

Use of CMV-seronegative Blood Components

Clinical Guidance Summary

Leucodepletion is standard for all red cell and platelet products released by the Australian Red Cross Blood Service. These standard leucodepleted blood components are now considered to be CMV safe and can be used in many situations in which CMV seronegative components would have been used historically.

A recent review by the National Blood Authority* has outlined the remaining indications for use of CMV seronegative components.

CMV seronegative cellular components should continue to be used for the following clinical indications:

- pregnant women regardless of CMV status who require regular elective transfusions during pregnancy (but not during delivery)
- intrauterine transfusion (IUT)
- neonates (up to 28 days post expected date of delivery)
- granulocyte transfusions for CMV negative patients .

In urgent situations, if CMV seronegative blood components are not available then standard leucodepleted (CMV safe) blood components of unknown CMV status should be used to avoid delays.

Standard leucodepleted blood components (CMV safe) can be used in the following situations:

- haemopoietic stem cell transplants (HSCT); all adult and paediatric HSCT patients, for all patient groups including seronegative donor / seronegative recipients
- haematology and oncology patients
- immunodeficient patients, including those with human immunodeficiency virus (HIV)
- solid organ transplants.

Institutions should consider whether to introduce polymerase chain reaction (PCR) monitoring for CMV for at-risk patients to allow early detection of any possible CMV infection.

⚠ Treating / prescribing clinician must ensure the transfusion laboratory & patient / family are aware of need for CMV seronegative blood components; document this in the alert section of medical record and all transfusion requests and relevant prescriptions.

The above indications are taken from the SA Health Clinical Guidance document at inside.sahealth.sa.gov.au/ and as per the tool at <http://www.optimalblooduse.eu/app/>

* National Blood Authority. Clinical Use of Cytomegalovirus Seronegative Blood Products in Australia. Position Paper. Sep 2017.
<https://www.blood.gov.au/cytomegalovirus-cmv-seronegative-blood-products>

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