

Activity Survey 2015

Patient and Transplant Numbers

| | | | |
|----------------------------------|-----------------------------|---------------|---------------|
| Teams : 655 | Participating countries: 48 | | |
| | Allogeneic | Autologous | Total |
| 1st Allo /auto HSCT | 16 030 | 21 596 | 37 626 |
| Re/Additional transplant | 1 272 | 3 273 | 4 545 |
| Total | 17 302 | 24 869 | 42 171 |
| Myeloablative HSCT | 60% | | |
| Main Indications 1st HSCT | | | |
| Leukaemia | 11 743 | 539 | 12 282 |
| Lymphoid neoplasia | 2 141 | 19 330 | 21 471 |
| Bone marrow failure | 827 | 0 | 827 |
| Solid tumour | 38 | 1 478 | 1 516 |
| Non-malignant dis. (excl. BMF) | 1 158 | 223 | 1 381 |
| Other | 123 | 26 | 149 |
| Leukemia | | | |
| AML 1 st . CR | 3 440 | 355 | 3 795 |
| not 1 st . CR | 1 848 | 53 | 1 901 |
| AML therapy related | 221 | 2 | 223 |
| AML from MDS/MPN | 680 | 3 | 683 |
| ALL 1 st . CR | 1 531 | 66 | 1 597 |
| not 1 st . CR | 963 | 18 | 981 |
| CML 1 st . cP | 163 | 1 | 164 |
| not 1 st . cP | 235 | 2 | 237 |
| MDS or MD/MPN, MPN | 2 407 | 3 | 2 410 |
| CLL | 255 | 36 | 291 |
| Lymphoid neoplasia | | | |
| Plasma cell disorders | 567 | 11 187 | 11 754 |
| Hodgkin lymphoma | 442 | 2 070 | 2 512 |
| Non-Hodgkin lymphoma | 1 132 | 6 073 | 7 205 |
| Solid tumour | | | |
| Neuroblastoma | 21 | 487 | 508 |
| Soft tissue sarcoma/Ewing | 8 | 215 | 223 |
| Germ cell tumour | 0 | 351 | 351 |
| Breast cancer | 0 | 29 | 29 |
| Other solid tumour | 9 | 396 | 405 |
| Non-malignant disorder | | | |
| Bone marrow failure - SAA | 566 | 0 | 566 |
| Bone marrow failure - other | 261 | 0 | 261 |
| Thalassemia | 341 | 4 | 345 |
| Sickle cell | 146 | 0 | 146 |
| Primary immune deficiency | 527 | 8 | 535 |
| Inherited disorder of metabolism | 129 | 4 | 133 |
| Auto immune disorder | 15 | 207 | 222 |
| Others | 123 | 26 | 149 |

