SOP: Management and Reporting of Transfusion Reactions or Complications

This SOP details the **management and reporting of transfusion reactions or complications**, encompassing identification of adverse reactions during or after transfusion, immediate clinical response and treatment protocols, documentation requirements, notification procedures to healthcare teams and regulatory bodies, and preventive measures to minimize future occurrences. It aims to ensure patient safety by timely recognition and effective handling of transfusion-related events, thereby improving overall transfusion care quality and compliance with healthcare standards.

1. Purpose

To establish a standardized process for the identification, management, documentation, and reporting of transfusion reactions or complications.

2. Scope

This procedure applies to all healthcare personnel involved in the transfusion process and transfusion monitoring within the facility.

3. Definitions

Term	Definition
Transfusion Reaction	Any adverse event occurring during or after transfusion that is related to the administration of blood or blood components.
Immediate Reaction	Adverse event occurring within 24 hours of transfusion.
Delayed Reaction	Adverse event occurring more than 24 hours following transfusion.

4. Responsibilities

- **Clinical Staff:** Monitor patients, identify and respond to reactions, initiate reporting.
- **Transfusion Services/Blood Bank:** Investigate reactions and report to regulatory authorities.
- **Quality/Risk Management:** Oversee adherence and facilitate follow-up.

5. Procedure

5.1 Identification of Transfusion Reactions

- Monitor patients **before, during, and after** transfusion per protocol.
- Be vigilant for symptoms including fever, chills, urticaria, dyspnea, hypotension, back pain, dark urine, or unexpected change in vital signs.

5.2 Immediate Clinical Response and Management

- **Stop the transfusion immediately** if a reaction is suspected.
- Maintain IV access with normal saline using new tubing.
- Evaluate patient and provide symptomatic treatment as needed (e.g., antihistamines, antipyretics, oxygen, vasopressors).
- Notify the treating physician and transfusion service/blood bank without delay.
- Send implicated blood product, post-transfusion samples, and all related tubing/IV fluids to the blood bank as instructed.

5.3 Documentation

- Document all findings, interventions, and patient response in the patient's medical record.
- Complete the transfusion reaction form promptly and accurately.
- Maintain records as per institutional and regulatory requirements.

5.4 Reporting and Notification

- Report the reaction to the transfusion service/blood bank immediately.
- Notify relevant healthcare team members and supervisors.
- Assist with investigation by providing clinical details and samples as requested.
- If required, submit official reports to national or regional haemovigilance or regulatory agencies.

5.5 Investigation and Follow-up

- Transfusion service investigates for clerical errors, serological incompatibility, and product quality.
- Follow up with patient and treating team regarding outcome and any preventive recommendations.
- Participate in multidisciplinary review if severe or recurrent reaction occurs.

6. Preventive Measures

- Review and reinforce adherence to transfusion protocols and correct patient identification.
- Educate staff about common and rare transfusion reactions and correct emergency response.
- Regularly audit transfusion reactions and recommend system improvements.
- Ensure traceability and availability of transfusion products and records.

7. References

- Institutional Transfusion Policy
- National Haemovigilance Guidelines
- World Health Organization: Blood Safety

8. Revision History

Version	Date	Description/Change
1.0	2024-06-05	Initial version