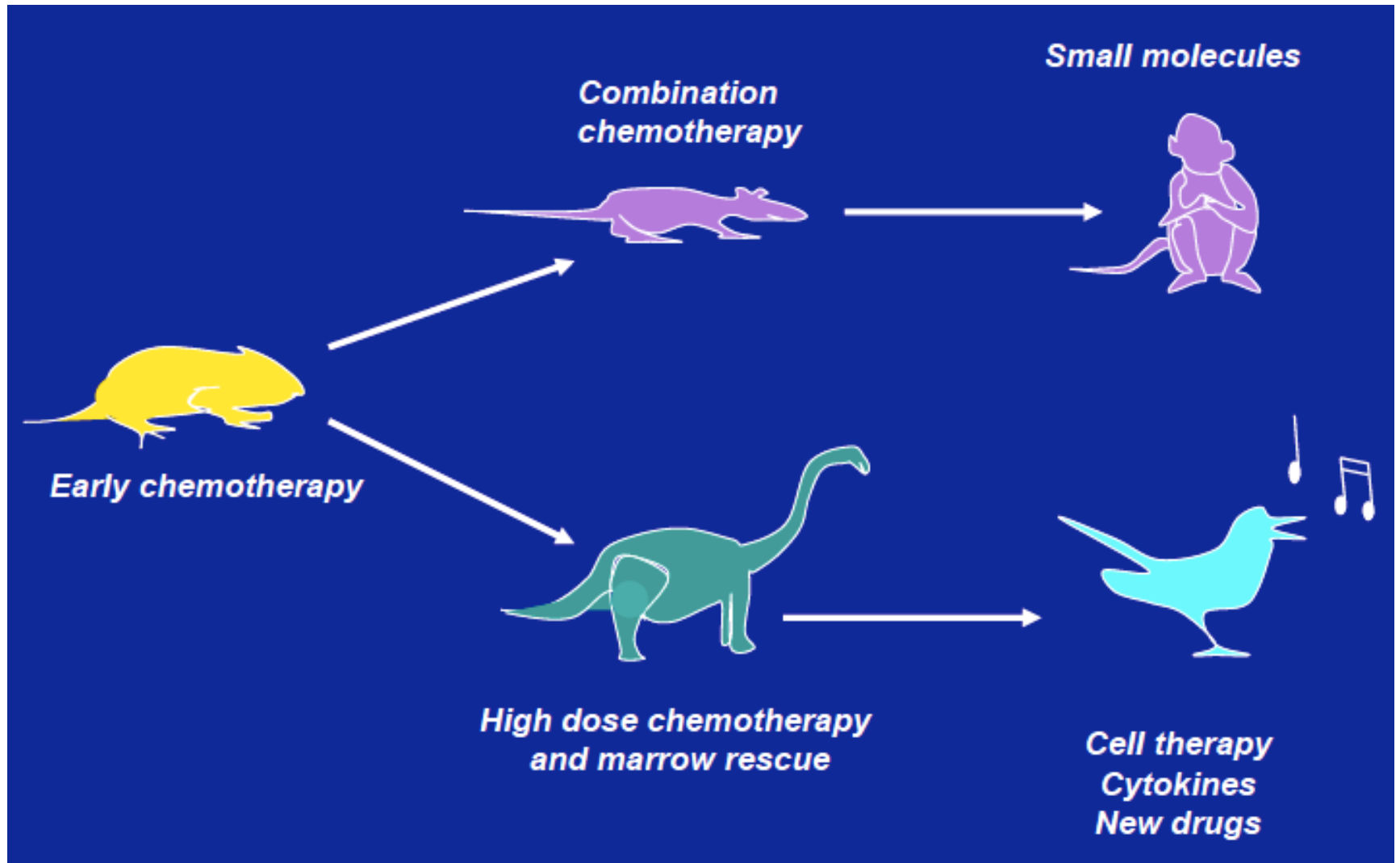
Hedeflerimiz

- Herkese trasplant yapabilelim
 - Donör havuzu arttıralım
 - Yaşlı hastalara daha güvenli bir şekilde işlem yapabilelelim
- Tüm olgularda nakil öncesi hastalık kontrolü sağlayalım
 - Hedeflenmiş tedaviler
 - Gelişmiş hazırlık rejimleri
 - Monoklonal antikorlar
 - Radyoimmunoterapi
 - Yolak inhibitörleri

Herkese Verici Bulalım

- Kordon kanı bankaları
 - Ekspansiyon
 - Ünit sayısında artma
- Haploidentik nakiller
 - Post infüzyon endoksan ÇAĞI
- Sağlığa erişim/geri ödeme
 - Sosyoekonomik durum
 - Transplant merkezi sayısı
 - Yetişmiş insan gücü

Evrim



Sonuç/Tartışma

- Kanser biyolojisi
 - Yolak inhibitörleri
 - İmmun sistemin toparlanması; imatinib öğretileri
- Epigenetik (NGS, WGS)
 - Farmakogenetik
 - Tümör Genetiği
- İmmun yeniden yapılanma
 - Otolog
 - Allojeneik
- Hücresel tedaviler
- Multidisipliner yaklaşım