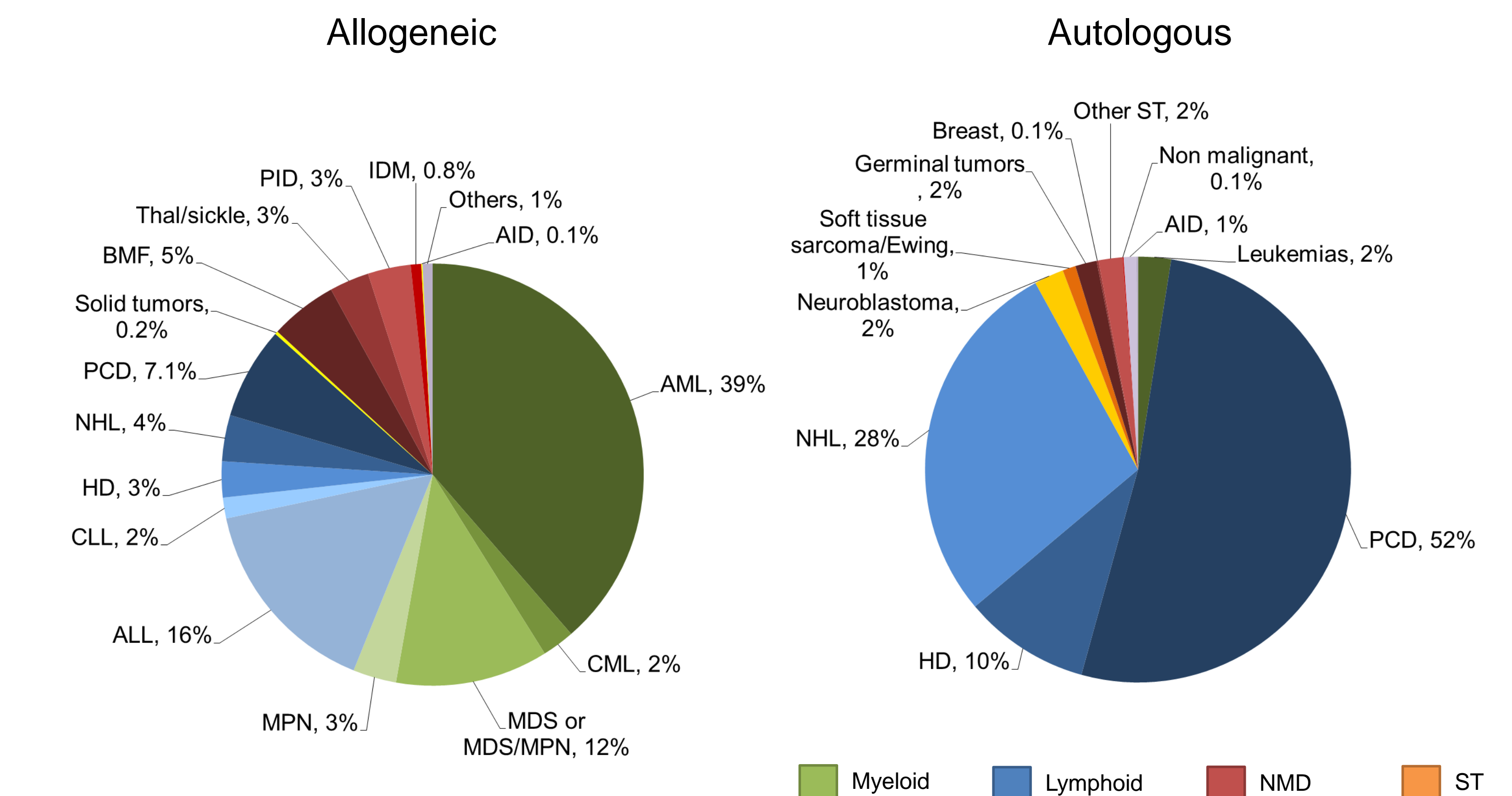
| | | | | | | | | | | | | | | |
|---------------------|-----|----|-------|-----|----|--------------|----|-----|-----------|-----|----|------------|----|----|
| Paediatric patients | | | | | | | | | | | | | | |
| Family | | | | | | | | | Unrelated | | | Autologous | | |
| HLA-id/twin | | | Haplo | | | Other family | | | | | | | | |
| BM | PB | CB | BM | PB | CB | BM | PB | CB | BM | PB | CB | BM | PB | CB |
| 890 | 278 | 36 | 123 | 337 | 94 | 67 | 3 | 798 | 441 | 225 | 59 | 1092 | 1 | |
| 3 338 | | | | | | | | | 1 152 | | | | | |

