Reducing the risk of Transfusion-transmitted Hepatitis E Virus (HEV) infections in patients undergoing Solid Organ Transplantation (SOT) and Haematopoietic Stem Cell Transplantation (HSCT)

SaBTO/BSBMT Recommendations on the use of HEV-screened blood components

Working Groups:
SOT: James Neuberger (NHSBT), Richard Tedder (SaBTO, PHE), Michael Ankcorn (PHE)
HSCT: Mallika Sekhar (SaBTO), Charles Crawley (BSMBT), Samreen Ijaz (PHE), Richard Tedder (SaBTO/PHE)

Background: HEV may be acquired in the UK both through diet and through receiving blood components, tissues and organs from viraemic donors.

Solid Organ Transplantation

1. **Solid Organ Transplant recipients:** HEV-screened blood components should be given to all SOT recipients taking immunosuppressive medication.
2. **Potential SOT recipients:** From 3 months prior to date of elective SOT potential recipients should only receive screened blood components. Patients who are likely to be transplanted within three months and currently not receiving immunosuppressive therapy who require blood components should also be given HEV screened components.
3. **Any patient who is receiving immunosuppressive therapy before SOT:** Since such persons will already be immunocompromised before transplantation they should receive screened blood components.
4. **Extra corporeal procedures:** HEV-screened blood components should be used for extra-corporeal circulatory support for patients undergoing SOT and for SOT patients receiving immunosuppressive medication.

Haematopoietic Stem Cell Transplantation

1. **Allogeneic HSCT:** HEV-screened blood components should be given to potential allogeneic HSCT recipients from 3 months prior to date of planned HSCT to until 6 months following allogeneic HSCT, or for as long as the patient is immunosuppressed. For patients with high transfusion burden due to diseases with a significant likelihood of proceeding to allogeneic HSCT over a period of a few months (such as acute leukaemia or aplastic anaemia) this should be from the time of diagnosis (indication tables for adult and paediatric patients are available at [http://bsbmt.org/indications-table/](http://bsbmt.org/indications-table/)).
2. **Autologous HSCT**: At present there is no convincing evidence to support screened blood components for all recipients of autologous HSCT. This recommendation should be reviewed by SaBTO at 6-12 months from implementation of these recommendations on the basis of data collected by the BSBMT on patients undergoing autologous HSCT acquiring HEV infection. The capacity to provide screened blood components to all recipients of autologous HSCT will be reviewed by NHSBT during this period.

SaBTO recognises that there could be need for further clarification of clinical context and these recommendations will be reviewed by SaBTO in September 2016. Please provide any feedback to the secretariat ([jonathan.graves@dh.gsi.gov.uk](mailto:jonathan.graves@dh.gsi.gov.uk)).

22 March 2016