

Guidelines for the Blood Transfusion Services

17.5: Donor testing

<http://www.transfusionguidelines.org/red-book/chapter-17-granulocyte-immunology/17-5-donor-testing>

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17.5.1: HNA typing

HNA typing of donors whose granulocytes may be transfused to support HNA-immunised recipients should, wherever possible, be typed twice using samples collected on different occasions. However, it may be necessary to issue HNA-selected products on the basis of a single or 'unconfirmed' type.

17.5.2: Investigation of HNA antibodies

HNA antibody specificities should only be assigned when the sample investigated has been tested and a minimum of three positive and three negative reactions obtained with a single technique or a minimum of two positive and two negative reactions with two techniques. A report identifying the antibody can be issued at this stage. A donor with an HNA alloantibody should receive an HNA antibody card and an information leaflet, wherever this is available. However, before an HNA antibody card and information leaflet is issued, the donor should be typed (on one occasion but ideally by two methods) and found negative for that antigen.

17.5.3: Investigation of female donors to reduce the incidence of TRALI

Many transfusion services have introduced screening for HLA or HLA and HNA antibodies to reduce the incidence of transfusion-related acute lung injury (TRALI). An initial screen for HLA antibodies may be followed by a screen for HNA antibodies to further reduce the potential incidence of TRALI. Female blood donors should be investigated for HNA antibodies following the guidelines for donor investigation, except that there is only a requirement to test for IgG antibodies. The screening techniques used should, as a minimum, enable detection of HNA-1a, -1b, -2 and -3a antibodies which are known to be implicated in causing TRALI.

HLA antibodies should be investigated using the guidelines set out in section 16.6.