

Activity Survey 2018

Patient and Transplant Numbers

	Participating countries: 50		
	Allogeneic	Autologous	Total
Teams : 701			
1st allo / 1st auto HSCT	18 483	24 418	42 901
Re/Additional transplants	1 147	3 420	4 567
Total HSCT	19 630	27 838	47 468
Myeloablative HSCT	62%		

Main Indications 1st HSCT

	Allogeneic	Autologous	Total
Myeloid malignancies	10 385	294	10 679
Lymphoid malignancies	5 369	21 949	27 318
Solid tumours	47	1 578	1 625
Bone marrow failure	954	5	959
Other non-malignant disorders	1 533	571	2 104
Other	195	21	216

Myeloid malignancies

	Allogeneic	Autologous	Total
AML 1 st . CR	4 008	241	4 249
not 1 st . CR	1 910	43	1 953
AML therapy related	286	1	287
AML /MDS related changes	739	8	747
CML 1 st . cP	202	0	202
not 1 st . cP	170	0	170
MDS or MDS/MPN, MPN	3 070	1	3 071

Lymphoid neoplasia

	Allogeneic	Autologous	Total
ALL 1 st . CR	1 780	64	1 844
not 1 st . CR	1 185	10	1 195
CLL	192	10	202
Plasma cell disorders	416	13 146	13 562
Hodgkin lymphoma	430	2 121	2 551
Non-Hodgkin lymphoma	1 366	6 598	7 964

Solid tumours

	Allogeneic	Autologous	Total
Neuroblastoma	31	518	549
Soft tissue sarcoma/Ewing	4	245	249
Germ cell tumour	3	381	384
Breast cancer	2	23	25
Other solid tumour	7	411	418

Non malignant disorders

	Allogeneic	Autologous	Total
Bone marrow failure - SAA	722	4	726
Bone marrow failure - other	232	1	233
Thalassemia	414	8	422
Sickle cell disease	225	0	225
Primary immune deficiency	676	7	683
Inherited disorder of metabolism	198	6	204
Auto immune disease	20	550	570
Others	195	21	216

Paediatric patients

Family			Unrelated			Autologous		
HLA-id/twin			Haplo-id			Other relative		
BM	PB	CB	BM	PB	CB	BM	PB	CB
1033	365	34	229	479	89	95	0	940
2 324			1 751			1 293		

Main trends in 2018

- Number of HSCT increase by 4.5% (7.4% allo and 2.6% auto)
- Continued increase in haploidentical (16%) and unrelated (5%) HSCT
- Increase in AML 1st CR, ALL, CML 1st cP, SAA in allo and AID in auto HSCT
- Cellular therapies: CAR T increase by 100% increase since 2017
- CAR-T 2019: preliminary data: 1079: 15 allogeneic, 1064 autologous: 260% increase

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HSCT in Europe 2018

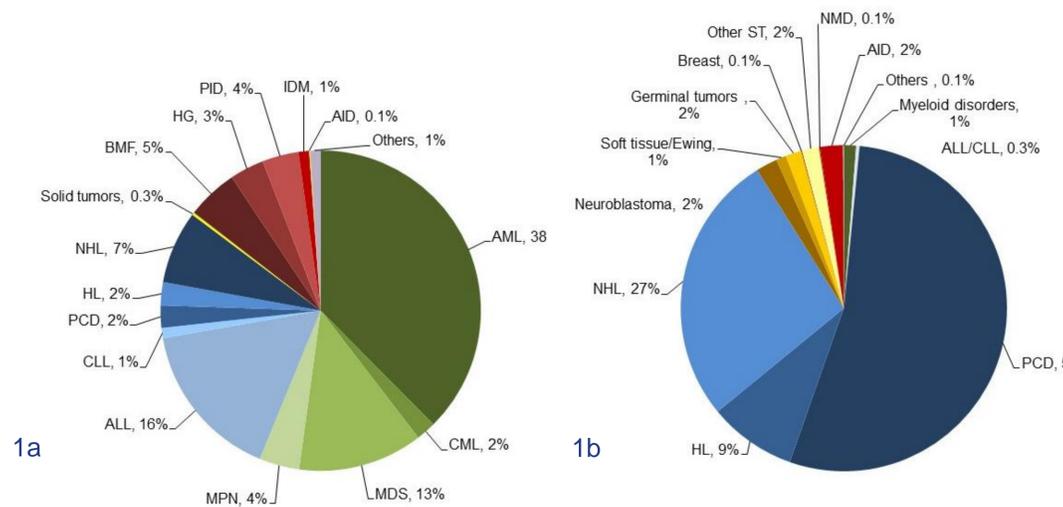


Figure 1: Relative proportion of disease indications in Europe 2018: allogeneic (1a) and autologous (1b) HSCT.

