West Hertfordshire Hospitals NHS Trust

UK NEQAS Haematology and Transfusion

UK NEQAS BTLP Training Assessment and Competency Tool (TACT) User Instruction Manual

1

Section 2. How to use TACT

Contents

Introduction

Welcome to the UK NEQAS BTLP TACT system. The aim of this system is to provide laboratory staff and managers with an online, fully-interactive knowledge-based training and competency assessment tool, not solely focussed on the practical applications of training, but on the theoretical knowledge of all laboratory Biomedical Scientists working in blood transfusion. Currently, TACT features a single scenario based on routine request handling, representing a typical request received in a hospital-based blood transfusion laboratory. Cases are randomly generated for users to work through, with six areas of automated assessment, based on BSH guidelines. These are sample and request acceptance, ABO interpretation, D interpretation, antibody screen, antibody identification (individual panels and a 'final interpretation stage'), and component selection for possible issue. With the data and rules that are held by the system it is possible to generate hundreds of cases within each participation where no two are likely to be the same. The automated assessment is based on criteria linked to BSH guidelines.

The laboratory manager has a dashboard display that keeps him/her informed of staff performance as well as how frequently each member of staff is accessing TACT. The TACT system initially defaults the target levels, but in a future development, every laboratory will be able to set its own targets for engagement for staff within each of the assessment areas to suit their own laboratory needs. Please read the disclaimer on page 4 regarding adjusting these targets to values lower than the recommended default.

The laboratory managers' dashboard display allows managers to achieve a full drill down into each participation completed by their staff members. Managers may also produce a spreadsheet containing engagement and performance data, and set the system to send automatic prompt emails to staff members who are not meeting engagement targets. The drill down takes the form of a review of a completed participation. The laboratory manager is presented with a timeline of a members progress through a participation, including the order in which laboratory processes were accessed, the tests commissioned, the interpretations and decisions made, and the time taken to complete the participation. The manager is also given the ability to view the request form, cassette images, panel profile sheets and stock fridge contents presented to the member in the participation, so that he/she can visualise the decision-making process of the member, and the appropriateness of these decisions. The manager can very quickly see if an incorrect decision or interpretation was made, and take the necessary action to address an identified training and knowledge gap. The automated email settings, when activated, can also notify managers when a staff member has obtained a red mark for a participation.

Managers may also review completed cases with staff and make edits to the marked assessments in a fully auditable fashion, whilst taking local policies and practices into account. The member can also review their own performance using the individual participation dashboard feature, which allows them to review (but not edit) their own participation outcomes as above. Staff can build a portfolio of activity and outcomes which can be used to inform a competency rating, and can also generate a personalised certificate of engagement and performance.

There is an indicator to denote which participations contained ‘complex’ situations to be dealt with, enabling both manager and staff member to easily focus on which and how many of these situations have been encountered. The definition of a ‘complex’ case is:-

- One containing an un-interpretable (UI) ABO and/or D group
- Where the only correct red cell component selection is group O D Negative, except where the patient’s blood group is O D Negative
- Where the selection of red cell components requires adherence to a patient’s specific requirements.

Activities attempted/completed within TACT may be used as CPD evidence, and staff memberships can be transferred across organisations. Please contact the UK NEQAS TACT team for assistance with this.

Additional features to be embedded in TACT in a future release includes an indicator beside completed cases to denote that, whilst the interpretations and selections made during the participation, whilst not in breach of BSH guidance or unsafe for the patient, may not represent ‘optimal practice’, in terms of management of, for example, blood stocks, time or cost to the department.

BSH 2012 Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories states ‘Unless secure electronic patient identification systems are in place, a second sample should be requested for confirmation of the ABO group of a first time patient prior to transfusion, where this does not impede the delivery of urgent red cells or other components’. The current iteration of TACT does not hold any patient transfusion history, or the ability to request a second sample before red cell component issue is performed. In view of this, and as the tests ‘Serological XM’ and ‘Electronic issue (EI)’ are not currently active in the upgraded version of TACT, we would ask laboratory managers and members to view the exercise as a selection of units for potential issue. The functionality of providing a second sample and the inclusion of patient transfusion history are features of the software will be introduced to the system, along with crossmatching and EI.

Minimum System Requirements.

To access the system, at a minimum you will need either:-

- Google Chrome
- Latest 'stable' release on Windows Vista and up, Linux and macOS.
- Mozilla Firefox
- Latest 'stable' release on Windows Vista and up, Linux and macOS.
- Internet Explorer
- Edge on Windows 10**
- 11 on Windows 8.1 and up
- Apple Safari
- Latest 'stable' release on latest macOS.

The minimum screen resolution to achieve optimal screen display is 1024 x 768. This will allow all of the user interface elements to be visible at once. Please ensure your browser is set to allow pop-ups.

Accessing the System.

The TACT site may be accessed using the following link:-

http://tact.ukneqasbtlp.org.uk

It can take up to 72 hours for a TACT account to be authorised. There is no charge levied for subscription to TACT.

Social Media.

The TACT social media pages can be accessed:-

http://www.facebook.com/btlp.tact

@btlp_tact

Disclaimers.

Any resemblance to any persons living or dead represented by the ‘patients’ generated in the scenarios of TACT is entirely unintended and coincidental.

The system is governed by complex probability and frequency logic rules for the randomised generation of a complex case, and the engagement targets have been optimised to ensure that complex cases are encountered. These targets are currently set at:-

Request acceptance	40 per year
ABO interpretation	40 per year
D interpretation	40 per year
Antibody screen	40 per year
Antibody identification (and exclusion)	10 per year
Component selection for possible issue	20 per year

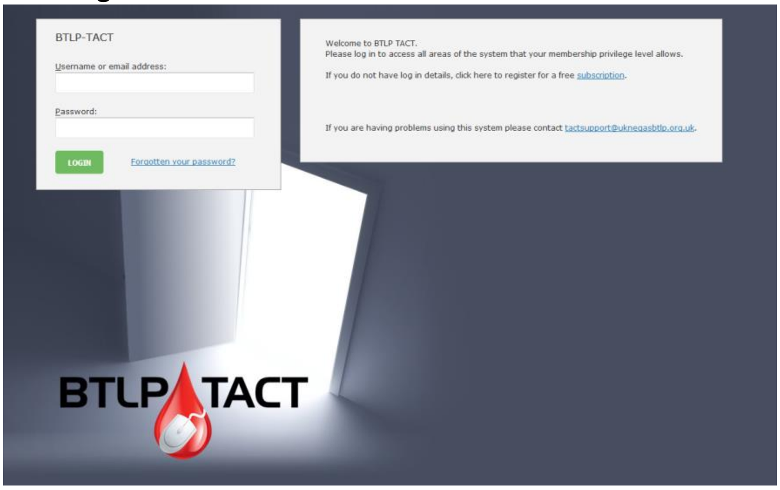
In a future development, managers will have the ability to adjust engagement targets for each of the six areas of assessment. However, if the engagement targets are adjusted to values lower than the default setting, it is likely that staff members may not encounter all complex cases programmed in the system.

Using TACT as a member.

- Enter https://tact.ukneqasbtlp.org.uk into the browser address bar.

- The screen in figure 1 is displayed:-

Figure 1.



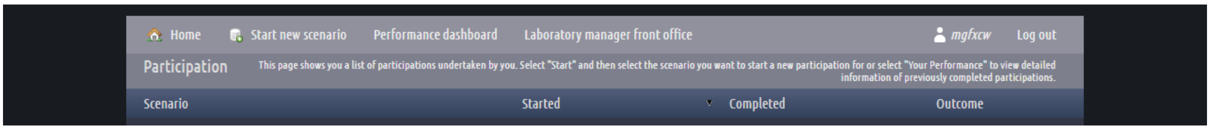
- Insert your username and password into the relevant fields. Please note the username and password are case sensitive. The username may contain numeric characters. Click on the green 'Login' icon, then click on 'Enter'.

- The system will time out after a period of 1 hour of inactivity. After this time, you will need to log on again to continue.

Starting a New Participation.

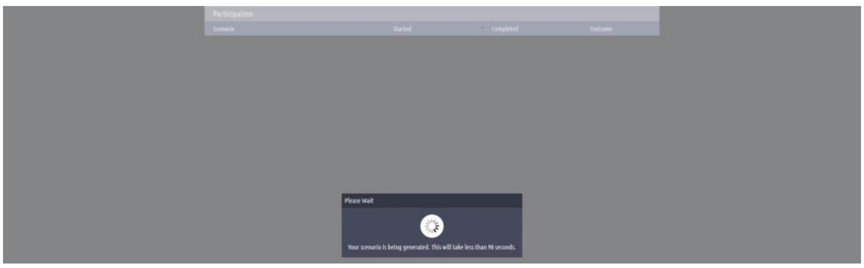
- Once logged in, the Home screen is as displayed as in figure 2:-

Figure 2.



- Click on 'Start new scenario'. A loading screen will be displayed as in figure 3:-

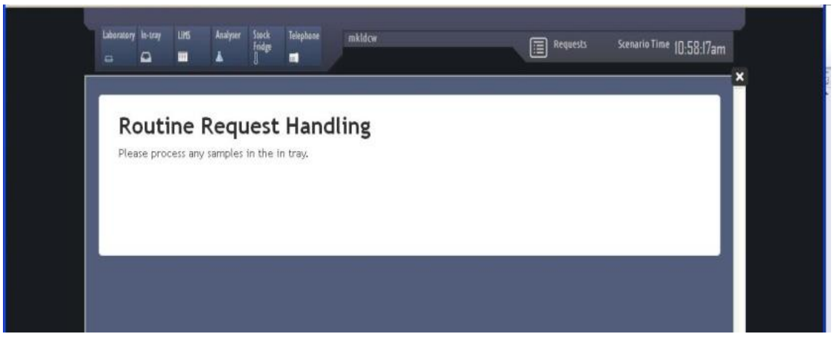
Figure 3.



- Your case is being randomly generated. Be aware that the screen may take up to 30 seconds to load.

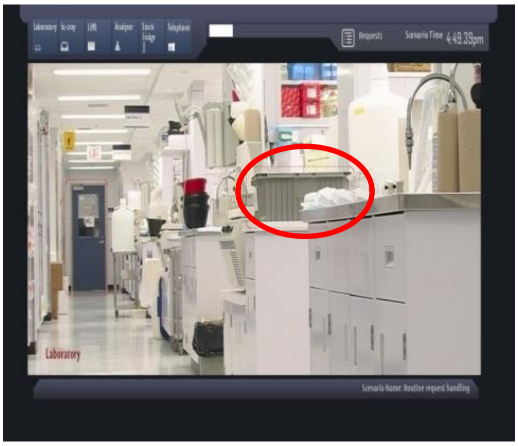
- A new window will open, allowing the user to return back to the home screen without exiting the exercise. Ensure pop-up's are enabled in your browser window. The new window will be displayed as below, with the instruction to process the samples in the in-tray. See figure 4:-

Figure 4.