Trends

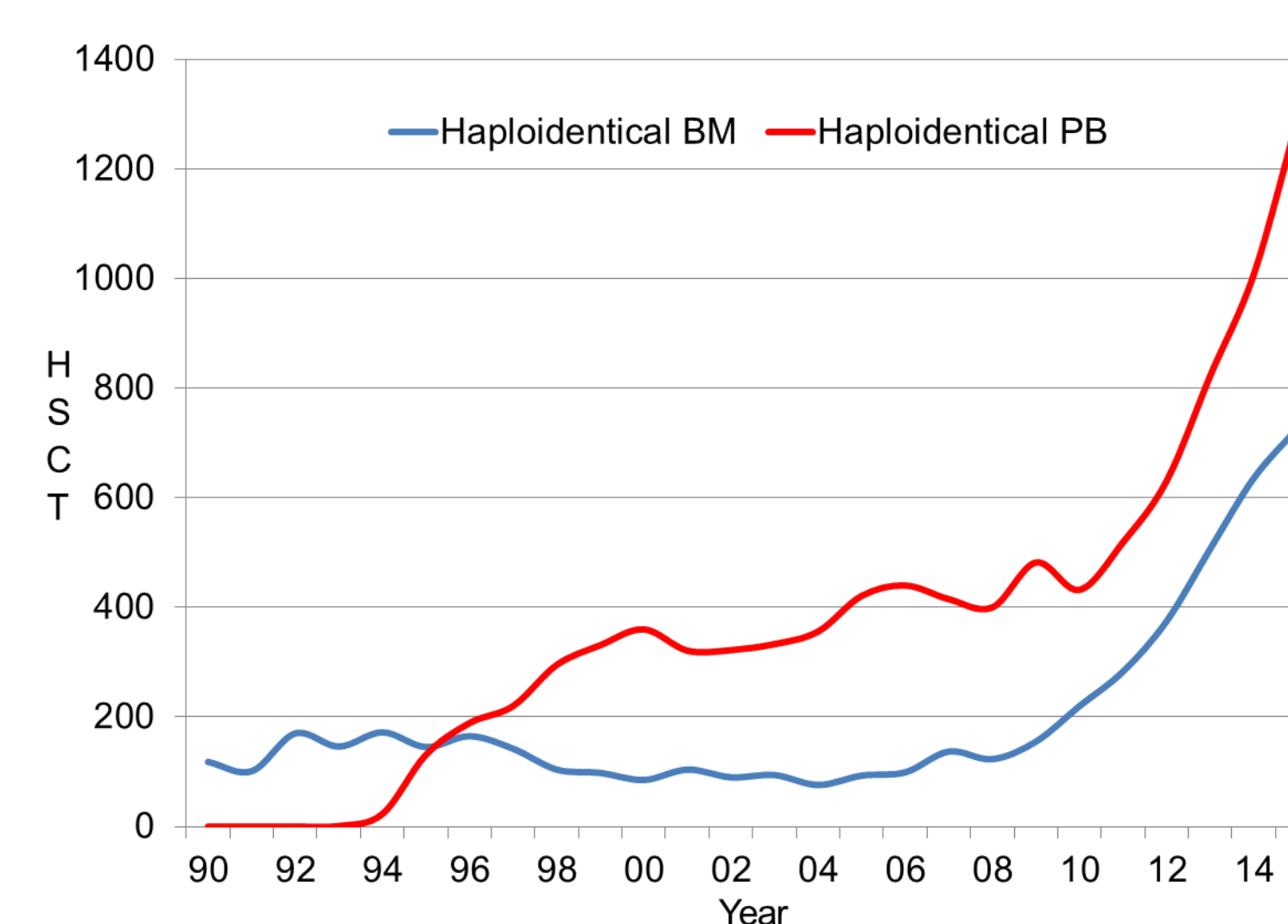
- Highest number of HSCT reported: > 42 000 HSCT
- Continued increase in haploidentical HSCT in both BM and PBSC
- Continued decrease in cord blood use in malignant disease but not in NMD
- Continued increase in DLI - 11% since 2014

