

CLINICAL FOLLOW UP OF PLATELETS RETURNING INITIAL POSITIVE RESULTS FOR BACTERIAL CONTAMINATION

REASON FOR ISSUE: Clarify title by including bacterial contamination (DCR19923), remove references to 150F202 and 150M205 as they are now obsolete.

1. PURPOSE

The purpose is to describe the procedure to inform the treating clinician whose patient receives a platelet component that returns an Initial Positive (IP) for bacterial contamination screening.

2. SCOPE

This procedure applies to *transfused* platelet components whose sample returns an IP result from the BacT / ALERT system.

Follow up of IPs will be performed by the Blood Processing departments, the Transfusion Medicine Specialists (TMS) or Medical Officers (MO).

3. KEY RESPONSIBILITIES

- Blood Processing staff will inform the TMS/MO without delay in the event that a platelet component was *transfused* and subsequently returned an IP result. Blood Processing staff will provide patient and component identification to the TMS / MO.
- The TMS / MO will contact the treating clinician, notify the result and provide advice and guidance as required.
- The treating clinician is responsible for the review of signs and symptoms in the patient and for any further treatment as applicable.

4. DEFINITIONS

- BacT/ALERT® 3D Microbial Detection System: a totally automated test system capable of incubating, agitating and continuously monitoring aerobic and anaerobic media for the detection of bacterial contamination in platelets.
- IP – Initial Positive: Indicates the presence of bacteria in a culture bottle inoculated with a sample from a platelet component. This result must be confirmed via culture of the components(s) and/or the patient.

5. DOCUMENTS

5.1 Required Documents

- 150M050d Handling of Positive Results from the BacT/ALERT System
- 150F050d BacT/ALERT Initial Positive Follow-Up Form
- 150D038 Algorithm for Interpreting BacT/ALERT and Microbiology Results

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6. PROCEDURE

Note: steps taken by Blood Processing are defined in 150M050d Handling of Positive Results from the BacT / ALERT System.

6.1 Initial Positive

- 6.1.1 Blood Processing: Upon receipt of a positive signal from the BacT / ALERT system where the platelet or any of its co-components have been transfused; complete 150F050d BacT/ALERT Initial Positive Follow-Up Form as per 150M050d Handling of Positive Results from the BacT / ALERT System, Section 7.
- 6.1.2 TMS / MO: contact the treating clinician by telephone and notify them of the initial positive result. Complete Section B of 150F050d and return to Processing department.
- 6.1.3 If the patient has been discharged after transfusion, advise the treating clinician to contact the patient and advise of need to watch for signs or symptoms of sepsis and, if appropriate, arrange a further review at hospital.
- 6.1.4 If the patient is still in the ward, advise the treating clinician that a review of the transfusion record must be performed and any significant change in temperature, pulse or blood pressure noted. If there are any clinical indications, blood cultures must be taken from the patient and consideration given to the early institution of broad-spectrum antibiotics.
- 6.1.5 Inform the clinician that final results will be conveyed to them once these are available.

6.2 True Positive / Indeterminate Results Follow up

- 6.2.1 Blood Processing: Upon receipt of the culture and identification results from the Microbiology laboratory; complete section C of 150F050d, attach the lab reports and forward to the local TMS without delay as per 150M050d.
- 6.2.2 TMS: If the Initial Positive is confirmed True Positive or Indeterminate, contact the treating clinician again to notify the results. Inform the treating clinician of the organism identified (where relevant) and also the Gram stain result. The confirmed results should also be provided in writing for the patient's medical record. Complete Sections D and E on 150F050d and return to Processing department.
- 6.2.3 If the cultures from the patient show growth of a similar organism as that grown from the bag, discussion should take place with a microbiologist to determine the need for further investigation to confirm transmission by the component.

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6.3 False Positive Results Follow Up

- 6.3.1 Blood Processing: Upon receipt of the culture and identification results from the Microbiology laboratory; complete section C of 150F050d, attach the lab reports and forward to the local TMS without delay as per 150M050d.
- 6.3.2 TMS: Notify the treating clinician and record the conversation on 150F050d. The confirmed results should also be provided in writing for the patient's medical record. Complete Sections D and E on 150F050d and return to Processing department.
- 6.3.3 Blood Processing: The completed 150F050d and related culture results will be held at the originating BacT testing site per 150M050d.

7. REFERENCES

- AABB Association Bulletin #14-04 Clinical Recognition and Investigation of Suspected Bacterial Contamination of Platelets.
- AABB Association Bulletin #04-07 Actions Following an Initial Positive Test for Possible Bacterial Contamination of a Platelet Unit

8. MINIMUM TRAINING REQUIREMENTS (FOR NZBS USE ONLY)

<input type="checkbox"/>	Complete Document Sign-Off Sheet (108F060). • Read specified sections: Sections: <i>(enter section numbers)</i>
<input checked="" type="checkbox"/>	Complete Document Sign-Off Sheet (108F060). • Read and understand whole document
<input type="checkbox"/>	Complete Document Sign-Off Sheet (108F060). • Formal training required. Specify: <i>(enter details of formal training)</i>
<input type="checkbox"/>	Complete Training Module <i>(enter name of module)</i>
<input type="checkbox"/>	No training required. Specify reason: