

# Australasian Bone Marrow Transplant Recipient Registry

## Annual Data Summary 2016

### Contents

<b>Introduction</b> .....	<b>1</b>
<b>25 years of registry data: 1992-2016</b> .....	<b>2</b>
Transplant activity .....	2
Autologous and allogeneic transplants .....	2
Stem cell source for autologous transplants .....	3
Stem cell source for allogeneic transplants .....	3
Indications for autologous transplant .....	4
Indications for allogeneic transplant .....	4
Allogeneic transplants for myeloma .....	5
Allogeneic transplants for Hodgkin lymphoma .....	5
Donor source for allogeneic transplants .....	6
Transplant activity by age group .....	6
<b>Transplant activity 2016</b> .....	<b>7</b>
Haematopoietic cell transplant activity summary .....	7
Transplant activity by state and country .....	8
Transplant activity 2016 by state / country and hospital type .....	9
Haematopoietic cell transplants by type .....	10
Outpatient procedures .....	10
<b>Transplant and recipient characteristics</b> .....	<b>11</b>
Transplant recipients by age group .....	11
Stem cell source for haematopoietic cell transplants .....	12
Stem cell source by donor type .....	12
HLA compatibility for allogeneic transplants .....	13
Number of infusions for staged autologous transplants .....	13
Conditioning agents for autologous transplants .....	14
Conditioning intensity for allogeneic transplants .....	14
Conditioning agents for allogeneic transplants .....	15
Recipients aged 0-15 .....	15
Recipients aged 16+ .....	15
ATG and Campath by donor relation .....	16
Graft vs host disease prophylaxis by donor relation .....	16
<b>Indication for transplant</b> .....	<b>17</b>
Recipients aged 0-15 by transplant type .....	17
Recipients aged 0-15: transplant indications .....	18
Acute leukaemia by disease stage, all ages (allogeneic transplants) .....	18
Recipients aged 16+: autologous transplants .....	19
Recipients aged 16+: allogeneic transplants .....	20
<b>Unrelated donor transplants</b> .....	<b>21</b>
Stem cell source - recipients aged 0-15 .....	21
Stem cell source - recipients aged 16+ .....	21
Donor country for Australian unrelated donor transplants .....	22
Australian peripheral blood and marrow transplants .....	22
Australian cord blood transplants .....	22

Donor country - marrow and peripheral blood .....	23
Donor country - cord blood .....	23
Adverse events in the first 100 days.....	24
Performance status 1 year post transplant (Lansky/Karnofsky) .....	24
<b>Outcomes in the first year post transplant .....</b>	<b>25</b>
Recipients aged 0-15.....	25
Neutrophil engraftment 2016 – matched sibling donor.....	25
Neutrophil engraftment 2016 – unrelated donor.....	25
Platelet engraftment 2016 – matched sibling donor .....	26
Platelet engraftment 2016 – unrelated donor .....	26
Acute GVHD 2016 all grades – matched sibling donor .....	27
Acute GVHD 2016 all grades – unrelated donor .....	27
Acute GVHD 2016 grade II and above – matched sibling donor .....	28
Acute GVHD 2016 grade II and above – unrelated donor .....	28
Chronic GVHD 2001-15 – matched sibling donor .....	29
Chronic GVHD 2001-15 – other related donor .....	29
Chronic GVHD 2001-15 – unrelated donor .....	30
One year survival 2001-2015 .....	30
Recipients aged 16+ .....	31
Neutrophil engraftment 2016 – matched sibling donor.....	31
Neutrophil engraftment 2016 – unrelated donor.....	31
Platelet engraftment 2016 – matched sibling donor .....	32
Platelet engraftment 2016 – unrelated donor .....	32
Neutrophil engraftment 2016 - autologous for lymphoma (BEAM conditioning) .....	33
Neutrophil engraftment 2016 – autologous for myeloma (Melphalan conditioning) ..	33
Platelet engraftment 2016 – autologous for lymphoma (BEAM conditioning).....	34
Platelet engraftment 2016 – autologous for myeloma (Melphalan conditioning) .....	34
Acute GVHD 2016 all grades - matched sibling donor.....	35
Acute GVHD 2016 all grades – unrelated donor .....	35
Acute GVHD 2016 grade II and above - matched sibling donor .....	36
Acute GVHD 2016 grade II and above – unrelated donor .....	36
Chronic GVHD 2001-15 – matched sibling donor .....	37
Chronic GVHD 2001-15 – other related donor .....	37
Chronic GVHD 2001-15 – unrelated donor .....	38
One year survival 2001-2015 .....	38
<b>Ten-year survival - first transplants 2001-2015 .....</b>	<b>39</b>
Recipients aged 0-15.....	39
Acute lymphoblastic leukaemia - HLA identical sibling donor .....	39
Acute lymphoblastic leukaemia - unrelated donor.....	39
Acute lymphoblastic leukaemia - unrelated cord vs other related donor.....	40
Acute myeloid leukaemia - HLA identical sibling donor .....	40
Immune deficiencies .....	41
Aplastic anaemia .....	41
Neuroblastoma .....	42
Medulloblastoma.....	42
Recipients aged 16+ .....	43
Acute myeloid leukaemia - HLA identical sibling donor .....	43
Acute myeloid leukaemia - unrelated donor .....	43
Acute myeloid leukaemia - unrelated cord vs other related donor .....	44

Acute lymphoblastic leukaemia - HLA identical sibling donor .....	44
Acute lymphoblastic leukaemia - unrelated donor.....	45
Acute lymphoblastic leukaemia - unrelated cord vs other related donor.....	45
Chronic myeloid leukaemia - HLA identical sibling donor .....	46
Chronic myeloid leukaemia - unrelated donor.....	46
Myelodysplasia - HLA-identical sibling donor.....	47
Myelodysplasia - unrelated donor.....	47
Myeloma .....	48
Myeloma - allogeneic.....	48
Hodgkin lymphoma - autologous .....	49
Hodgkin lymphoma – allogeneic.....	49
Non-Hodgkin lymphoma - autologous .....	50
Non-Hodgkin lymphoma - allogeneic.....	50
Primary amyloidosis .....	51
Testicular cancer .....	51
Aplastic anaemia .....	52
Ewing sarcoma - adult and paediatric autologous.....	52
<b>Transplant related mortality .....</b>	<b>53</b>
Recipients aged 0-15.....	53
Recipients aged 16+ .....	53
<b>Cause of death post transplant .....</b>	<b>54</b>
Primary cause of death post autologous transplant .....	54
Recipients aged 0-15.....	54
Recipients aged 16+ .....	55
Contributing causes of TRM in the first year post autologous transplant.....	55
Primary cause of death post allogeneic transplant - first year.....	56
Recipients aged 0-15.....	56
Contributing causes of TRM in the first year post allogeneic transplant .....	56
Recipients aged 16+ .....	57
Contributing causes of TRM in the first year post allogeneic transplant .....	57
Primary cause of death post allogeneic transplant - second year.....	58
Recipients aged 0-15.....	58
Recipients aged 16+ .....	59
<b>Contributing centres.....</b>	<b>60</b>
Australia .....	60
New Zealand.....	60
<b>Publications.....</b>	<b>61</b>