HSCT in Europe 2015

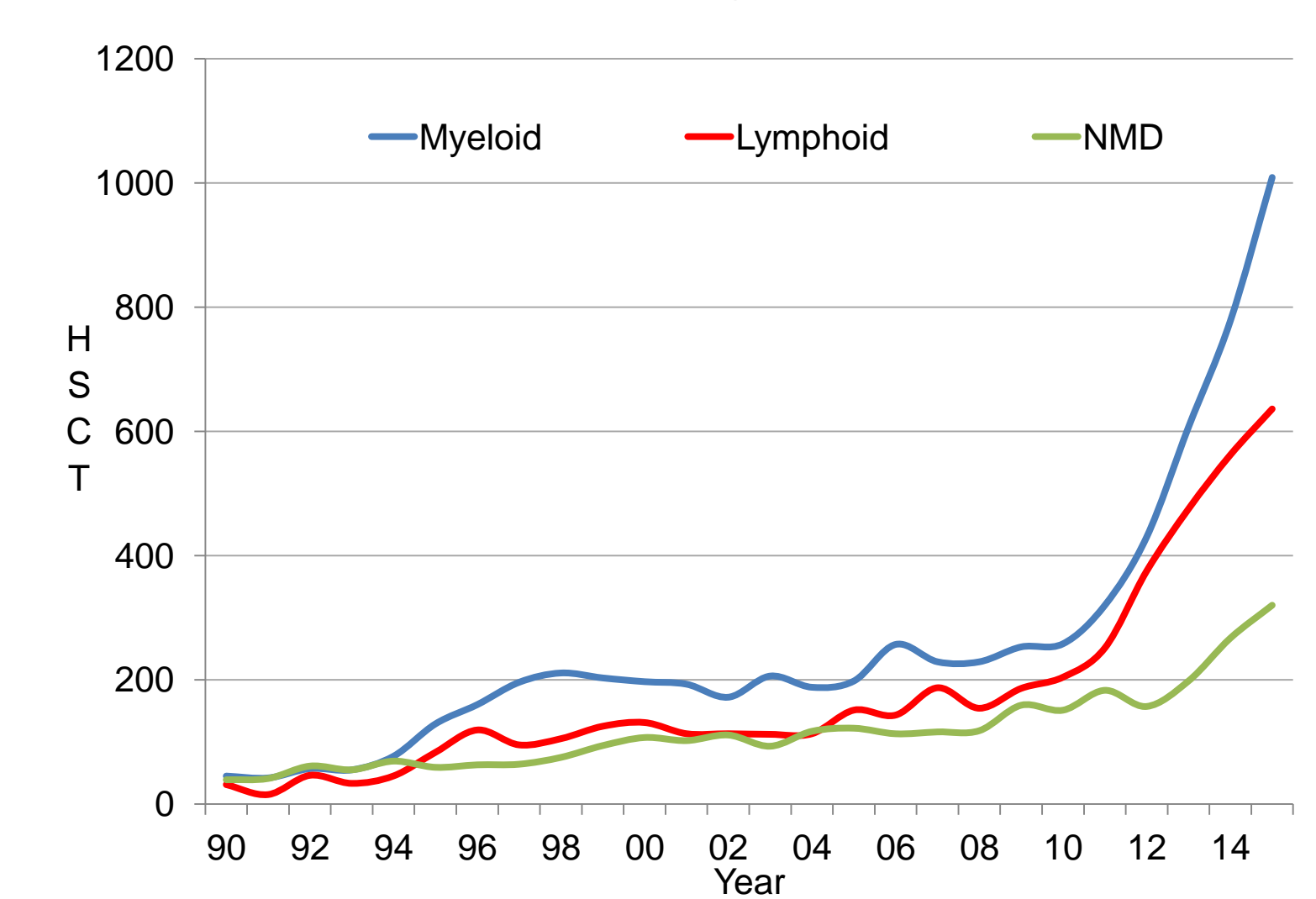
Main Indication by transplant type