- Click on the black-and-white 'x' underneath where the date and time are displayed. You are now presented with a screen showing the layout of a typical laboratory, as in figure 5:-

Figure 5.

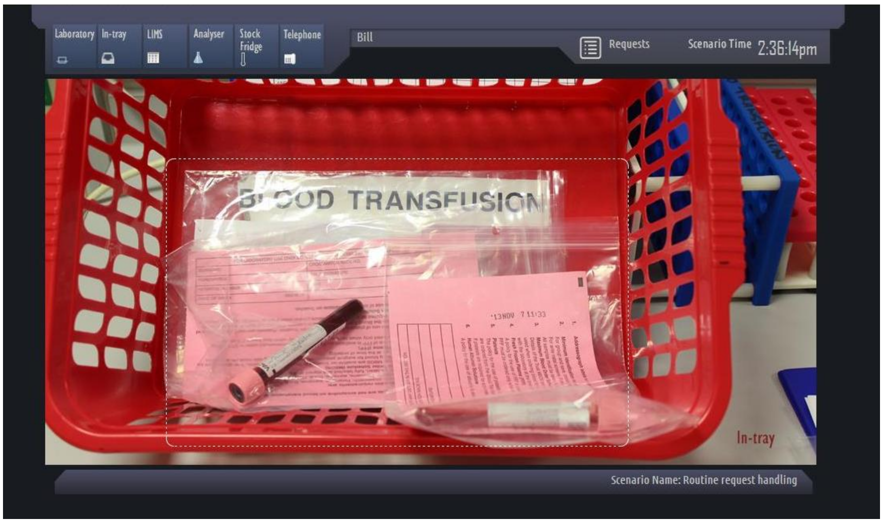


Navigating around the laboratory.

- At the top of the screen a series of named icons can be seen. The laboratory scene shown can be accessed by clicking the first icon, 'Laboratory' at any time. In addition there is a 'Requests' icon towards the right-hand side of the screen, which is the access icon for any patient request forms that are in use. Click this icon to display the request form and the results of any actions taken so far in the participation. Click 'Requests' again to hide this screen.
- There are two 'live' areas – the door to the lab and the 'in-tray', circled in red in figure 5. By placing the mouse over live areas, navigate through the TACT environment. 'Live' areas can be recognised by a solid red or white outline that appears when the mouse is placed over them.

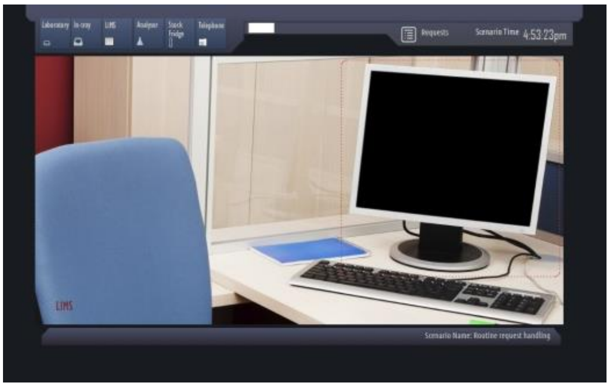
- The in-tray can be accessed by clicking on the image of the in-tray, as in figure 6, or by clicking on the 'In-tray' icon.

Figure 6.



- The laboratory computer, or Laboratory Information Management System (LIMS), can be accessed by clicking on the 'LIMS' icon. See figure 7.

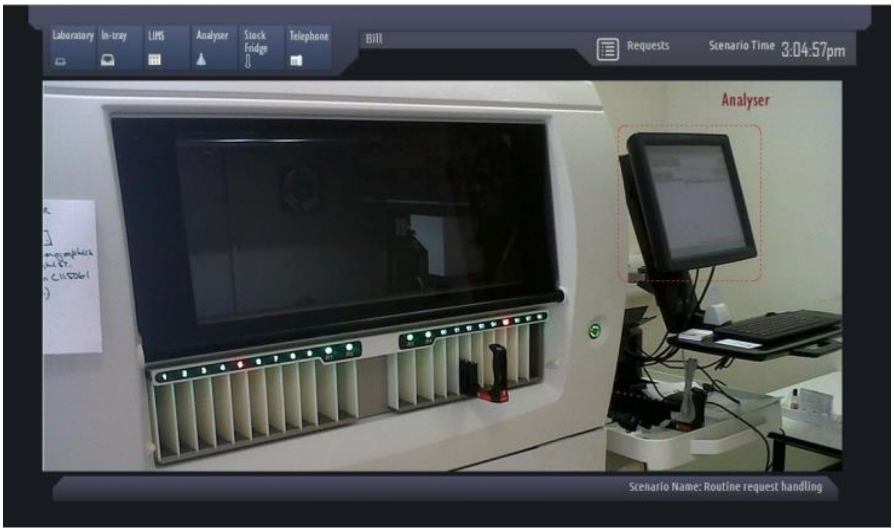
Figure 7.



8

- The laboratory analyser can be viewed by clicking on the 'Analyser' icon. See figure 8.

Figure 8.

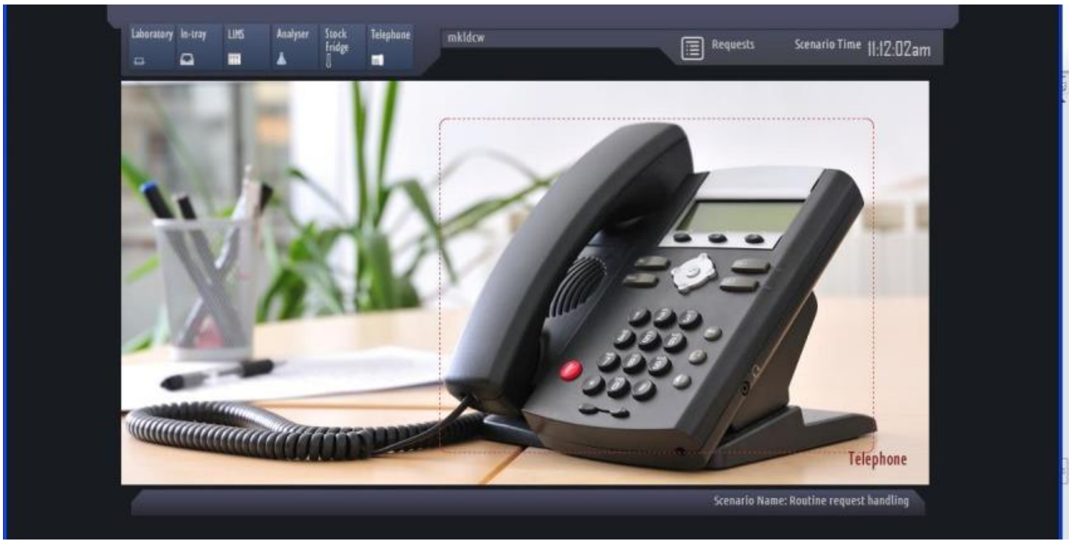


- The Blood Stock Fridge can be accessed by clicking on the 'Stock Fridge' icon. See figure 9.

Figure 9.

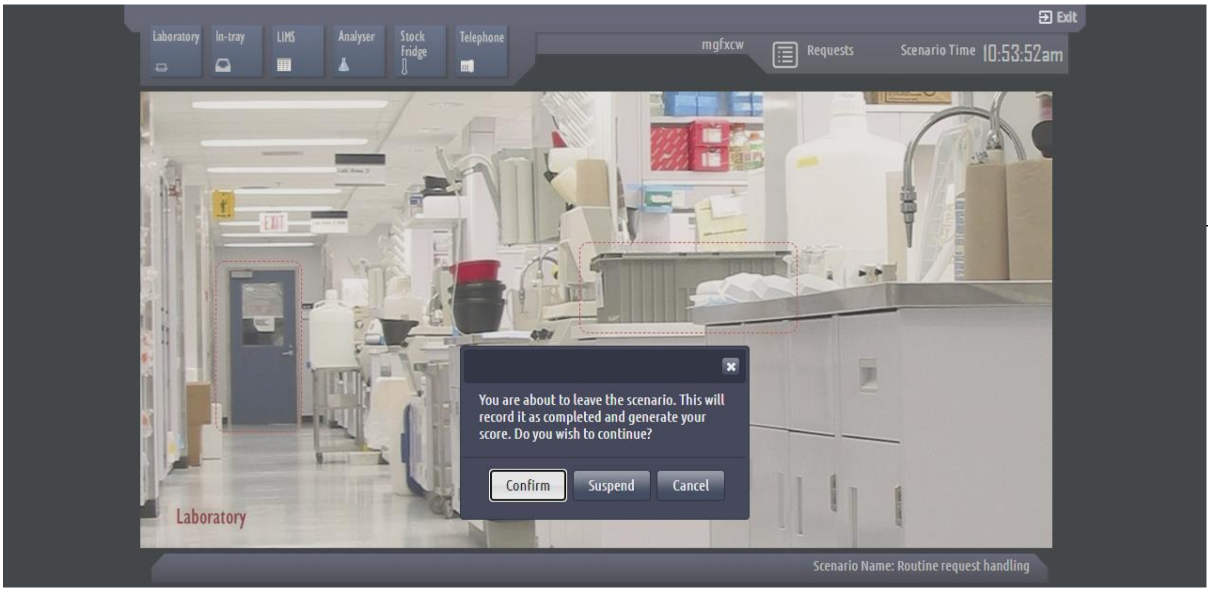
- The Telephone can be accessed by clicking on the 'Telephone' icon. See figure 10.

Figure 10.



- Clicking on the 'laboratory door' live area will display the screen as in figure 11:-

Figure 11.



- By clicking 'Confirm' you will exit the application, and the exercise will be marked as complete and scored. By clicking 'Suspend' you will be presented with a text box to explain the reason for suspending the participation, and the exercise will not be marked as complete, and may be returned to at a later time. By clicking 'Cancel' you will return to the participation as before. You must always leave the application through the lab door to save your result submission, and for the participation elapsed time in the performance dashboard to be correct.
- Failing to complete all of the requests in the in-tray will attract a red mark for the participation.

Performing the Exercise.

