

## Activity Survey 2016

### Patient and Transplant Numbers

Teams : 679	Participating countries: 49		
	Allogeneic	Autologous	Total
<b>1st Allo /auto HSCT</b>	<b>16 507</b>	<b>22 806</b>	<b>39 313</b>
Re/Additional transplant	1 134	3 189	4 323
<b>Total</b>	<b>17 641</b>	<b>25995</b>	<b>43 636</b>
<b>Myeloablative HSCT</b>	<b>61%</b>		
Main Indications 1st HSCT			
Myeloid malignancies	9 190	357	9 547
Lymphoid malignancies	5 037	20 581	25 618
Bone marrow failure	894	5	899
Solid tumour	33	1 483	1 516
Non-malignant dis. (excl. BMF)	1 193	367	1 560
Other			
Myeloid malignancies			
AML 1 <sup>st</sup> . CR	3 567	295	3 862
not 1 <sup>st</sup> . CR	1 780	54	1 834
AML therapy related	268	3	271
AML from MDS/MPN	666	2	668
CML 1 <sup>st</sup> . cP	173	1	174
not 1 <sup>st</sup> . cP	211	0	211
MDS or MD/MPN, MPN	2 525	2	2 527
Lymphoid neoplasia			
ALL 1 <sup>st</sup> . CR	1 638	80	1 718
not 1 <sup>st</sup> . CR	1 013	10	1 023
CLL	275	17	292
Plasma cell disorders	463	11 931	12 394
Hodgkin lymphoma	390	2 045	2 435
Non-Hodgkin lymphoma	1 258	6 498	7 756
Solid tumors			
Neuroblastoma	20	479	499
Soft tissue sarcoma/Ewing	6	190	196
Germ cell tumor	1	399	400
Breast cancer	0	21	21
Other solid tumor	6	394	400
Non malignant disorders			
Bone marrow failure - SAA	642	5	647
Bone marrow failure - other	252	0	252
Thalassemia	329	6	335
Sickle cell disease	137	1	138
Primary immune deficiency	550	5	555
Inherited disorder of metabolism	150	4	154
Auto immune disorder	27	351	378
Others	160	13	173

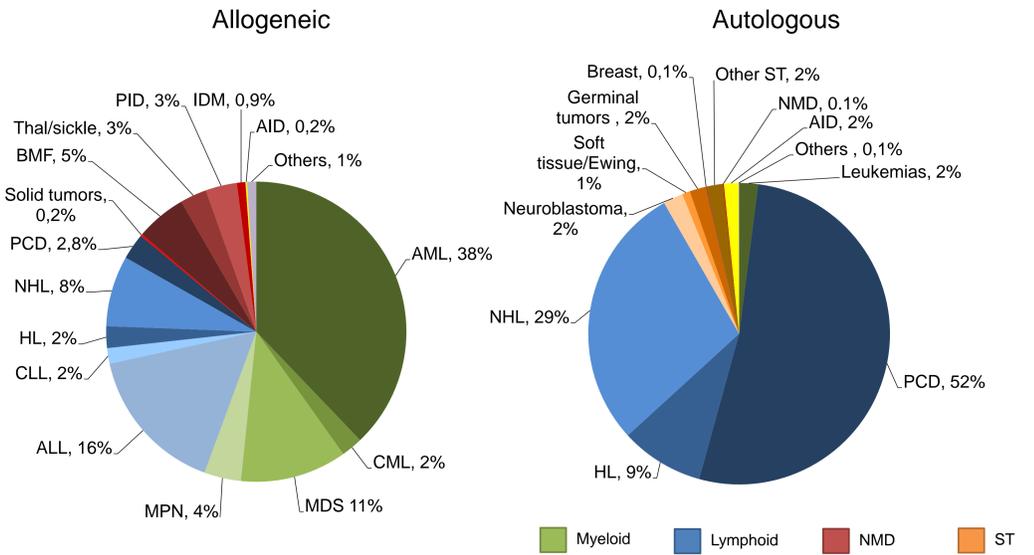
Paediatric patients																	
Family									Unrelated			Autologous					
HLA-id/twin			Haplo			Other family			BM	PB	CB	BM	PB	CB	BM	PB	CB
BM	PB	CB	BM	PB	CB	BM	PB	CB									
930	256	37	122	423	100	68	2	859	541	207	58	1 086	1				
1 938									1 607			1 145					

