

26ABOT4

Exercise instructions

Distributed on 12/10/26 – Closing on 26/10/26

Material Provided

Please refer to the COSHH sheet provided for all Health and Safety aspects of the samples.

https://haembtbp.ipassportqms.com/document_download/M2ZIYWMzMTetNTYwNi00YjEzLTg3YTItYTNmMzAzN2FiMGY5

- 3 vials of plasma, to be used for anti-A titration, prepared from filtered fresh frozen plasma
 - Patient 1 – containing group O plasma - to be used vs. the A₁ cells provided
 - Patient 2 – containing group B plasma - to be used vs. the A₁ cells provided
 - Patient 3 – containing group B plasma - to be used vs. the A₁ cells provided
- 1 vial of group A₁ rr red cells, red cells suspended in 20-30% modified Alsever's solution
 - A₁ rr red cells - to be used as a reagent red cell for titration vs Patients 1, 2, and 3
- 3 vials of group A 'patient' red cells, red cells suspended in 20-30% modified Alsever's solution
 - Patient W – for A subtyping
 - Patient Y – for A subtyping
 - Patient Z – for A subtyping

Testing

- Samples should be treated as per clinical samples.
- Plasma samples should be centrifuged prior to testing.
- Red cell samples should be prepared for use in the appropriate diluent.
- Treat the plasma samples for Patients 1, 2 and 3 as being from patients awaiting an ABO incompatible transplant from a group A living donor.
- Use the 30% red cells (group A₁) provided to undertake titration of the plasma samples against the cells indicated above using your in-house techniques, and if possible the equivalent standard techniques using Bio-Rad technology as described below.
- Do not use local cells for titration, use the cells provided.
- If A subtyping is performed in clinical practice, undertake A subtyping on the three 'patient' **red cell** samples.

Standard techniques (Bio-Rad)

- Prepare dilutions of plasma in saline (PBS or NaCl) using a doubling dilution method. Make the dilutions with a minimum volume of 200µl, using an automatic pipette. Use a new tip to dispense each dilution.
- Prepare a 0.8 - 1% red cell suspension in CellStab (use ID-diluent 2 if CellStab is not available).
- Read the endpoint of the titration as the last **weak** reaction.

LISS indirect antiglobulin test (**IAT**) using IgG or polyspecific cards

- a) Add 50µl of cells suspended in CellStab or ID-diluent 2 to each microtube
- b) Add 25µl of each plasma dilution to the corresponding microtube
- c) Incubate at 37°C for 15'
- d) Centrifuge 10' in DiaMed centrifuge

Direct agglutination at room temperature (**DRT**) using NaCl cards

- a) Add 50µl of cells suspended in CellStab or ID-diluent 2 to each microtube
- b) Add 50µl of each plasma dilution to the corresponding microtube
- c) Incubate at RT for 15'
- d) Centrifuge 10' in DiaMed centrifuge

Return of results

Record results of the titrations with your in-house and/or standard techniques, via the UKNEQAS website (www.ukneqasbtlp.org/participants/login). Instructions for data entry can be found at

https://haembtbp.ipassportqms.com/document_download/ZmNINTI3OTEtY2RhZC00NDA4LTlhZjktMDA0YzlyMG15Zm15

If you have any problems with the material or any queries regarding the questionnaire or results please contact the BTLP team.

With thanks for your participation