- Click on the in-tray and a tray of work will appear, as shown in figure 12:-

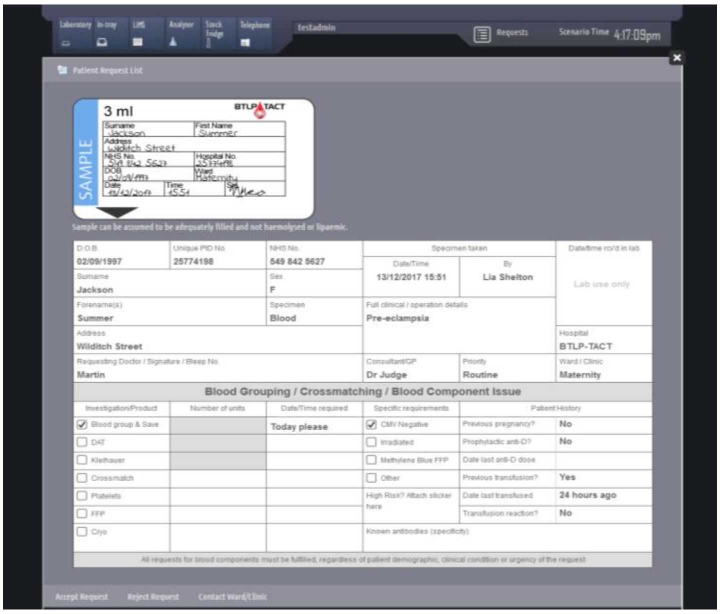
Figure 12.

- Click on the work in the basket and a Patient Request List will appear, as shown in figure 13:-

Figure 13.

- Up to two requests will appear. Details of the patient demographics are given for the samples currently in the in-tray. By clicking on the request number, you are presented with a sample label and corresponding request form to check, as seen in figure 14:-

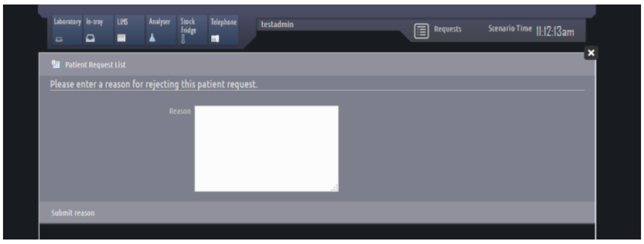
Figure 14.



11

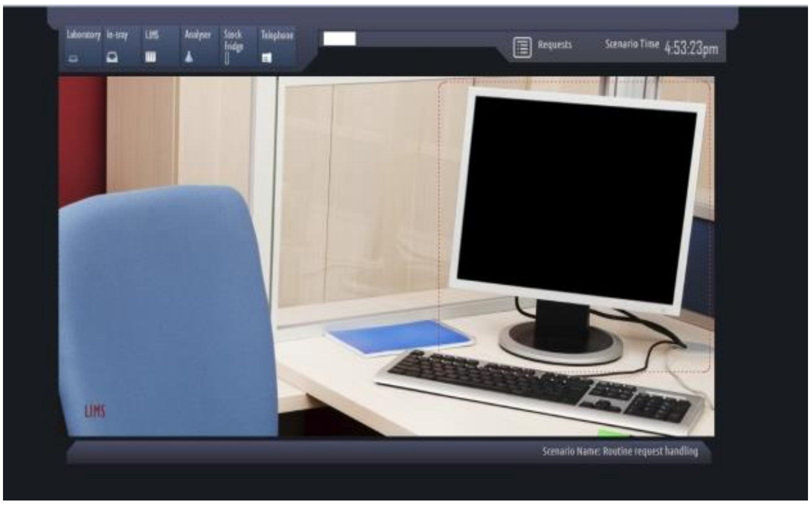
- Details of the tests and components requested, and an indication of the time required, are given on the form.
- At this point you can accept or reject the sample, or seek clarification by simulating making a phone call to contact the requestor.
- Scroll down to the clickable options at the bottom of the screen. Clicking on the ‘Accept Request’ option will return you to the Patient Request List screen. Clicking on ‘Contact Ward/Clinic’ will send you back to the Patient Request List screen. Clicking on the ‘Reject Request’ option will send you to a free-format text box, as seen in figure 15:-

Figure 15.



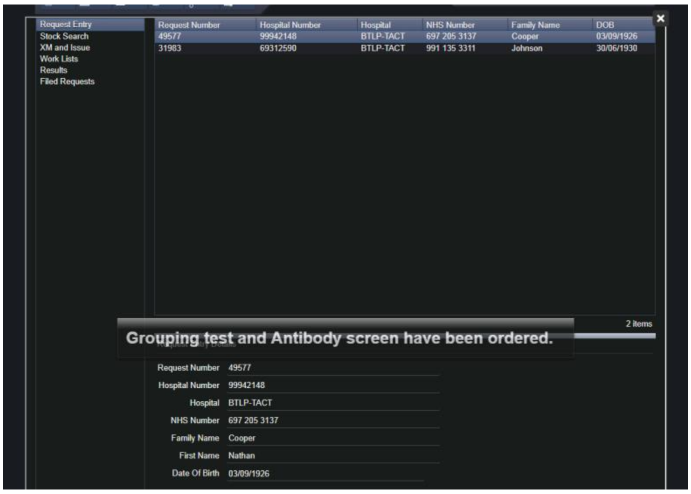
- If you are rejecting a request, you must input a free-format comment into the text box to explain the justification for rejecting the sample. This field is mandatory, and if a reason is not entered, the system will not record that the sample has been rejected. The information is then submitted by clicking ‘Submit reason’. You will be shown confirmation that the sample has been rejected, and you should exit the exercise at this point, by clicking on the laboratory door from the ‘Laboratory’ screen.
- If you would require clarification of the request by contacting the requestor you can record this by accessing the telephone icon, click on the telephone and then the area you wish to contact. You will be taken to a text box where you should select which request you are making the call about (where there is more than one request in the in-tray), enter the essence of your enquiry, and then end the call. Access the ‘in tray’, then click on the request number and either accept or reject it. If rejecting, explain why as detailed above.
- The current system iteration does not provide a reply to your enquiry.
- Accepting a request removes it from the work list and sends it to the LIMS. Rejecting a request also removes the request from the work list, but this request is deemed to have been completed and tests cannot then be commissioned on it in the LIMS.
- The request form may be printed using the ‘Print’ option in the ‘Requests’ screen if you wish to note results on a hard copy of the request form. This can be done once the sample has been accepted from the in-tray.
- The request number is displayed on the request form in the ‘Requests’ screen, when the request has been accepted from the in-tray.
- To go back to the previous screen, click the ‘Requests’ icon again to close the request form screen.
- Click on LIMS and a screen appears with a PC, as shown in figure 16:-

Figure 16.



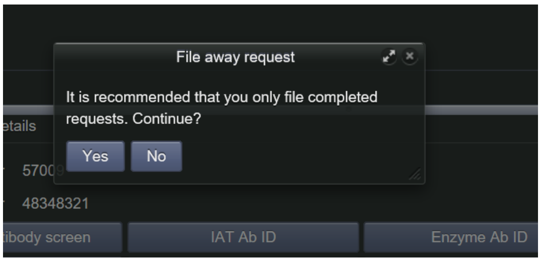
- Click on the PC. The screen defaults to the 'Request entry' menu of the LIMS. Requests accepted from the in-tray will appear here, and you can order the required tests by highlighting requests at the top of the screen and then clicking on the appropriate ordering icons for each request. TACT will tell you that the requested tests have been ordered.
- At this time if blood has been requested we are asking members to order 'select for red cell issue', as the completion of a serological crossmatch or issue of red cells by electronic issue is not possible in the current iteration.
- Each test will only be ordered once, even if the button is clicked multiple times while the primary request is at status 'in progress' in the work list.
- The tests 'Group & Antibody Screen', 'IAT Ab ID', and 'Enzyme Ab ID' can be requested again, once they have been completed, and TACT will score the most recent result or interpretation entered.
- A banner appears across the middle of the screen when tests are ordered, as in figure 17. Please allow this banner to fade out before clicking on the next test request, or your next selection may not be registered.

Figure 17.



- The option for 'file away request' will remove the patient request from the 'Request Entry' area of the LIMS, and essentially file it away, so that no further work can be commissioned on the filed request. Clicking on the 'file away request' button will prompt a warning message, as shown in figure 18 below:-

Figure 18.



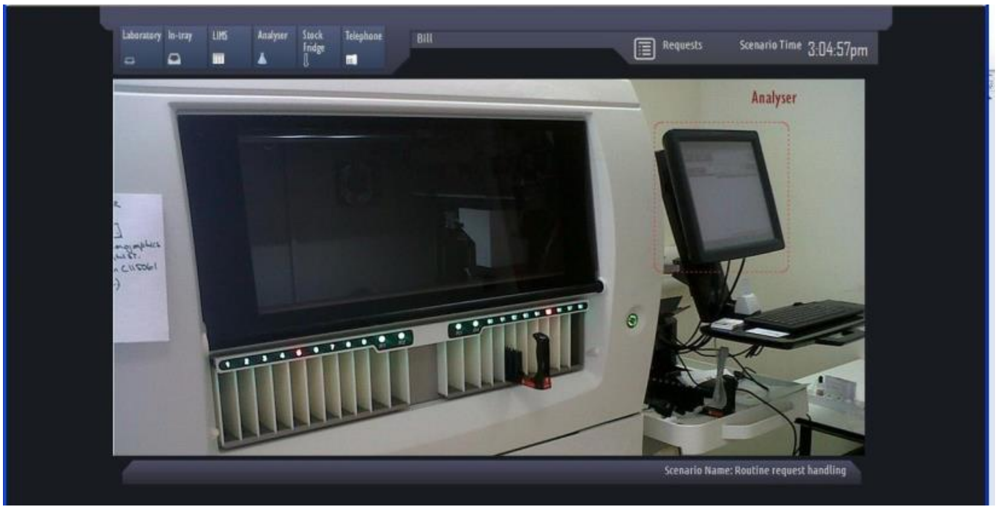
- Click on 'yes' to file away the request.
- There is a list of six clickable options (circled in red in figure 19) headed 'Request Entry', 'Stock Search', 'XM and issue', 'Work Lists', 'Results', and 'Filed Requests'. Each of these provides you with information about the progress of a specific request. The information displayed is pertinent to the request that is currently highlighted, with the exception of 'Filed Requests'.

Figure 19.

