**Supplementary Table 1: Mapping blood donor testing requirements across different European countries**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **AT** | **BE** | **BG** | **CY** | **CZ** | **DE** | **DK** | **EE** | **EL** | **ES** | **FI** | **FR** | **HR** | **HU** | **IE** | **IT** | **LT** | **LU** | **LV** | **MT**  Malta | **NL**  Netherlands | **NO**  Norway | **PL**  Poland | **PT**  Portugal | **RO**  Romania | **SE**  Sweden | **SI**  Slovenia | **SK**  Slovakia | **UK**  United Kingdom |
| **Blood group testing** | **ABO typing** | **2004/33/EC Directive** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **RhD typing** | **2004/33/EC Directive** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Other (Kell antigen system)** | \* |  |  | \* | \*\* | \* | \*\* |  | \* |  | \*\* | \* |  |  | \*\* | \* | \* |  |  | \*\* | \*\* | \*\* |  |  |  |  | \* | \* |  |
| **Screening for irregular red cell antibodies/technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLA testing** | |  |  |  |  |  |  |  |  |  |  | \*\*  (HLA Ab, HLA gene) | \*\*  (technique not specified, HLA Ab, HLA Ag, HLA gene) |  |  |  | \*\*  (technique  not specified) |  |  |  |  | \*\*  (technique not specified) |  |  |  |  |  |  |  |  |
| **HIV-1 and HIV-2** | **Anti-HIV1** | **2004/33/EC Directive** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Anti-HIV2** | **2004/33/EC Directive** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **HIV 1p24** |  |  |  | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |
| **HIV NAT pool or ID** | \* |  |  |  | \* | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HIV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Hepatitis B** | **HBsAg** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-HBc** |  | \* |  | \* |  | \* | \*\* |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  | \*\* |  |  |  | \*\* |
| **Anti-HBs** |  |  |  | \* |  |  |  |  |  |  |  | \* |  |  |  |  |  |  |  |  | \*\* |  |  | \* |  |  |  |  | \*\* |
| **HBV NAT pool or ID** |  | Blood services use for  all donations triplet  HIV /HBV/HCV NAT  tests. So HBV NAT is  included. |  |  | \* | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HBV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Hepatitis C** | **Anti-HCV** | **2004/33/EC Directive** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **HCV NAT pool or ID** | \* |  |  |  | \* | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HCV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Hepatitis E** | **Anti-HEV** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HEV NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  | \*\* |
| **HEV NAT ID** |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HTLV-1** | **Technique not specified** |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-HTLV-1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  | \*\* | \*\* |  | \* |  | \* |  |  | \*\* |
| **HTLV-1 NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HTLV-1 NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HTLV-2** | **Technique not specified** |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-HTLV-2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  | \*\* | \*\* |  | \* |  | \* |  |  |  |
| **HTLV-2 NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HTLV-2 NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Cytomegalovirus** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-CMV** |  |  |  | \* |  |  |  |  | \*\* |  |  | \* |  |  | \*\* | \*\* |  | \*\* |  | \*\* | \*\* |  |  |  |  |  | \*\* |  | \*\* |
| **CMV NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **CMV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **West Nile Virus** | **Technique not specified** |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* | \* |  |  |  |
| **WNV NAT pool or ID** |  |  |  |  | \* |  |  |  |  |  |  | \*\* |  | \* |  | \* |  | \*\* |  |  |  |  |  |  | \*\* |  |  |  | \*\* |
| **WNV NAT ID** |  |  |  |  |  |  |  | \* | \* |  |  | \*\* |  |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  | \* |  |
| **Other technique** |  |  |  |  |  |  |  |  | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Epstein-Barr Virus (EBV)** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-EBV** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **EBV NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **EBV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Human Parvovirus B19** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  |  |  |  |
| **HPVB19 NAT pool or ID** |  |  |  |  | \* |  |  |  |  |  |  | \*\* |  |  |  | \* |  |  |  |  |  |  | \* |  |  |  |  |  |  |
| **HPVB19 NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Herpes Simplex Virus (HSV)** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HSV Ag** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HSV Ab** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HSV NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HSV NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Trypanosomiasis** | **Technique not specified** |  |  |  |  |  |  |  |  |  | \*\* |  | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Microscopy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-*Trypanosoma cruzi*** |  | \*\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \*\* |  |  |  |  |  | \* |  |  |  |  | \* |
| ***T. cruzi* NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***T. cruzi* NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Babesiosis** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Microscopy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-*Babesia*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Babesia* NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Babesia* NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Leishmaniasis** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Microscopy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-*Leishmania sp.*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Leishmania sp.* NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Leishmania sp.* NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Toxoplasmosis** | **Technique not specified** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Microscopy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Anti-*Toxoplasma gondii*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***T. gondii* NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ***T. gondii* NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Treponema pallidum (Syphillis)** | **Technique not specified** | \* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Microscopy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Anti-*T. pallidum*** | \* |  |  | \* |  | \* |  |  |  |  |  |  |  |  |  |  | \* |  |  |  |  | \*\* |  |  |  |  | \* |  |  |
|  | ***T. pallidum* NAT pool or ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ***T. pallidum* NAT ID** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Culture** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Other technique** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
|  | Minimum testing requirements as per the 2004/33/EC Directive |
|  | More stringent testing as per national requirements – Legally binding  (\* Testing performed under specific conditions) |
|  | More stringent testing as per national requirements – Recommended  (\*\* Testing performed under specific conditions) |
|  | Not legally binding and not recommended at national level |

AT = Austria, BE = Belgium, BG = Bulgaria, CY = Cyprus, CZ = Czech Republic, DE = Germany, DK = Denmark, EE = Estonia, EL = Greece, ES = Spain, FI = Finland, FR = France, HR = Croatia, HU = Hungary, IE = Ireland, IT = Italy, LT = Lithuania, LU = Luxembourg, LV = Latvia, MT = Malta, NL = Netherlands, NO = Norway, PL = Poland, PT = Portugal, RO = Romania, Sweden = SE, SI = Slovenia, SK = Slovakia, UK = United Kingdom.

RhD = rhesus D, HLA = human leukocyte antigens, Ab = antibody, HIV-1 = human immunodeficiency virus type 1, HIV-2 = human immunodeficiency virus type 2, NAT = nucleic acid testing, ID = individual specimens, HBsAg = surface antigen of the hepatitis B virus, Anti-HBc = hepatitis B core antibody, Anti-HBs = Hepatitis B surface antibody, HBV = hepatitis B virus, HCV = hepatitis C virus, HEV = hepatitis E virus, HTLV-1 = human T-cell lymphotropic virus type 1, HTLV-2 = human T-cell lymphotropic virus type 2, CMV = cytomegalovirus, WNV = West Nile virus, EBV = Epstein-Barr virus, HPVB19 = human parvovirus B19, HSV = herpes simplex virus.