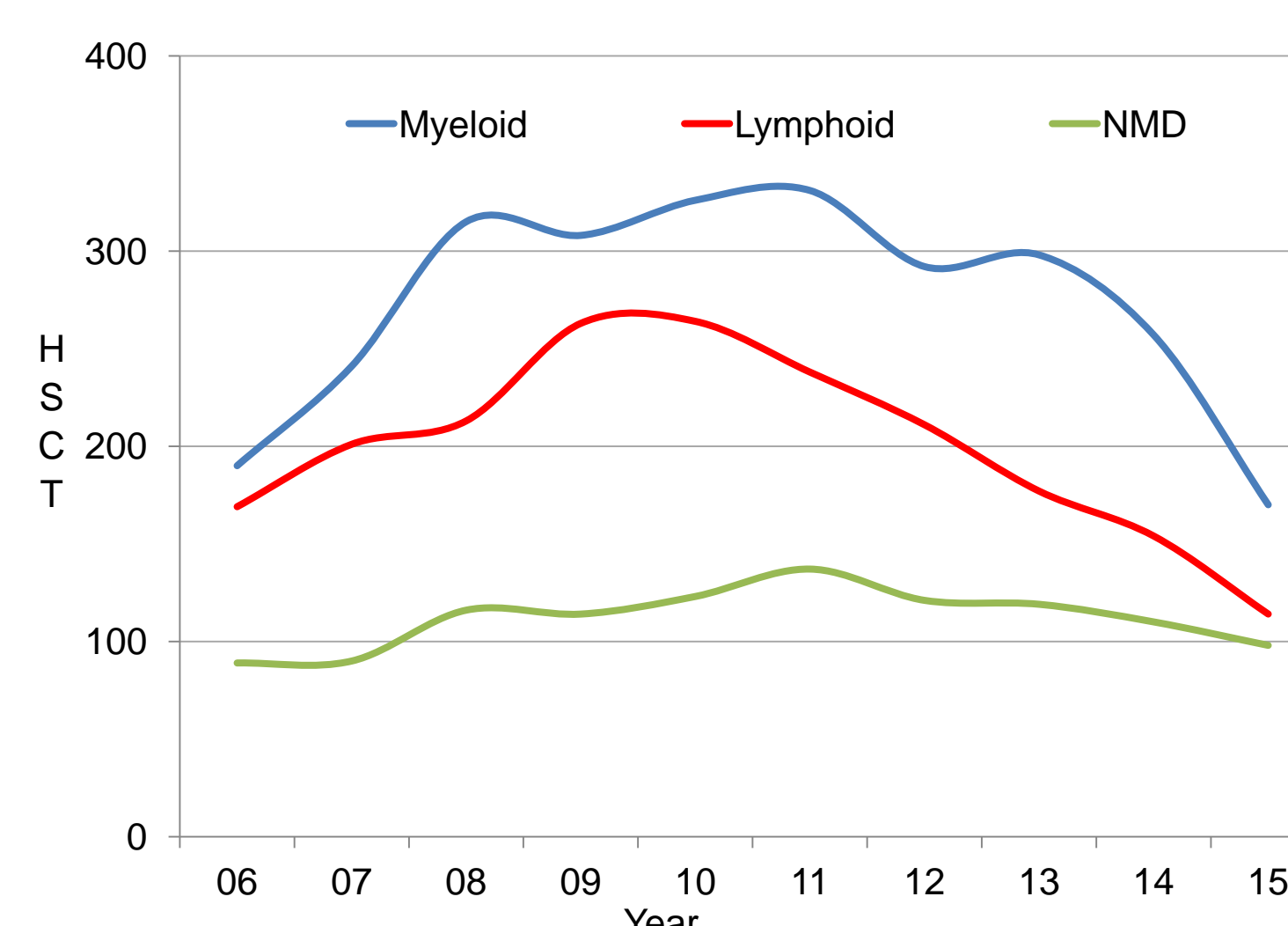
Trend in haploidentical HSCT by stem cell source