14

- When tests have been commissioned for a request, they will appear in the 'Work Lists' menu, and when tests have been resulted or interpreted, these results will appear in the 'Results' menu.
- Visual data for the participation, such as the grouping cassette, will be available in the 'Requests' menu, as progress through the participation continues.
- When all of the required tests have been ordered for each request, click on the Analyser icon. This effectively puts the work onto the analyser and a screen appears showing the analyser and its associated PC, as shown in figure 20:-

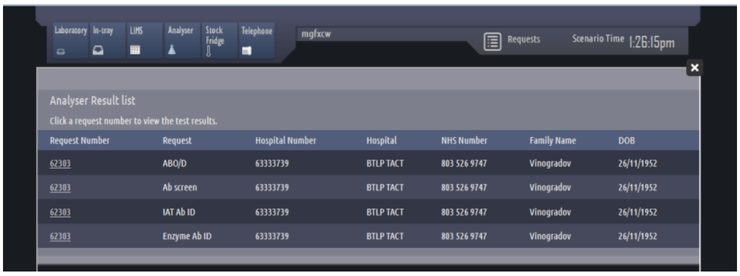
Figure 20.



You may assume that all IQC and analyser maintenance procedures have been performed to a satisfactory manner, and the analyser is valid for use.

- Click on the PC and the ordered tests on the request(s) will appear, with each test on a separate line, as shown in figure 21:-

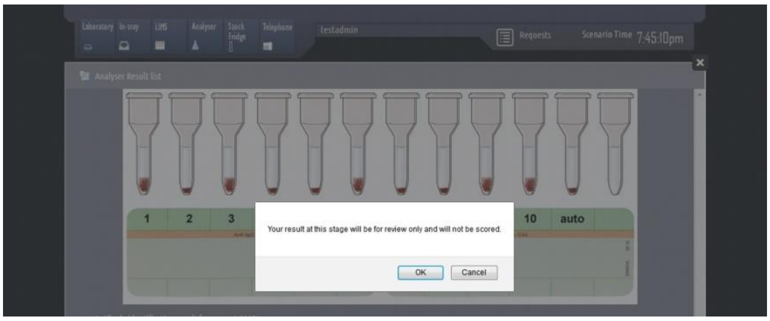
Figure 21.



- Note: If a 'select for red cell issue' test has been ordered this will NOT appear as a test but can be resulted through the stock fridge AFTER the option has been selected.
- Click on each test line in turn and interpret results.
- Some browsers, e.g. Google Chrome present autocomplete dropdown boxes when the same text is typed into free text fields more than once. Be aware that if previous exercises have been performed, an autocomplete dropdown box may appear.
- Click on 'submit findings'. ABO groups are to be entered as A, B, AB, O or UI (unable to interpret); D groups are to be entered as Positive, Negative or UI. Antibody screens are Positive or Negative. Result submissions at this point are not case sensitive, and the system will accept 'pos' or 'neg' for D groups and antibody screen results.
- Where a 'UI' interpretation is made for an ABO/D group, the system requires a mandatory entry into the free-form comment box before the case can be progressed.

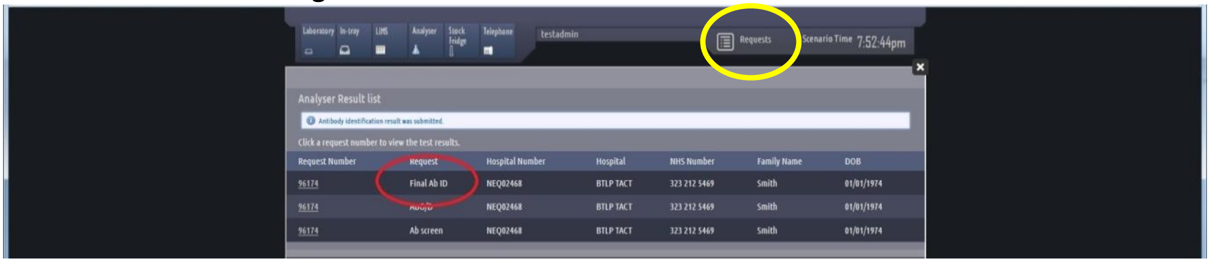
- Note: There are icons at the bottom of the Analyser Result List screens for antibody screens and antibody identifications that enable you to print antibody screening profile sheets and/or antibody identification sheets. Take care to close JUST the screening/panel sheet tab to exit the document and return to the current TACT case.
- If the antibody screen is positive, it is advisable at this point to print out the antibody screen and antibody ID profile sheets, then return to the LIMS and order any further test or tests that may be appropriate.
- Click back through to the analyser to obtain test cassettes for the IAT or enzyme panel (if ordered) and enter an interpretation. There are drop-down boxes to enable you to enter each selected antibody for up to eight specificities as either 'confirmed' or 'cannot be excluded'.
- A box is available for any additional comments, but this is not mandatory. Click on 'submit findings'.
- Upon clicking on 'submit findings' for antibody ID (IAT and Enzyme) a warning message will appear to alert you that your entry at this stage will not be scored, as shown in figure 22:-

Figure 22.



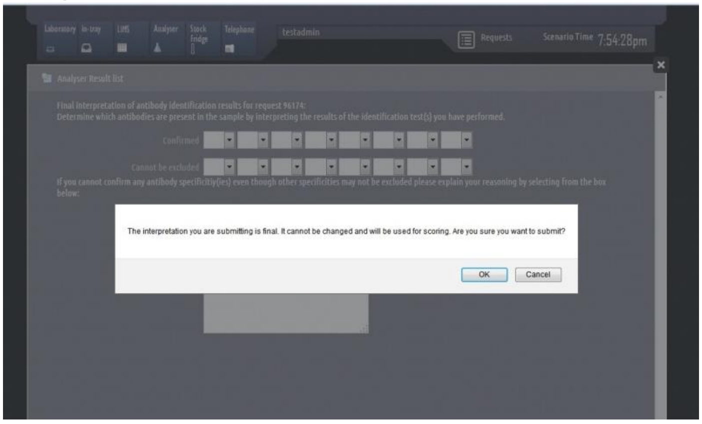
- If at this point you wish to review your result entry, click on the 'Requests' icon, to be shown images of your progress so far, circled in figure 23 below in yellow.
- Click on the appropriate request number on the left of the screen, then click on the element of the case that you wish to review. Any element you have entered a result for up to now will be shown here. To close this window, click on the 'Requests' icon again.
- If you wish to change any of your results up to this point, click on the LIMS icon, and re-request the required test that you wish to change. You will be presented with the original set of reactions once more. Click on the Analyser icon and re-result the test. The system will assess you on results you enter **last** for each test, and will ignore any previous results.
- After submitting a result for either the IAT or enzyme panel, a further test option will appear in the 'Analyser' list, as circled in red in figure 23:-

Figure 23.



- This test option is for the entry of your final conclusion for the antibody identification, taking into account the result of the antibody screen and one or both panels. This **must** be completed to register an antibody identification interpretation. Failure to enter an interpretation for the Final Ab ID will result in a red mark for antibody ID being incomplete.
- Your final conclusion is entered here in an identical dropdown box as for when interpreting the panel(s). Click on 'submit findings'. The system will generate a mark for confirmed identification and for any 'cannot be excluded' interpretation.
- Upon clicking on 'submit findings', a further warning message will appear to alert you that your result at this stage will be scored, and that you may not change your entry beyond this point, as shown in figure 24:-

Figure 24.



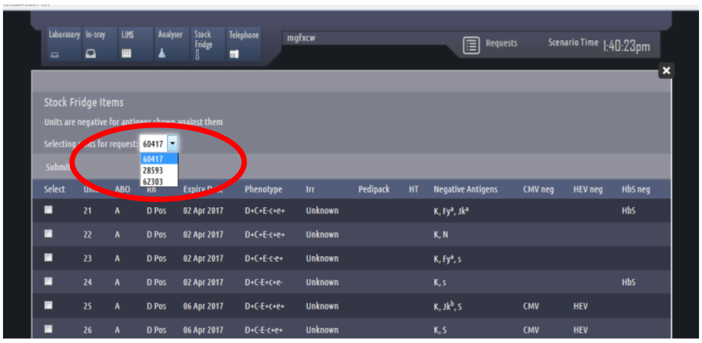
- If 'select for red cell issue' was ordered, go to the 'Stock fridge' icon. The screen in figure 25 will be displayed:-

17

Figure 25.

- Click on a drawer within the stock fridge and a list of contents for that drawer will appear. A drop down list of requests for which 'select for red cell issue' has been ordered will appear above the list of components, circled in red in figure 26.

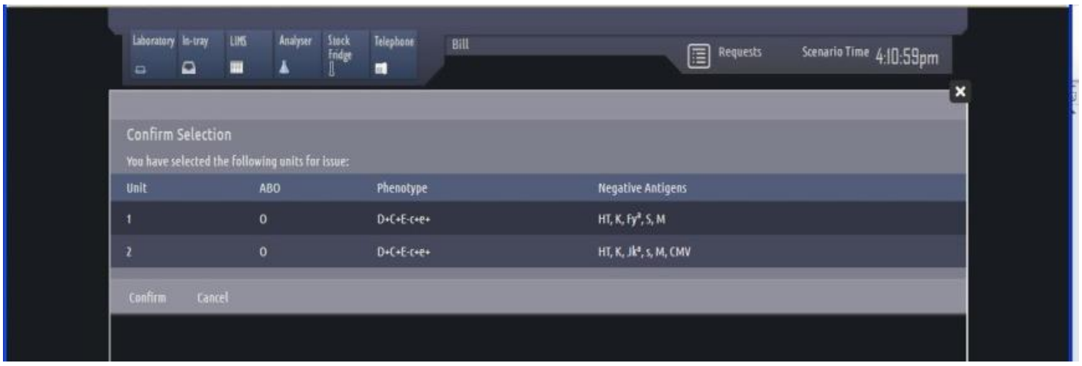
Figure 26.



18

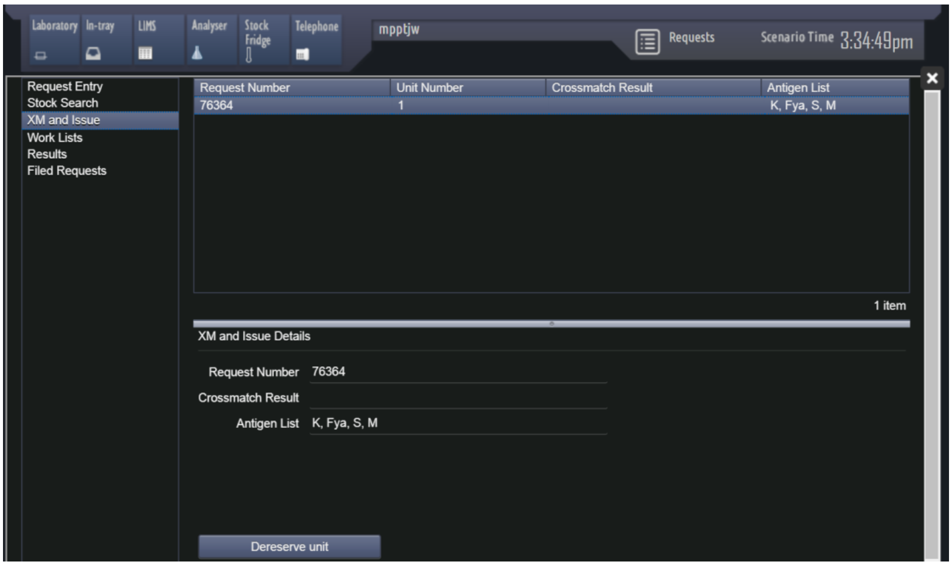
- Select units for a request by selecting the appropriate request number, and then ticking the box beside the component under the 'Select' column. Click the 'Submit' button when you are happy about the units selected. The 'Submit' button is not available if the option to issue components has not been commissioned in the LIMS.
- Note:- requests that have been filed away will not appear in this list.
- You must confirm your selection on the next screen by clicking 'Confirm', shown in figure 27:-

Figure 27.



