

Principles of Triage in HSCT

Hungarian model

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What is Triage?

- Triage originated in World War I doctors treating the battlefield wounded at the aid stations behind the front. They divided victims into three categories:
 - Those who **are likely to live**, regardless of what care they receive;
 - Those who **are likely to die**, regardless of what care they receive;
 - Those for whom immediate care might make a positive difference in outcome

What is Triage?

- The term comes from the French verb *trier*, meaning to separate or select.
- The sorting of and allocation of treatment to patients and especially battle and disaster victims according to **a system of priorities designed to maximize the number of survivors**

What is Triage?

- The assigning of priority order to projects on the basis of where funds and other **resources** can be best used, are most needed, or are most likely to achieve success

Principles of Triage in a Transplant Program

Two kinds of interest

- Take care of the interest of the **patient** (Salus aegroti suprema lex esto)
- Take care of the interest of the (brand new) transplant **program**
(*Bad decisions consequently repetitive bad transplant outcomes result in the collapse of a newly established program*)

Make a (central) transplant board

- Helps balanced and fair decision making
- Helps sharing responsibility
 - Helps avoiding wrong decision because of *emotional, financial* or *political* pressure

Make a (central) waiting list

- Helps to avoid unfair availability for the transplantation
- Will be aware of all patients in need and can start an appropriate triage.

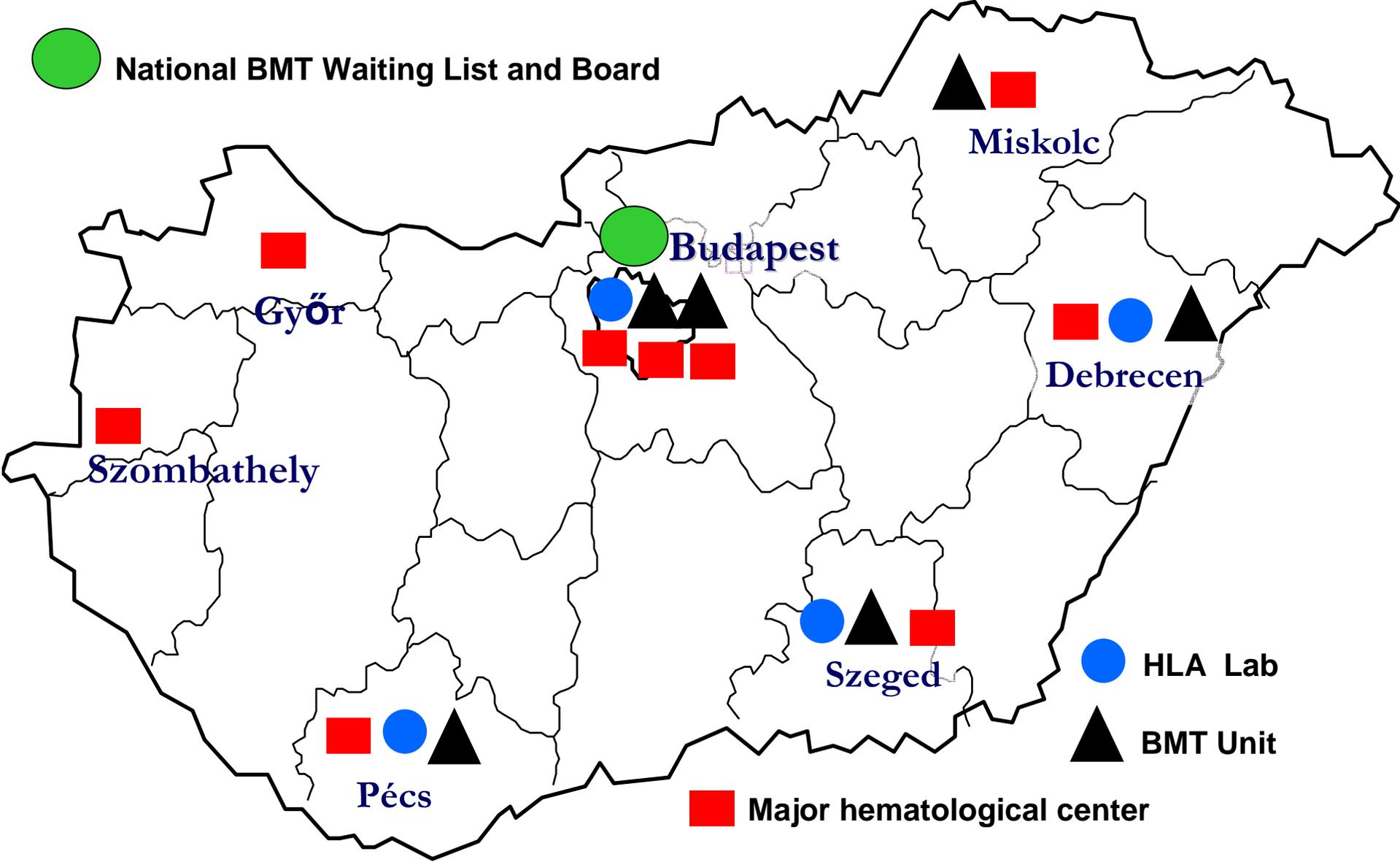
Find the appropriate patient **in time**