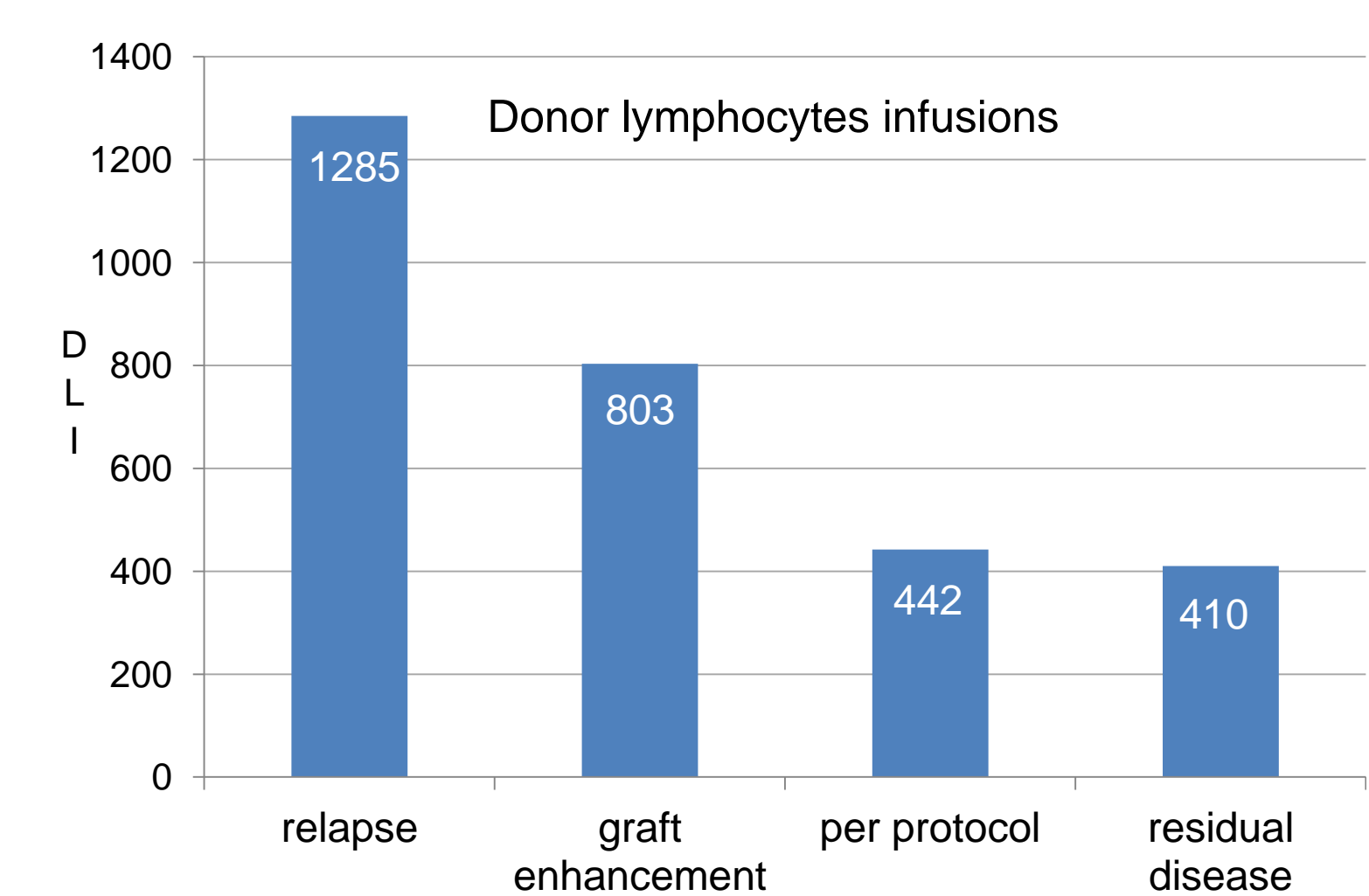
by main indication group



Trend in cord blood HSCT by main indication group.



N. Patients receiving DLI in 2015



Non HSCT Cellular therapies using manipulated or selected cells in 2015

| 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 | 396 | | | | 3 | | 29 | | 1 | | | | 3 | | | | | |
| Graft enhance. | 44 | 1 | 2 | | 14 | | | | | | | | 5 | | | | 24 | |
| AID | 4 | 40 | | | | | | | | | | | | | | | | |
| Genetic disease | 2 | | | | | | | | 1 | | | | | | 8 | | | |
| Infection | 4 | | | | 119 | | | | | | | | | | | | 6 | |
| Malignancy | 1 | | 11 | 1 | 32 | 5 | 1 | 5 | 8 | 4 | 5 | 20 | | | 19 | | | 3 |
| Regenerative med. | 16 | 7 | | | | | | | | | | | 1 | | | | 3 | 94 |
| Total | 467 | 48 | 13 | 1 | 168 | 5 | 30 | 5 | 9 | 5 | 5 | 20 | 9 | 0 | 19 | 8 | 33 | 97 |

Epub: Passweg, Baldomero et al, Bone Marrow Transplantation January 2017

helen.baldomero@usb.ch