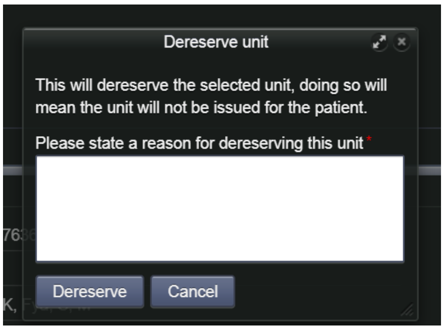
- It is possible to cancel the unit selection by clicking ‘Cancel’ to be returned to the list of components in the drawer.
- Repeat this process for each request that requires component issue. Be aware to check the request number for which units are being selected.
- You may need to access more than one drawer to satisfy the request. To select components of differing ABO/D groups, submit one component first, then return to the stock fridge screen by clicking on the black-and-white ‘x’, then select another drawer to select and submit further components.
- NOTE:- the expiry date of the components are generated in real time at the point the case is generated. If the exercise is not completed before all compatible components have reached their expiry date, you will not be able to complete the exercise and may receive a penalty mark.
- If you believe there are insufficient units in the stock fridge with the correct specification for the patient, selecting only one unit of the correct specification will result in a green mark awarded for component selection.
- If you believe that you have selected a unit in error, you can deselect the unit in the LIMS. Deselected units are effectively returned to stock and not ‘issued’ to the patient. Units should be deselected before ending the participation, or a red mark for component selection may be awarded. The system will not take deselected units into account when generating the final mark for component selection, but details of all units selected, whether de-selected or ‘issued’ will be shown in the participation performance dashboard.
- To deselect a unit, visit the LIMS menu, and click on the ‘XM and Issue’ option, as shown in figure 19. The screen shown in figure 28 below will be displayed:-

Figure 28.



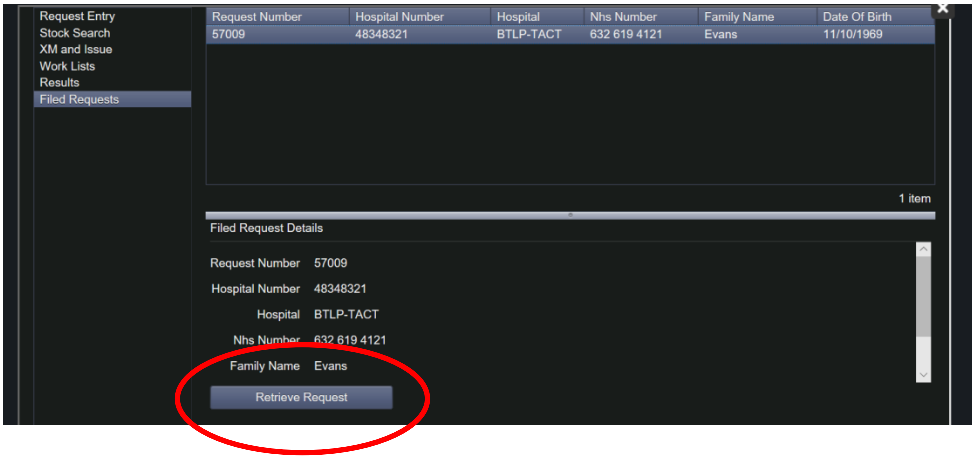
- Click on the unit to be deselected, and click 'dereserve unit'. The screen shown in figure 29 below will be displayed:-

Figure 29.



- You must enter a reason for deselecting the unit in the freeform text box. Click 'dereserve'. The unit is then returned to stock, and is no longer reserved for the patient.
- Once you believe a request has been completed, you may return to the LIMS to file away the request, although this is not mandatory or scored. Filed requests can be retrieved, by selecting the 'filed requests' menu option in the LIMS, highlighting the request to be retrieved, and clicking on 'retrieve request' as shown circled in red in figure 30 below:-

Figure 30.



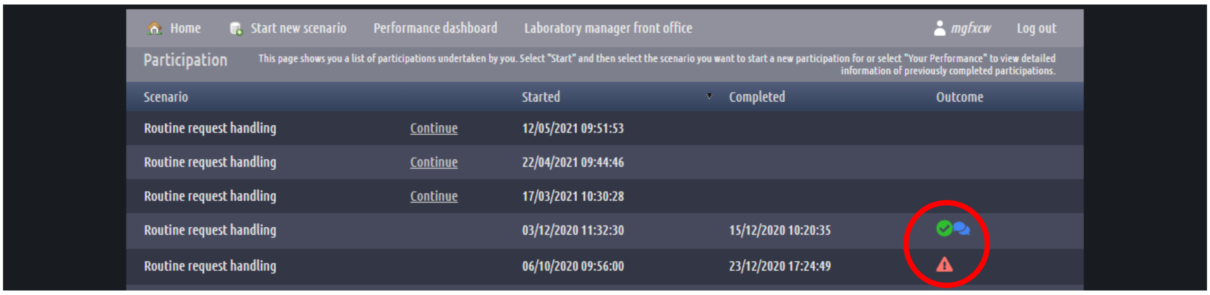
- TACT will display a message to the effect that the request has been retrieved. Further tests can now be commissioned on the request, and the request number will appear in the drop down lists in the telephone and stock fridge menus, where appropriate.
- If all of the tests requested have been resulted and submitted, and all required components issued, the participation is now complete and you can exit TACT clicking on the laboratory icon, then the lab door. Click 'Confirm' to exit the participation and save your results.
- You will be presented with a Participation Summary of the results submitted for the exercise and details of component units issued (if applicable) for each request. There is a free text comment box available for you to enter any comments or other details/observations on the case that you might wish to add. Click 'Continue', and the browser window will close.
- Your results will appear on your Individual Performance Dashboard for you to review, and will also be visible to the main subscriber for review.
- If you wish, you can start again and try another case. Access to TACT is available 24/7 all year round. If your session has ended, log out of TACT by clicking on the 'Log out' icon at the top right of the home screen.

Reviewing performance.

'Instant' review.

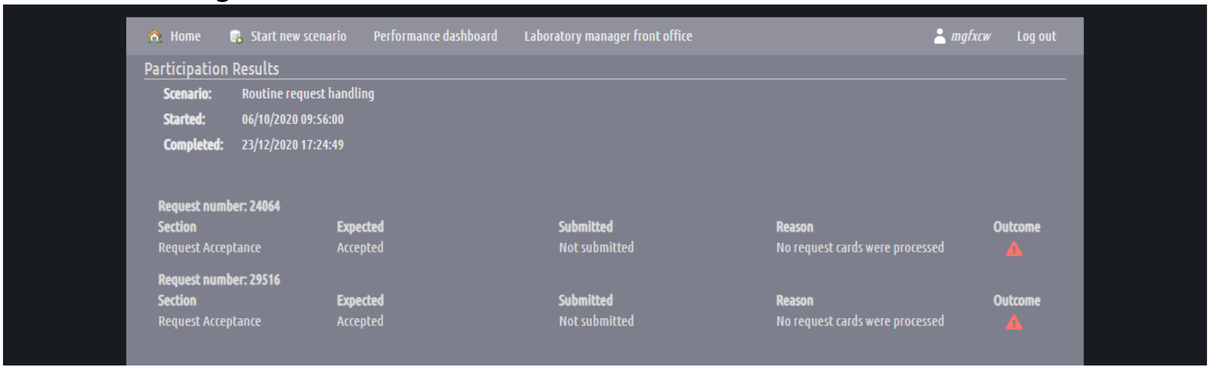
- All Individual users (including non-administrators) are able to instantly review their own performance in the TACT participations in this screen. They are not able to view the dashboard of any other member.
- From the home screen shown in figure 31, the coloured indicators in the 'outcome' column (circled in red) are clickable.

Figure 31.



- Click on one of the coloured circles to be taken into the participation results screen, as shown in figure 32:-

Figure 32.



- Within the participation results screen, the expected results and the submitted results are displayed side-by-side for comparison purposes. Where a correct response was input for each element of the case, a green indicator is displayed. Where an incorrect response was input, a red indicator is displayed.
- Where a response is missing or incorrect, there is also a brief description of the 'reason for penalty'.

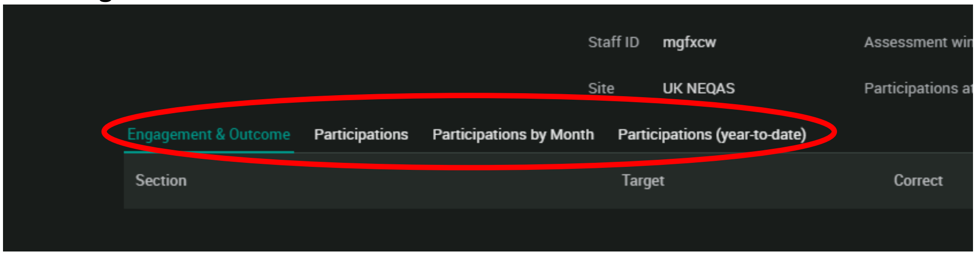
Performance dashboard.

- The Performance Dashboard is accessed from the Home screen, by clicking on the 'Performance dashboard' icon.
- The Individual Dashboard shows the name of the member, their unique staff ID, the site, the member assessment window interval, the date the first assessment was started, and how

many exercises have been attempted and how many completed during the assessment window.