- Ensure the perfect hematological background
 - Train haematologist regarding the appropriate indications
 - Try to manage appropriate timing (not too early, and no too late phase of the disease)

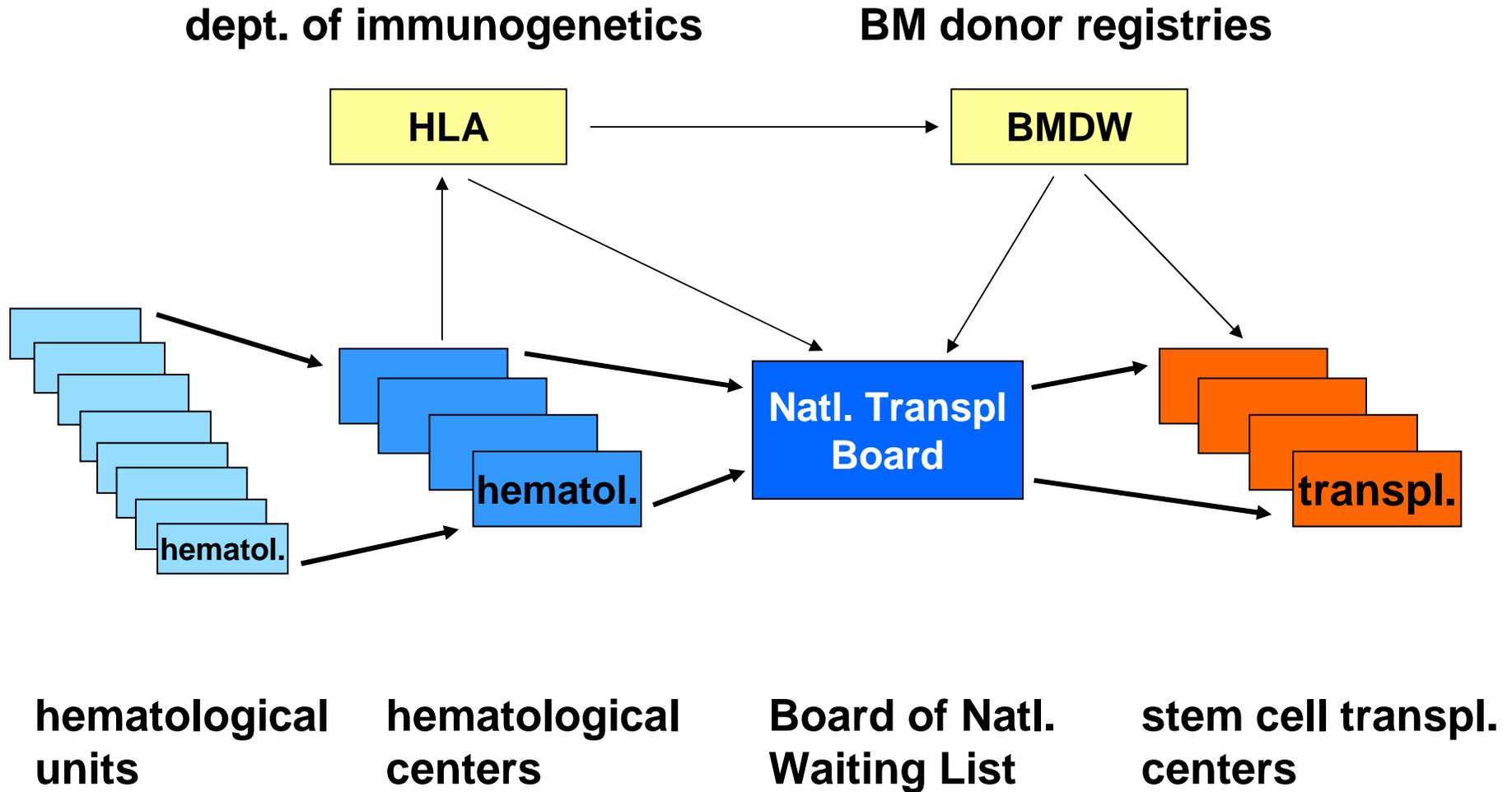
Fast information exchange

- The decision making board needs up to date information on the patients on the list to make appropriate decisions.
- Late decisions make upside down the principles of triage.