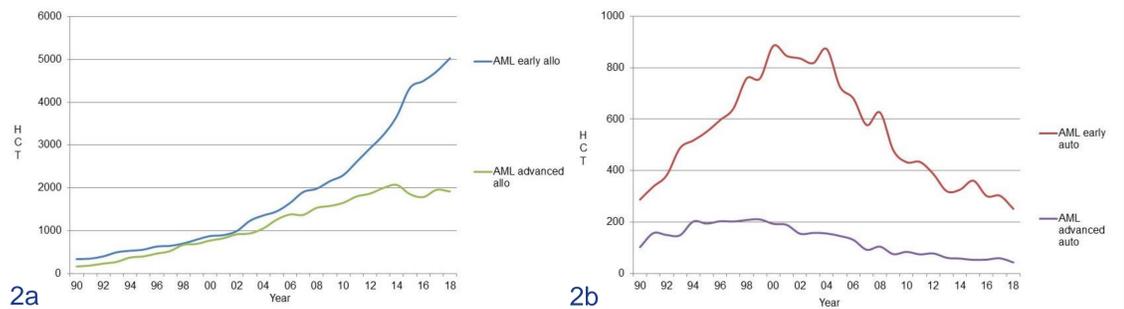


Figure 2: Changes in the use of HSCT for AML in early and late disease: allogeneic (2a) and autologous (2b) HSCT

Cellular therapies in Europe 2018

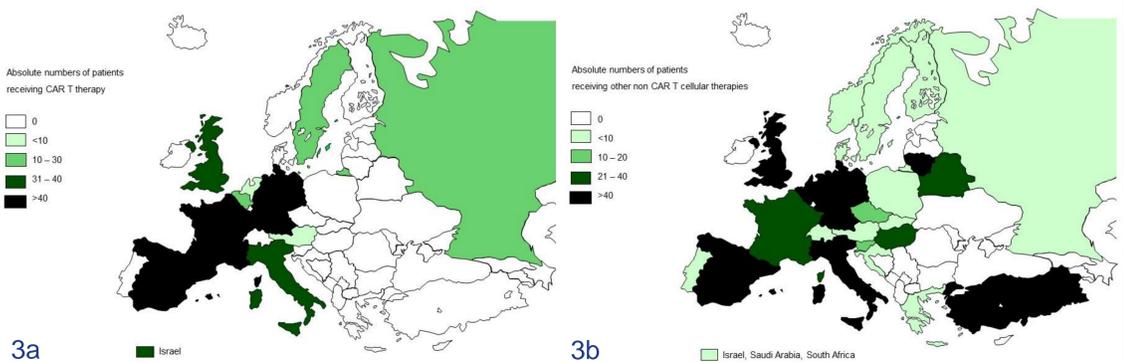


Figure 3a: Numbers of patients receiving CAR T cells. 3b: Numbers of patients receiving other non CAR T cellular therapies in 2018

Non HSCT Cellular therapies using manipulated or selected cells in 2018

Number of patients	CAR T cells		select/exp T cells or CIK		Reg T cells (TREGS)		Genetic mod. T cells		Natural killer cells		Dendritic cells		MSC		Genetic mod. CD34+ cells		Other	
	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto	Allo	Auto		
GvHD			2		38						22		318		4		19	
Graft enhancement			6						1		1		39		6		106	41
AID											4		7		16			
Genetic disease													2		9		6	
Infection					1		5						10				1	4
Malignancy	19	282	15	2					12		21	29		10	1		24	2
Regenerative med.							1	1					25	33			10	71
Total	19	282	120	2	39	0	5	1	14	0	44	33	401	59	20	7	163	116

CAR-T 2019 preliminary data: 1079 CAR-T therapies (15 allogeneic and 1064 autologous). Indications: allogeneic: ALL=14, other malignancy=1; autologous: ALL=266, lymphomas=733, other malignancy=64 and infection=1.