- There are four tabs in the individual performance dashboard – 'engagement & outcome', 'participations', 'participations by month' and 'participations (year to date)', as shown circled in red in figure 33:-

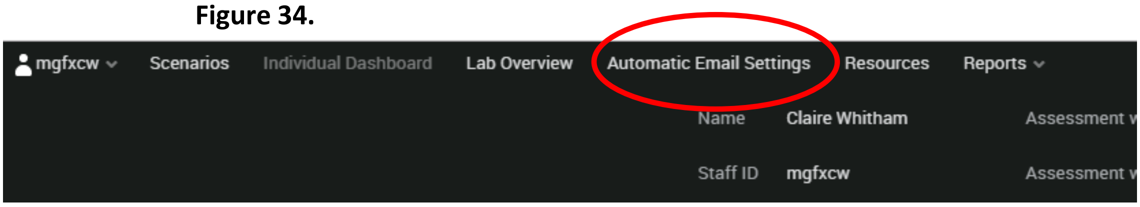
Figure 33.



Staff member engagement.

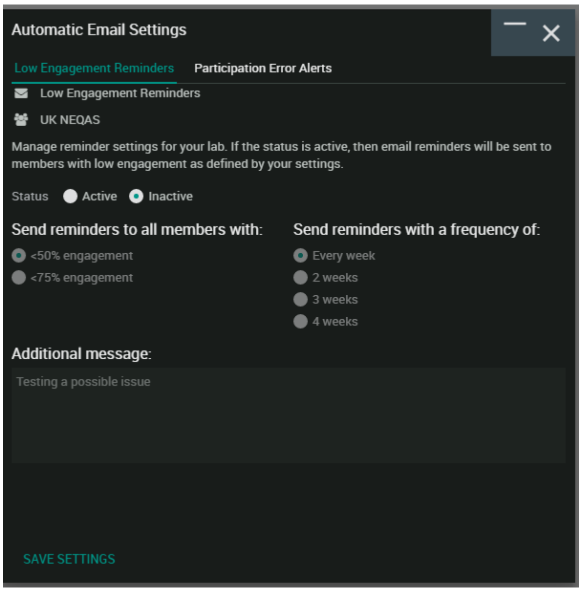
- The system is governed by complex probability and frequency logic rules for the randomised generation of a complex case, and the engagement targets have been optimised to ensure that complex cases are encountered.
- To review the number of completed participations by month and a running tally of completed participations for the current and previous financial years, click on the appropriate tab, as shown in figure 33 above.
- Managers can set the system to automatically send an email to staff members whose engagement is less than either 75% or 50%, set the frequency at which these emails are sent, and can view a list of which staff members have received these emails.
- Please note:- staff engagement targets are based on completion of the minimum number of scored elements within a participation, and not by the number of completed participations.
- From the participation dashboard screen, click on 'automatic email settings' (fifth option from the top left), as shown circled in red in figure 34:-

Figure 34.



- The following screen, as shown in figure 35, is displayed:-

Figure 35.

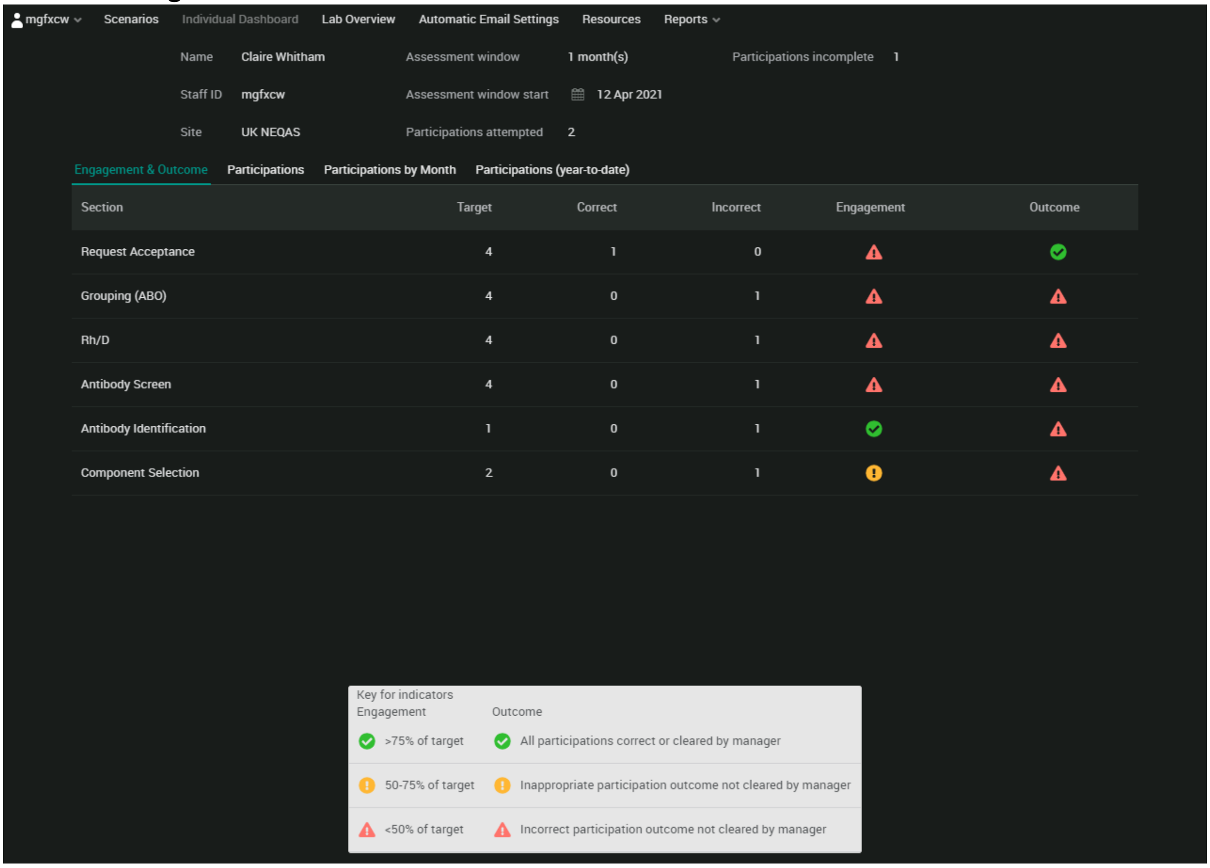


- The screen will default to the 'low engagement reminders' tab. To set the system to send the email reminders, click on 'active'. To switch off, click on 'inactive'.
- When the 'active' radio button is selected, the options for % engagement and frequency will become available to select. Click on the % engagement and frequency as required. An additional message may be entered in the free form text box, according to preference.
- Click on 'save settings' to set the automated emails settings.
- Automated emails will not be sent immediately, but in the selected frequency time frame.
- To inactivate the automated emails, clink on 'inactive' and then 'save settings'.
- To view which staff members have been sent the engagement reminder email, click on 'lab overview' and then select a member of staff. Click on the 'reminders' tab above the table (third option from the left).

Engagement and outcome.

- Within the 'engagement & outcome' tab, there is a table of all the possible areas of assessment currently within TACT, with columns for the target number of participations, and how many have been completed correctly and incorrectly. There is a colour coded indication of if the member has reached their target of engagement with TACT, and the outcome of these participations, according to keys given below the table.
- The engagement targets are currently set at the numbers shown in in figure 36 below, in the 'target' column:-

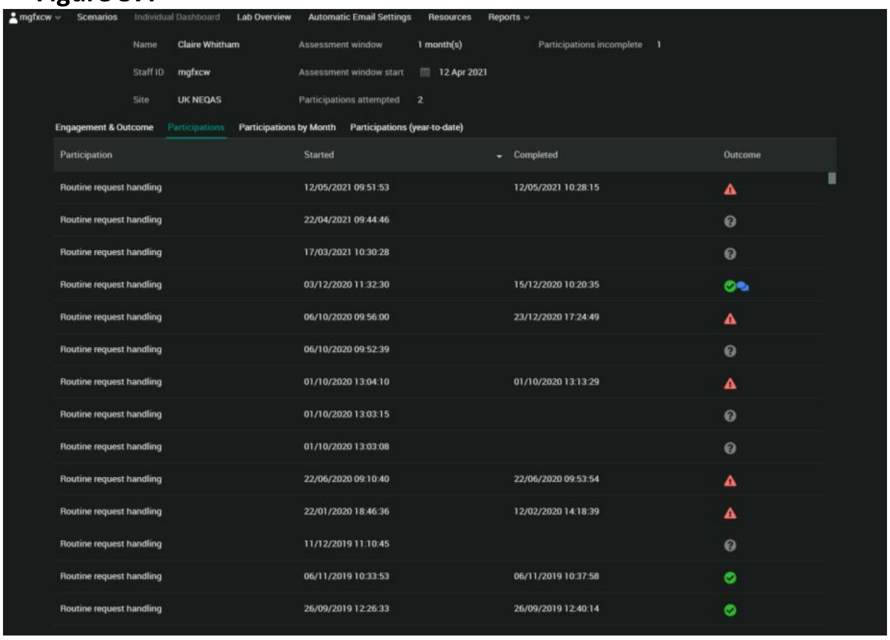
Figure 36.