DISTRIBUTION OF STEM CELL TRANSPLANTATION UNITS, HLA LABS AND MAJOR HEMATOLOGICAL CENTERS IN HUNGARY



NATIONAL STEM CELL TRANSPLANTATION PROGRAM AND ALGORITHM IN HUNGARY

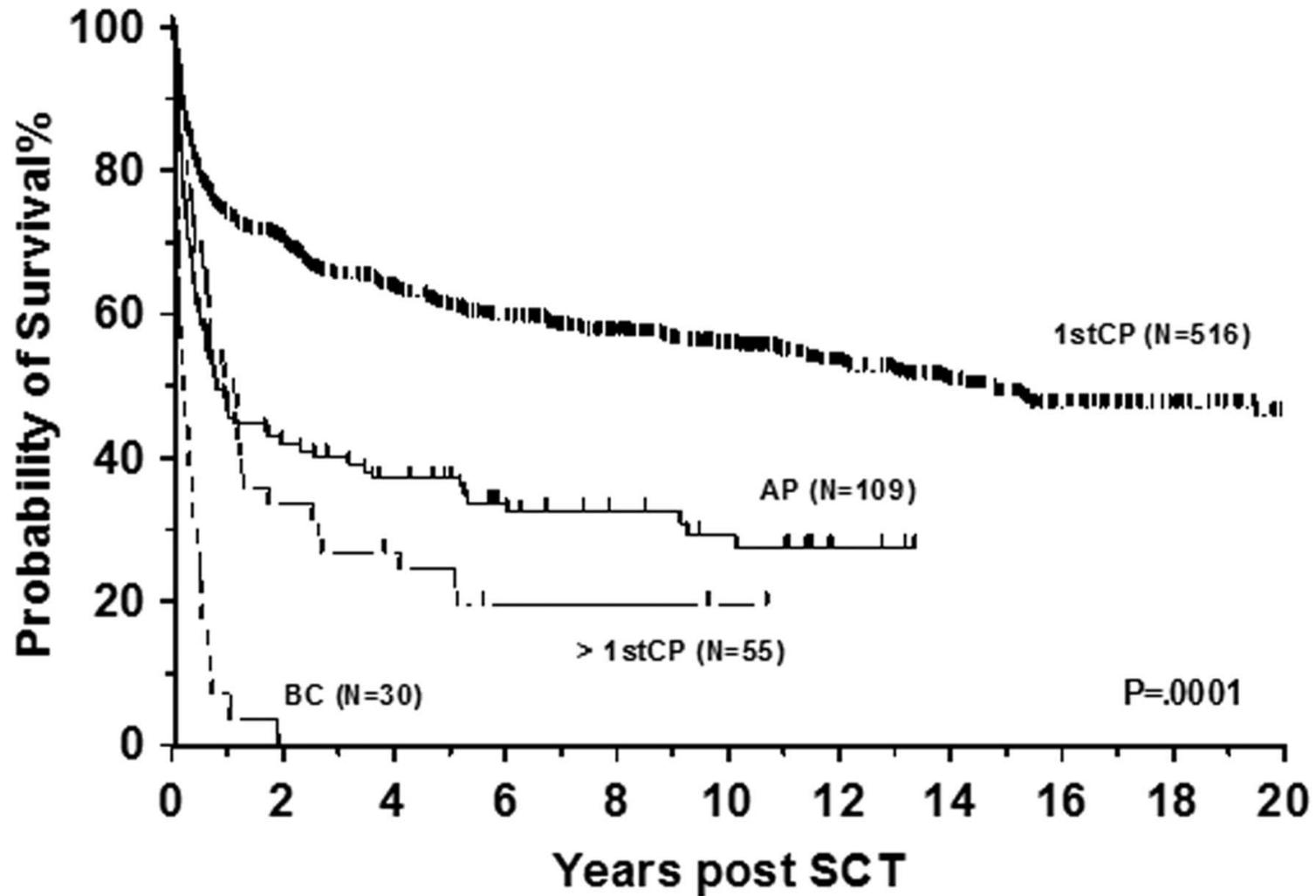


To ensure good results and avoid spending money in vain

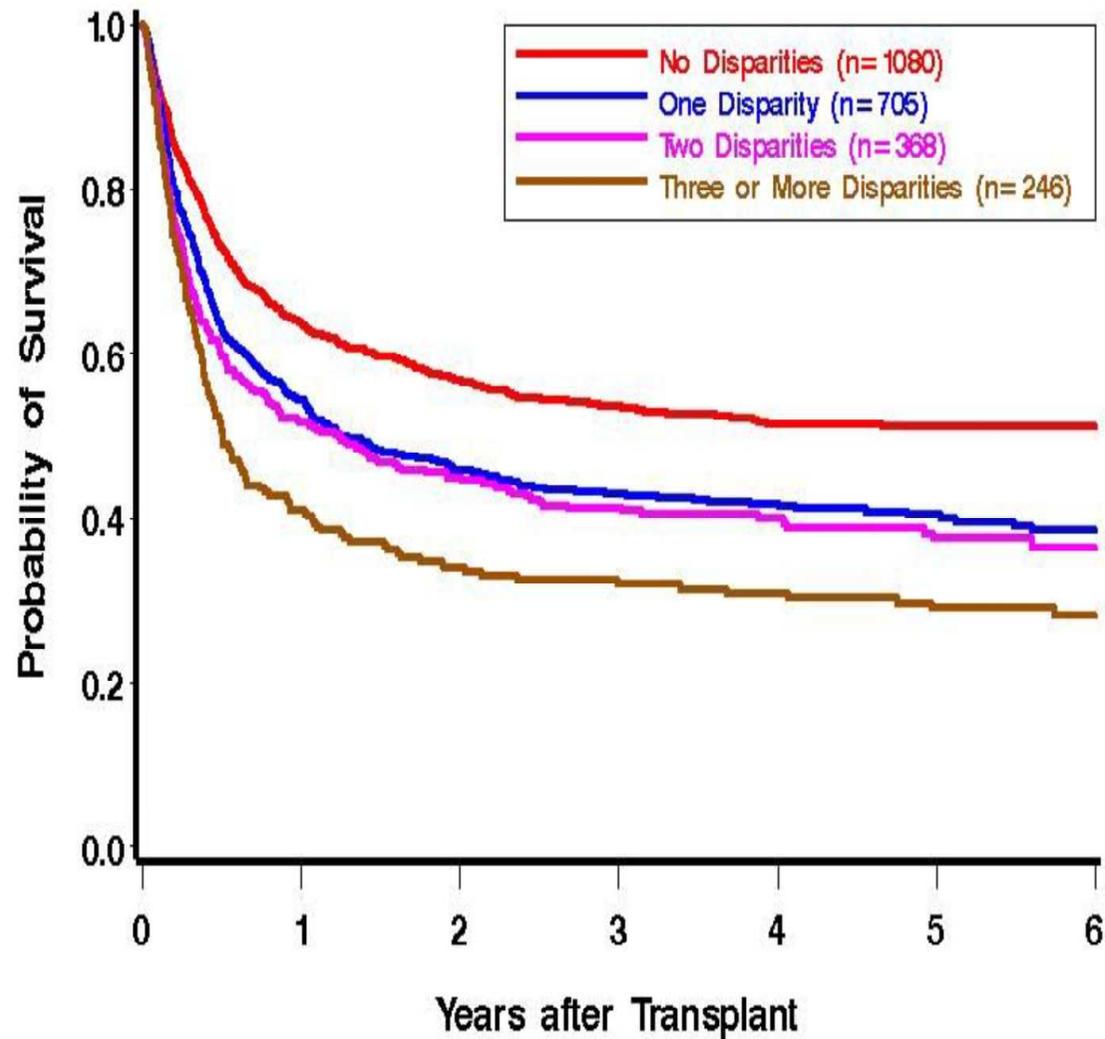
(Considering the interest of the transplant program)

