Tuberculosis

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Condition

Tuberculosis (Mycobacterium tuberculosis complex)

Individual at risk

Recipient

Guidance at RECRUITMENT

Defer enrolment until two (2) years after completed successful treatment.

Guidance at CT/WORK-UP

Defer donor if within two (2) years of completed successful treatment.

Justification for guidance

There are no documented case reports of tuberculosis (TB) transmission via blood transfusion or HPC transplantation. However, TB is one of the most common bacterial infections transmitted via solid organ transplantation.

There is also a known risk of reactivating pre-existing latent infection in HPC transplant recipients, which is mainly seen in countries with an indigenous risk of TB.

The lack of reports of TB transmission via blood despite the known blood phase of TB infection and the worldwide prevalence of TB suggests that the risk of blood transmission – if it exists – must be extremely low. Extrapolating this assumption to HPC, however, should be done with caution because TB can infect bone and has been detected in bone marrow biopsies of infected patients. A recent study even suggests that bone marrow stem cells are an important reservoir of latent infection.

In this context, the precautionary stance of the current 2-year deferral period following successful treatment of infection seems justified, and is consistent with widely-utilised blood donor selection guidelines (eg the Council of Europe Guide to the preparation, use and quality assurance of blood components).

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