25

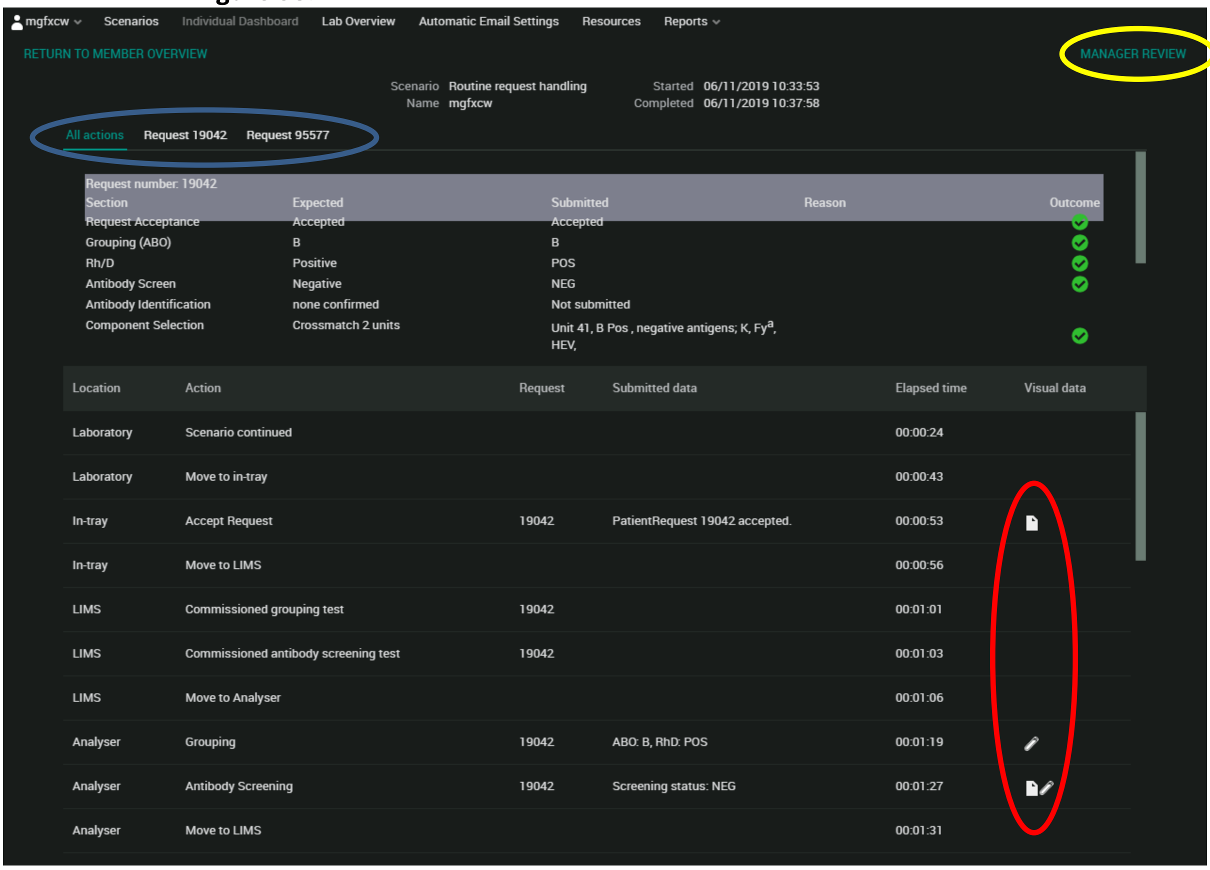
- Note:- if no participations have been completed, this table will be blank.
- Within the ‘participations’ tab, there is a scrollable list of all of the exercises that have been begun. The date started, the date completed (where applicable), and the outcome of each participation is shown, as seen in figure 37:-

Figure 37.



- Where a participation was completed correctly, the indicator is green, where a participation was completed with one or more errors made, the indicator is red. Where a participation has been subject to manager review and an adjustment made, there is a blue indicator displayed. Where the participation is incomplete, the indicator is grey.
- For completed participations only, click on the either red or green coloured indicator to be shown the timeline for the participation in a table, and a copy of the participation results screen, as seen in figure 38 below:-

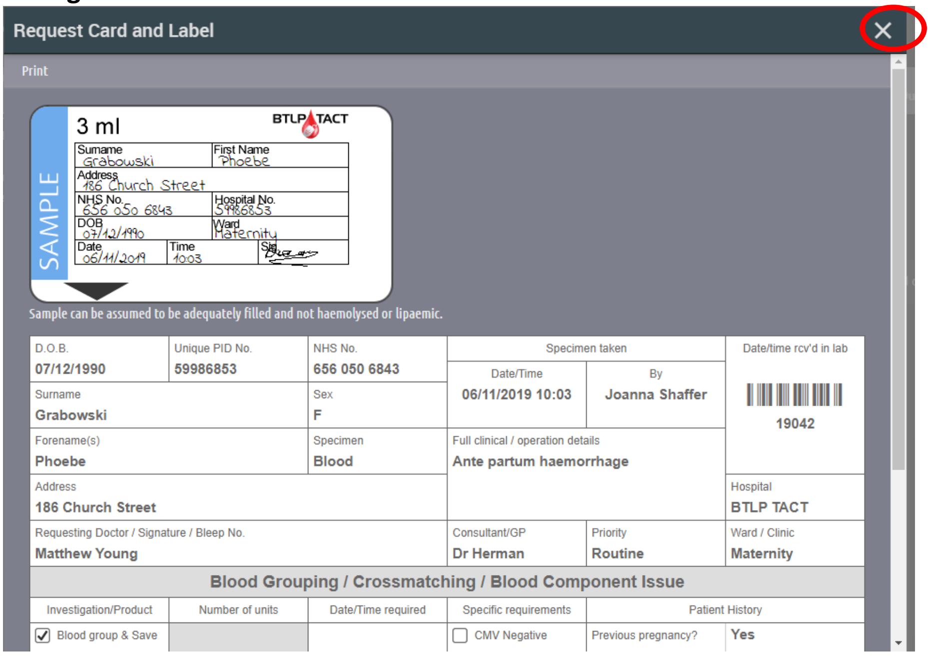
Figure 38.



- The information above the table contains details of the type of scenario, the identity of the member, and the date and time the exercise was started and completed.
- Note:- if the exercise was exited before completion at any stage by closing the browser window and not using the 'suspend' option to leave the lab via the lab door, the elapsed time for the participation will not display the correct information.
- The information in the table shows the actions taken in the order they occurred, the data that was submitted at each of the assessed points in the exercise and any comments entered into the text boxes, and the elapsed time taken to complete the exercise.
- The screen defaults to show all actions taken during the participation. The actions for each individual request can however be viewed in isolation, by clicking on the request number circled in blue in figure 38.

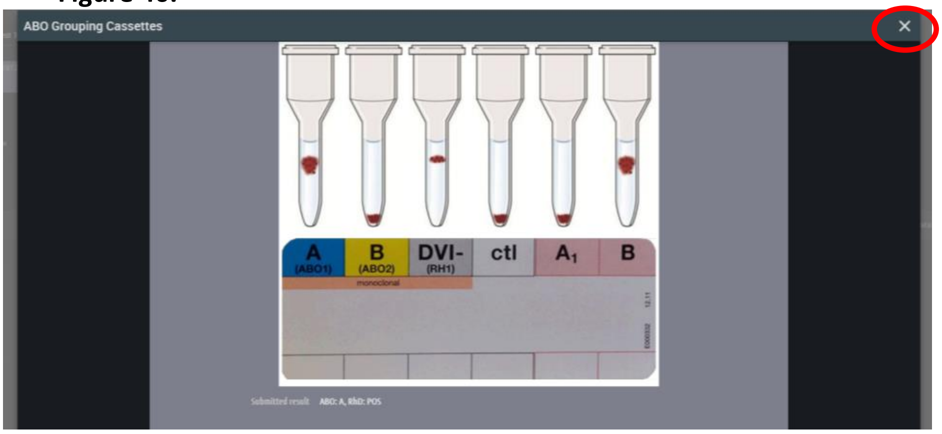
- There are two clickable icons for visual data, circled in red in figure 38. The ‘file’ icon shows the request form and sample label, the panel profile sheets, and the contents of the stock fridge. The ‘paper clip’ icon shows the cassette images that were presented during the participation. Click on these icons to be shown the relevant visual data, as shown in figures 39 and 40:

Figure 39.



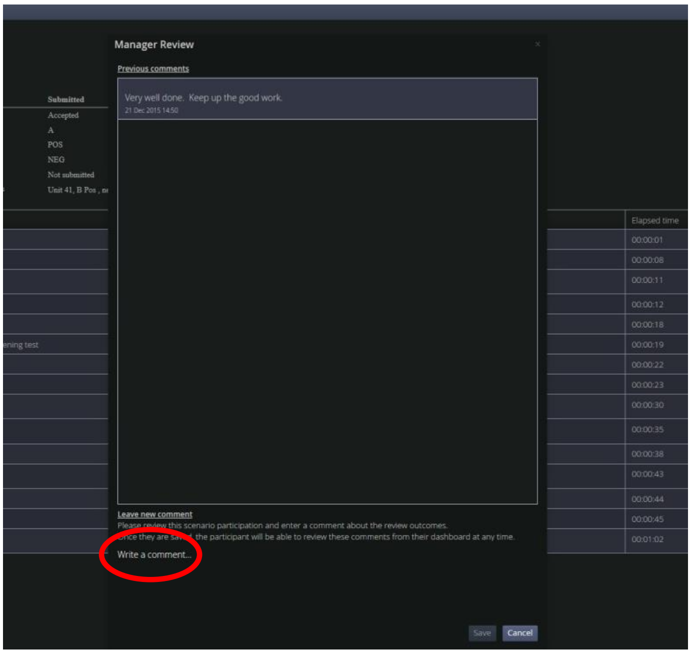
27

Figure 40.



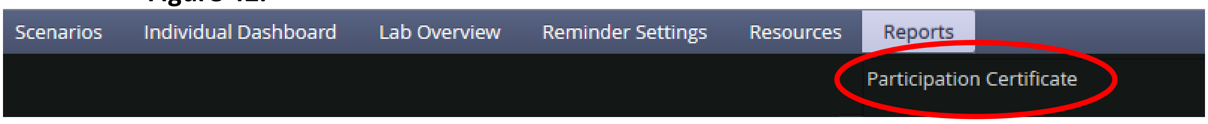
- The visual data window is closed by clicking on the ‘x’ as shown in figure 39 and 40, circled in red.
- Click on the ‘manager review’ icon, circled in yellow in figure 38. This will show you the screen in figure 41. If a manager has reviewed the completed participation, the comments they made for this review can be seen here. Comments will only be available where the coloured outcome indicator displays the additional blue indicator, denoting that the participation has been reviewed.

Figure 41.



- You may type some reflective learning comments here also. All comments made will remain visible to both manager and individual member, but are not visible to other members.
- Click on the words 'write a comment', circled in red in figure 41, to activate the freeform text box. The cursor must be clicked away from the box for the 'save' button to become available. Click on save to save your changes and close the window, or cancel to discard changes and close the window.
- You may produce a certificate of participation, by clicking on the 'reports' icon at the top of the screen, and then on 'participation certificate' shown circled in red in figure 42 below:-

Figure 42.

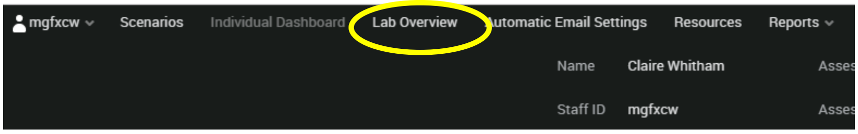


- A new window will open, from which you may select a date range for participation. There are several options, including one to choose a custom date range by selecting 'custom' from the date range drop down, and then entering a start and an end date in the fields below. This can be generated as a csv file or as an xls file, and will open on the screen when 'print' is clicked.
- For each scored element, the number of completed participations is displayed, with a percentage figure of 'initial correct' and 'final correct', how many have been reviewed and if the engagement target has been met for the selected date range. The 'final correct' figure includes participations that have been amended by a manager to a correct outcome.

Additional features for managers.

- Managers are able to view their own individual performance by following the steps described above. Managers and members with administrative rights can also review all other members' performance for their laboratory, in the 'lab overview' screen. Click on the 'lab overview' icon, circled in yellow in figure 43 below:-

Figure 43.