- Start with patients with probable good outcome
 - Who are in complete remission
 - Who are in good performance status
 - Who have a very well matched donor (eg. Sibling)
 - *Who are NOT in very advanced or end stage disease*

Allogeneic transplantation in CML
Outcome by disease phase: Imperial College 1981-2010



Role of HLA allele mismatches in unrelated HSCT



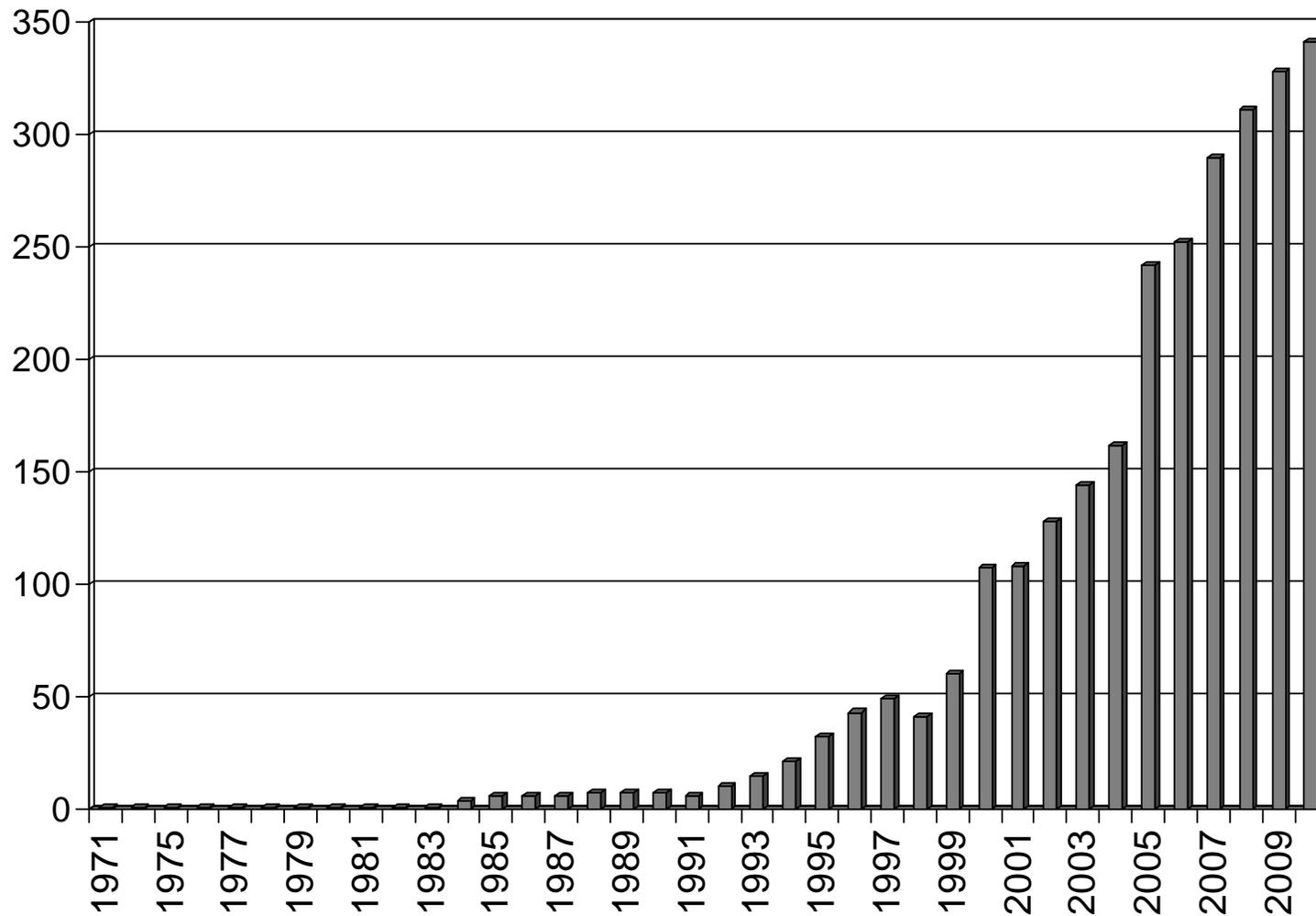
Petersdorf et al.

