

**Bone Marrow Transplant Society of Australia and New Zealand COVID19 Consensus Position Statement
15th April 2020**

In the context of a viral pandemic, utilisation of health care resources may exceed standard capacity. The impact of potential resource limitation on the needs of a stem cell transplant and bone marrow service needs to be carefully considered. Challenges are likely to include reduced availability of highly specialised health care staff due to illness or allocation to other areas, as well as compromised infrastructure and acute care bed capacity.

Representatives of all adult and paediatric allogeneic stem cell transplant centres in Australia and New Zealand have been in regular communication and have collectively come to a consensus regarding several issues relating to the COVID-19 pandemic:

1. Centres will identify backup donor options for patients undergoing allogeneic transplant from interstate and overseas unrelated donors, including haploidentical related donors and cord blood donors. Travel restrictions and illness are likely to reduce the unrelated donor pool.
2. Centres will cryopreserve all international and possibly interstate unrelated donor products before starting conditioning. Cryopreservation by the collecting centre will be requested as a preference for international donors.
3. Donors who have developed COVID-19 will be excluded for at least three months. Refer to updated international guidelines for the management of donors with contact or geographical risk of SARS-CoV-2 exposure (1-3).
4. The ABMDR will update donor questionnaires to include questions specific to risk factors for COVID-19.
5. Donors and recipients should be screened for symptoms of COVID-19 prior to commencement of donor mobilisation and recipient conditioning. Routine donor screening is recommended if feasible, although the sensitivity of screening in asymptomatic donors, and optimal timing of this testing, remains uncertain.
6. Centres should attempt to triage transplants. Triage will depend on patient, donor and disease factors. This should include consideration of risks of disease progression or relapse and estimated transplant related mortality. It is not possible to develop a strict triage protocol that would take into account all eventualities or how the COVID-19 pandemic will evolve. Nevertheless, general suggestions for disease-based triage are as follows:

- High priority: Adverse outcomes are expected if transplant is delayed for any reason other than patient factors.
 - Allogeneic transplantation
 - Acute leukaemia with considerations for the DRI and HCTCI
 - High risk myelodysplastic syndrome not responding to bridging therapy
 - Aplastic anaemia
 - Severe combined immune deficiency in children
 - Autologous transplantation
 - Relapsed/refractory aggressive lymphoma or Hodgkin lymphoma
 - CNS lymphoma in first remission based on individual patient considerations
 - Multiple myeloma failing induction therapy
- Intermediate priority: Patients can be delayed with bridging therapies used where possible to stabilise disease while awaiting transplant.
 - Allogeneic transplantation
 - Stable myelodysplastic syndrome
 - Stable myelofibrosis
 - Autologous transplantation
 - Multiple myeloma with consideration of collection of autologous cells based on local resources
 - Relapsed indolent lymphoma
 - MCL in first remission
 - Highgrade lymphoma in first remission
- Low priority: Patients can be delayed with low risk of adverse outcome
 - Allogeneic transplantation
 - CML in chronic phase
 - Low grade lymphoproliferative disorders including CLL and indolent lymphoma
 - Sickle cell disease
 - Immunodeficiency
 - Autologous transplantation
 - Autoimmune diseases (multiple sclerosis, myasthenia gravis, systemic sclerosis)
 - Amyloidosis
 - Clinical trials: unless the clinical trial provides standard of care transplantation that patients would otherwise receive.

References:

1. WMDA: share.wmda.info, accessed 27 March 2020
2. ASTCT: Interim Guidelines for COVID-19 Management in Hematopoietic Cell Transplant and Cellular Therapy Patients Version 1.1, March 9 2020 available at [https://higherlogicdownload.s3.amazonaws.com/ASBMT/a1e2ac9a-36d2-4e23-945c-45118b667268/UploadedImages/COVID-19 Interim Patient Guidelines 3 9 20 V2.pdf](https://higherlogicdownload.s3.amazonaws.com/ASBMT/a1e2ac9a-36d2-4e23-945c-45118b667268/UploadedImages/COVID-19%20Interim%20Patient%20Guidelines%203%209%2020%20V2.pdf), accessed 14 March 2020
3. EBMT: 'CORONAVIRUS DISEASE COVID-19: Updated EBMT Recommendations (8th March 2020)' available at <https://www.ebmt.org/sites/default/files/2020-03/EBMT%20COVID-19%20guidelines%20v.2%20%282020-03-10%29.pdf>, accessed 14 March 2020

Authors and Affiliations:

Nada Hamad: St Vincent's Hospital Sydney and University of New South Wales
David Gottlieb: University of Sydney and Westmead Hospital
David Ritchie: Clinical Haematology, Peter MacCallum Cancer Centre & The Royal Melbourne Hospital
Glen Kennedy: Royal Brisbane and Women's Hospital
Anne Marrie Watson: Liverpool Hospital
Matthew Greenwood: Royal North Shore Hospital
Richard Doocey: Auckland City Hospital
Travis Perera: Wellington Blood and Cancer Centre
Andrew Spencer: The Alfred Hospital and Monash University
Eric Wong: Austin Hospital
Tracey O'Brien: Sydney Children's Hospital
Peter Shaw: University of Sydney and Westmead Hospital
Rachel Conyers: The Royal Children's Hospital
Theresa Cole: The Royal Children's Hospital
Sam Milliken: St Vincent's Hospital Sydney
Peter Bardy: Royal Adelaide Hospital
Stephen Larsen: Royal Prince Alfred Hospital and the University of Sydney
Hock Lai: Townsville Hospital
Andrew Butler: Christchurch Hospital
Chris Fraser: Queensland Children's Hospital
Ashish Bajel: Clinical Haematology, Peter MacCallum Cancer Centre & The Royal Melbourne Hospital
Jason Butler: Royal Brisbane and Women's Hospital
Ian Kerridge: Royal North Shore Hospital and the University of Sydney
Duncan Purtill: Fiona Stanley Hospital