- Each member registered for TACT on a subscription is listed in a table. The list of staff members in the table can be sorted alphabetically by name. To do this, click on the word 'member'. Click the choice again to reverse the order. A specific member of staff can also be searched for, by typing the name into the search function, located underneath the Assessment window.
- Click on a members name to be presented with a view of that members' individual performance dashboard. The same process can be followed as described above, to view the 'engagement & outcome' and 'participations' tabs, and also to review a completed exercise.

Clearing participation history.

- If a member has completed 15 or fewer participations, a button to clear the participation history is available, as shown circled in red in figure 44 below:-

29

Figure 44.

- Please note:- this button is <u>single-use</u> only, and is not be available for members who have completed 16 participations or more.
- To clear the participation history, click the button as shown circled in red in figure 44, enter a comment in the mandatory free-format box that is then displayed, and click 'confirm'. The members participation history will then be deleted from the dashboard, and the member will receive an automated email to inform them of this.
- If you do not wish to clear the participation history, click 'cancel'.

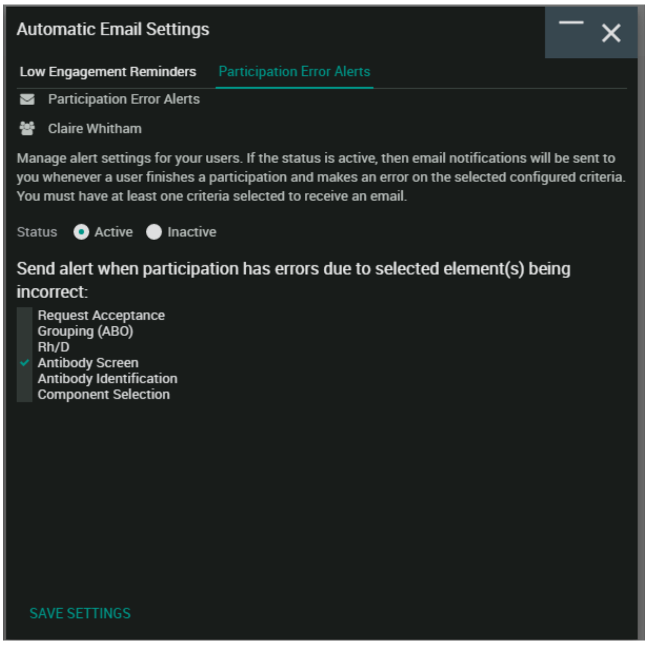
Complex participation flag.

- The member dashboard here also shows a column to indicate if a request within a participation contained a 'complex' situation, i.e a patient with specific requirements for component selection, or an ABO or D group for which an acceptable response was 'UI' (unable to interpret).
- Hover the mouse pointer over the folder icon in the 'complex' column to view the details of the complexity.

Manager review of a participation.

- A manager can opt to be notified by email of any red marks awarded to staff members upon completion of a participation, by activating the 'participation error alert' feature. Click on the 'automatic email settings option' as shown circled in red in figure 34. The screen shown in figure 35 will be displayed. Click on the 'participation error alerts' tab, and the screen shown in figure 45 below will be displayed:-

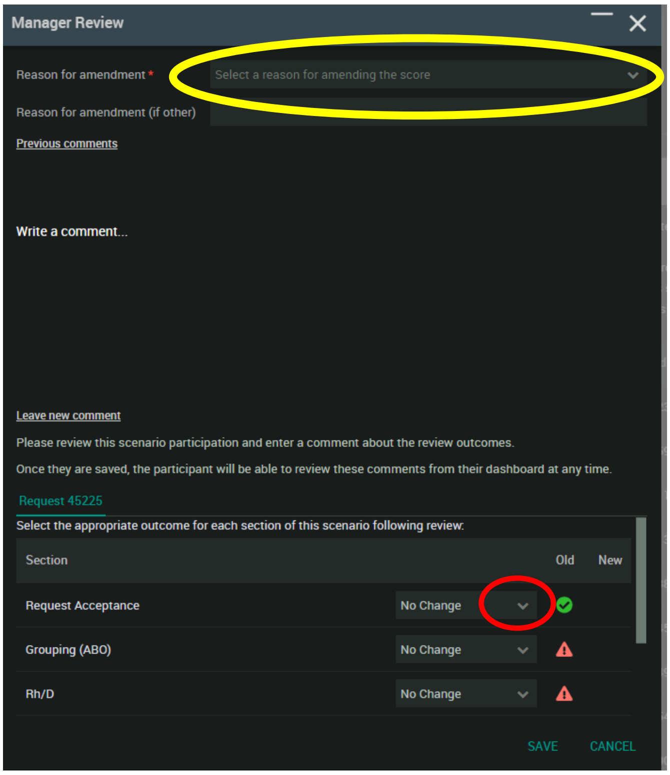
Figure 45.



30

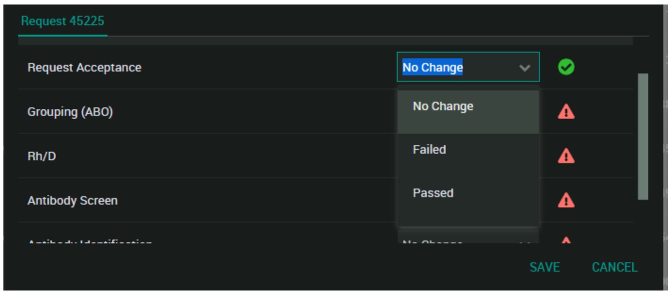
- Click on the button to the left of 'active', and then select which scored elements you wish to be notified for, when a staff member obtains a red mark. Click on 'save settings'.
- Emails will only be sent for red marks awarded for participations completed from the point after the feature is activated. No retrospective emails will be sent.
- The feature can be turned off by clicking on the button to the left of 'inactive' at any time.
- To access the manager review feature, click on the 'participations' tab in the performance dashboard area (figure 33), then click on a chosen red or green participation outcome indicator.
- Click on 'manager review' in the top right hand corner (circled in yellow in figure 38), the screen in figure 46 is shown:-

Figure 46.



- There is a dropdown list of common reasons for amendment (circled in yellow in figure 46). One of these reasons must be selected in order for the 'save' button to become available.
- Where there may be more than one reason for making an amendment to an participation outcome, please select the primary reason.
- If a particular reason for amendment does not appear in the list, there is an 'other' option available. Selection of the 'other' option will cause the text box underneath the drop-down list to become mandatory. You must enter a comment for the 'save' button to become available. If a comment is not entered in the box, an error message will appear. Click on the error message to remove it.
- Each of the outcome indicators for the scored elements encountered for each request during a participation are editable. Making an adjustment to an outcome indicator is not a mandatory requirement for reviewing a participation.
- Select the appropriate request number tab, and then click on the drop-down options beside each element, circled in red in figure 46, to be given options to change the outcome indicator.
- The outcome indicator will change to the option selected in the column headed 'new', as shown in figure 47.

Figure 47.



- Where alterations are made to any outcome indicator, a blue indicator displayed beside the outcome indicator for the individual participation wherever it is displayed, as shown in figure 48.

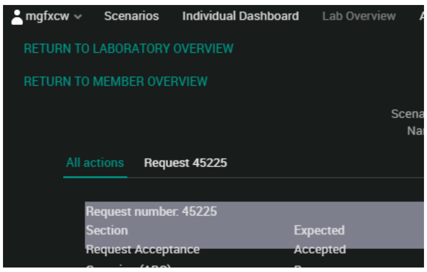
Figure 48.

Request number: 45225

Section	Expected	Submitted	Reason	Outcome
Request Acceptance	Accepted	Accepted		
Grouping (ABO)	B		No blood group submitted.	
Rh/D	Negative		No D group submitted.	
Antibody Screen	Positive		No antibody screening result was submitted	
Antibody Identification	D confirmed	Not submitted	No Final Ab ID test was submitted	
Component Selection	Crossmatch 2 units		A component issue was required for this scenario	

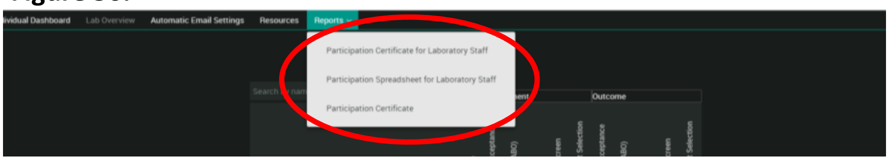
- Click on the ‘return to member overview’ icon in the top left underneath the screen options to return to the previous screen, as shown in figure 49.

Figure 49.



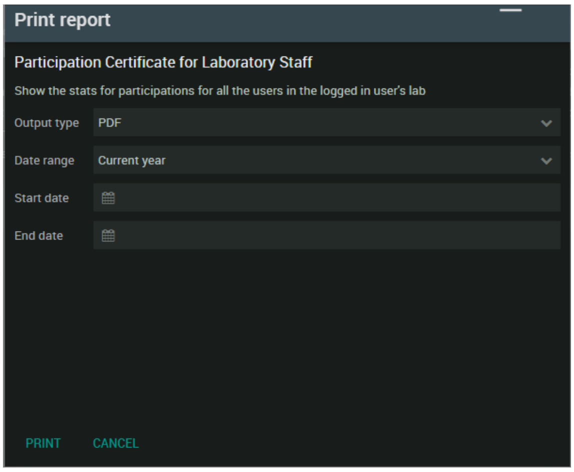
- Click on the ‘return to laboratory overview’ icon in the top left underneath the screen options to return to the list of staff members.
- The ‘reports’ feature allows the generation of a participation certificate for each member, including the main subscriber, and a spreadsheet of participation statistics. Click on the ‘reports’ icon as shown circled in red in figure 50 below:-

Figure 50.



- The option for 'participation spreadsheet for laboratory staff', when clicked, will open a new window, from which a date range for participation can be selected. See figure 51 below:-

Figure 51.



- There are several options, including one to choose a custom date range, by selecting 'custom' from the date range drop down, and then entering a start and an end date in the fields below. This can be generated as a csv file or as an xls file, and will open on the screen when 'print' is clicked.
- The option for 'participation certificate for laboratory staff', when clicked will generate a file of participation certificates for all staff. This will also open a new window following specification of a date range, in the same manner as for the spreadsheet. Click 'print' to generate a pdf file, which can then be saved if required.
- For each scored element, the number of completed participations is displayed, with a percentage figure of 'initial correct' and 'final correct', how many have been reviewed and if the engagement target has been met for the selected date range. The 'final correct' figure includes participations that have been amended by a manager to a correct outcome.
- The option for 'participation certificate', when clicked, will generate a participation certificate with the same date range options, but for the main subscriber only.