Autologus SCT results in Agressive NHL according to the phase of disease

Disease state At transplant	100 day mortality (%)	5 year Deases Free survival (%)
First relapse	3	45-50
Second relapse	5-8	30-35
Refractory disease	10-20	5-10

Haematopoietic Stem Cell Transplantation in Hungary

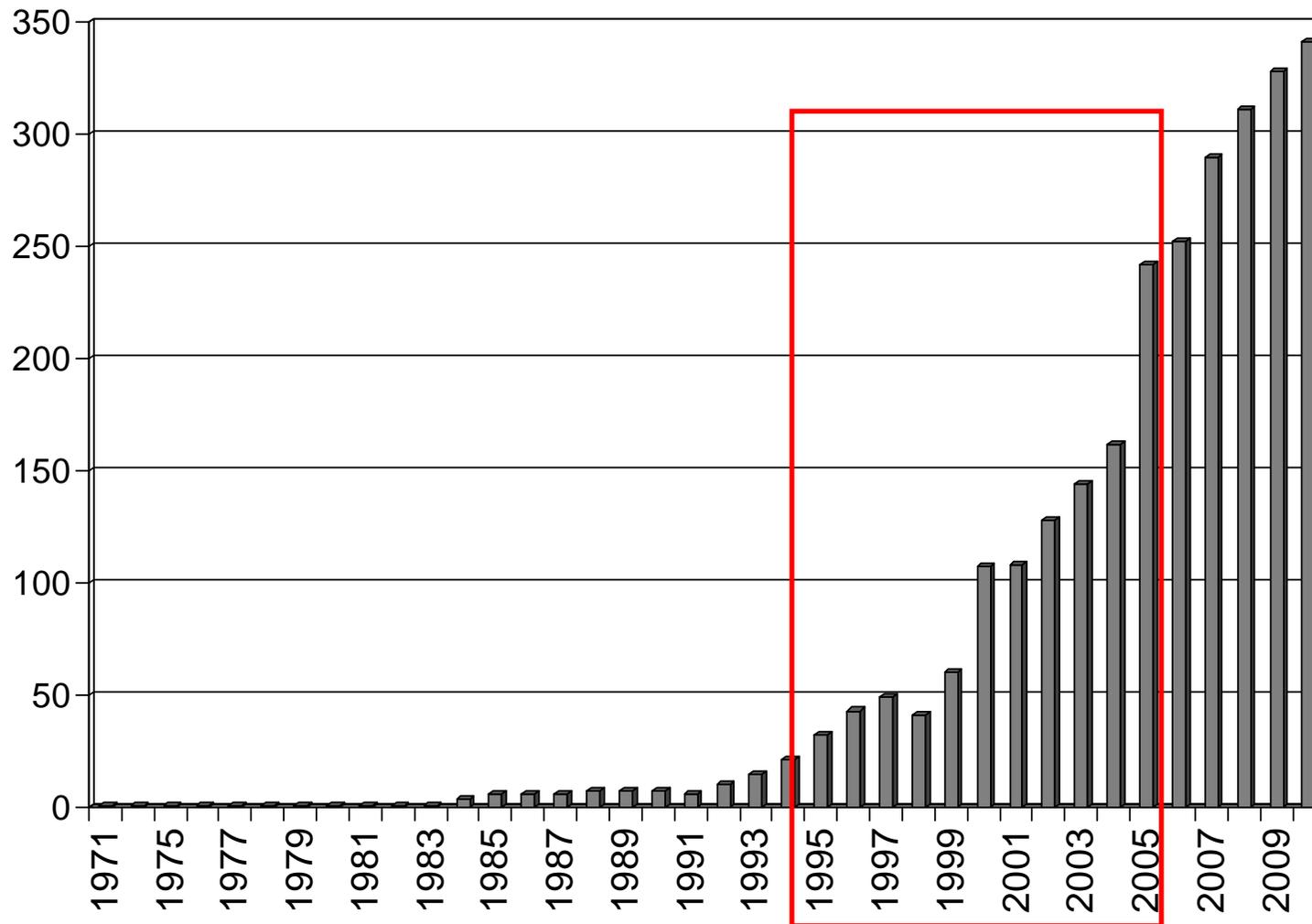
Number/10 milliion inhabitants



years

Haematopoietic Stem Cell Transplantation in Hungary

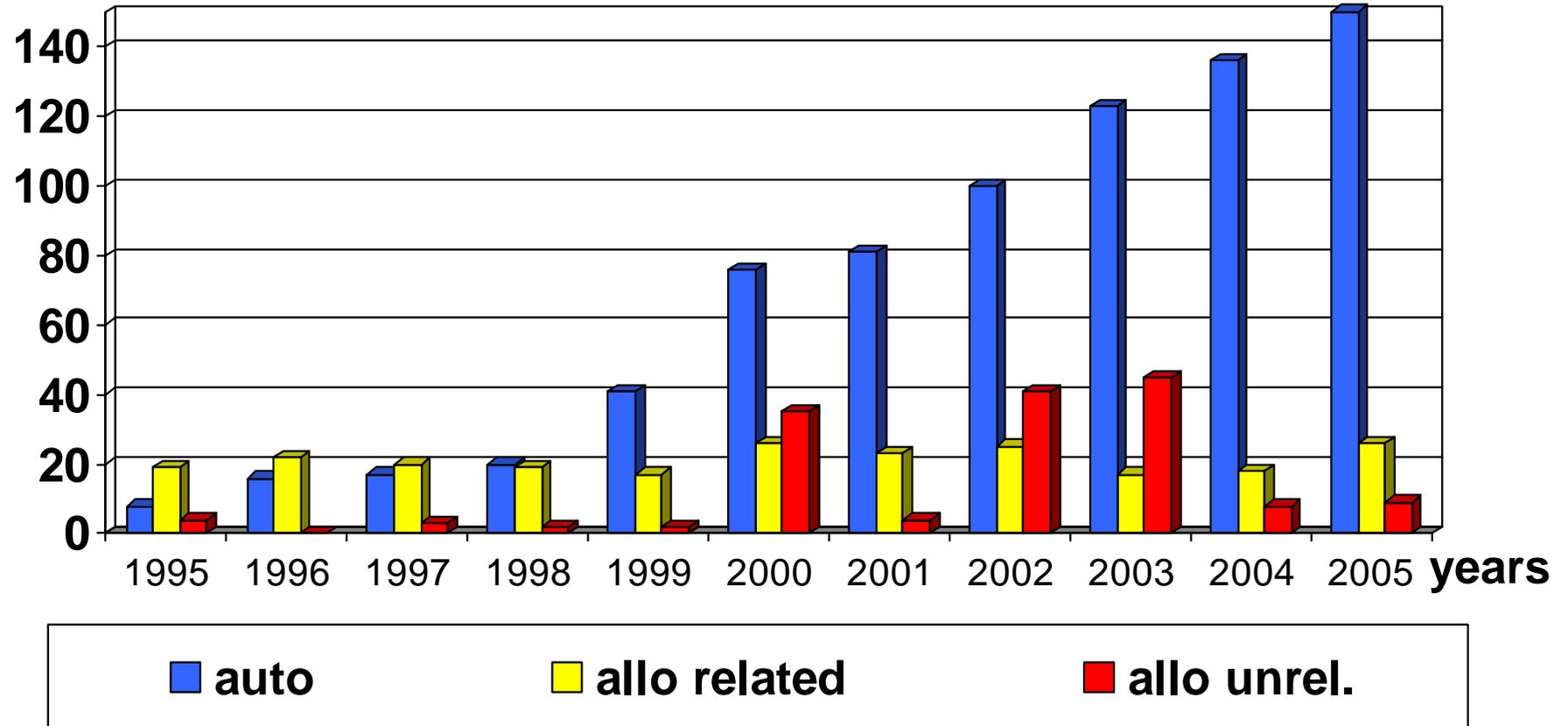
Number/10 milliion inhabitants



years

ADULT AUTO AND ALLO TRANSPLANTATION ACTIVITY FROM 1995-2005 IN HUNGARY

number



STEM CELL TRANSPLANTATION ACTIVITY IN HUNGARY

1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

<i>AML</i>	6	6	4	2	7	8	9	18	10	8	7
<i>ALL</i>	3	0	1	1	2	3	2	3	3	6	2
<i>CML</i>	15	14	11	14	8	35	9	11	3	8	5
<i>MDS</i>	3	6	10	1	1	2	2	3	6	3	3
<i>CLL</i>	0	1	1	0	1	0	4	3	2	4	4
<i>Myeloma</i>	1	3	4	8	12	27	39	32	46	42	83
<i>HD</i>	0	0	0	3	15	16	11	44	33	30	53
<i>NHL</i>	2	7	5	9	11	29	31	48	80	55	75
<i>SAA</i>	1	1	2	3	3	3	1	2	2	3	3

A transplant program is a teamwork