### Trends

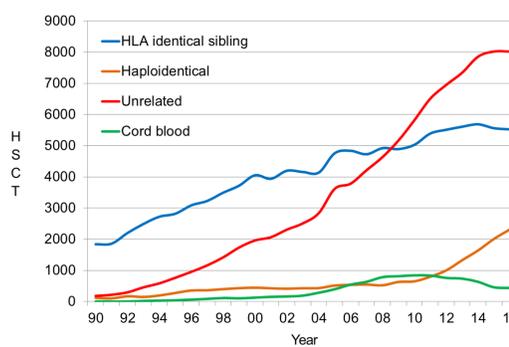
- Number of HSCT continue to increase: > 43 600 HSCT
- Continued increase in haplo-identical HSCT in both BM and PBSC
- Notable increase in AID autologous HSCT since 2009
- Cellular therapies increased by 22% since 2015
- Slight levelling off in unrelated and cord blood HSCT

## HSCT in Europe 2016

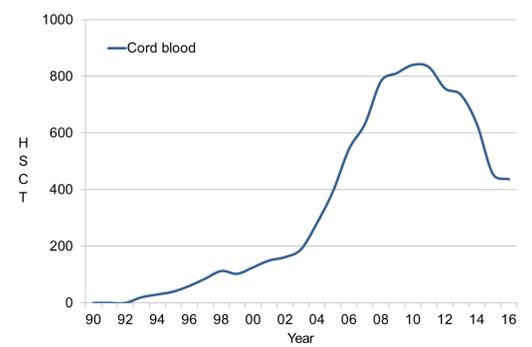
### Main Indication by transplant type



### Trend in donor selection



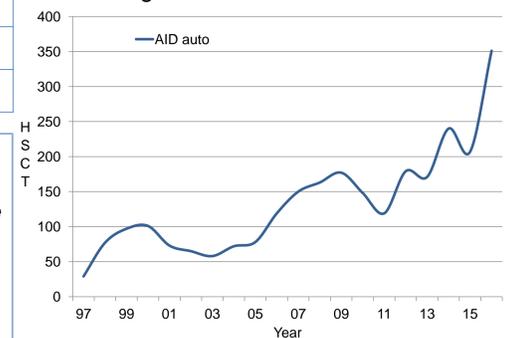
### Trend in cord blood HSCT



Transplant rates per 10 million inhabitants.			
Income group	Very high	High	Upper middle
Identical sibling	390	283	102
Haplo-identical	77	106	16
Unrelated	978	321	16

- Unrelated donor HSCT are done mainly in *very high income* countries.
- Rates of haplo-identical HSCT are higher in the *high income* group compared to the *very high income* group: possible favored use over unrelated HSCT due to economical considerations?
- *Upper middle income* groups concentrate on sibling donor HSCT, pointing towards restricting HSCT to the best possible donor in a situation of limited resources.

### Trend in autoimmune disease: autologous HSCT



## Non HSCT Cellular therapies using manipulated or selected cells in 2016

N. patients	MSC		NK cells		select/exp T cells or CIK		Reg T cells (TREGS)		Genetic mod. T cells		Dendritic cells		Expanded CD34+ cells		Genetic mod. CD34+ cells		Other	
	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto
GvHD	421	2			4	31							1				11	36
Graft enhancement	17	4	5		20				1				14	1			75	22
AID	9	19																
Genetic disease	1																1	1
Infection	4				157													7
Malignancy	1		9		32	3	28		6	29	3	45	1		8	16	1	
Regenerative med.	5	8											1				14	79
<b>Total</b>	<b>458</b>	<b>33</b>	<b>14</b>	<b>0</b>	<b>213</b>	<b>3</b>	<b>59</b>	<b>0</b>	<b>7</b>	<b>29</b>	<b>3</b>	<b>45</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>124</b>	<b>139</b>