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## **G1.4 SPECIMEN REJECTION**

### **Purpose/Principle of the Procedure**

Specimens must be rejected if they are unsuitable for the analyses requested, so that misleading results (which could lead to incorrect patient management) are not produced.

### **Procedure**

The reasons specimens are rejected are discussed below in this procedure. In all case, the requesting sources needs to be contacted and informed that the specimen is rejected and the reasons for the rejection. A note should be made in labcentre where the sample has been entered into labcentre. A non conformity must be raised using the Rejected specimen's template where details are not stored in labcentre. This procedure will cover following:

1. Reasons for specimen rejection on Level D & C specimen receptions.
  - 1.1. There is a sample mismatch.
  - 1.2. If specimen's requirements from G1.1 AND G3.3 SOPs are not met.
  - 1.3. If specimens are unlabelled
  - 1.4. Baby samples are clotted for FBC
  - 1.5. Laboratory specific requirements for the test are not met.
  - 1.6. Exceptional circumstances
2. Reasons for specimen rejection in laboratories.
  - 2.1. Automated Clinical Chemistry
  - 2.2. Blood Transfusion
  - 2.3. Molecular Pathology
  - 2.4. Coagulation
  - 2.5. Haematology
  - 2.6. Immunology
  - 2.7. Exceptional circumstances
3. Required actions for staff

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## 1. Reasons for Specimen Rejection in Specimen Reception.

### 1.1. There is a sample mismatch

The guidelines outlined in this SOP do NOT apply to Blood Transfusion or Transplantation samples. There are very strict nationally agreed guidelines on specimen labelling requirements for samples processed by the Blood Transfusion laboratory which are outlined in the SOP BTSP 1.2 and applied to Blood Transfusion and Transplantation samples.

Requests should not be accepted unless the request card has at least 3 of 5 from:

Surname  
Forename  
DoB  
Hospital number  
NHS Number

Under certain circumstances patient data is anonymised (e.g. clinical trials or GUM samples) these samples should be identified according to local procedures (e.g. Soundex coding). Please check with the section supervisor or manager if you are unsure.

Samples should have sufficient information on them to allow them to be matched to the request form. The most common reasons for sample mismatch are

NO SAMPLE

WRONG SAMPLE

NO UNEQUIVOCAL ID ON SAMPLE (e.g. unique bar coded lab number)

INSUFFICIENT INFORMATION FOR MATCH (sample in bag attached to form)

i.e. Less than 2 of 4 on sample from

Surname,  
Forename,  
DoB,  
Hospital number

INSUFFICIENT INFORMATION FOR MATCH (sample and form separate)

i.e. Less than 3 of 4 on sample from

Surname,  
Forename,  
DoB,  
Hospital number

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The problem must be verified with the section supervisor or manager AND fill a nonconformity in Q-Pulse.

**1.2. If specimen's requirements from G1.1 AND G3.3 SOPs are not met**

If the requirements of Sample Reception SOP 1.1 Pathology Test Information and G3.3 Pathology user handbook are not met in terms of specimen container type and minimum volumes, specimens will be rejected. There is also volume requirements for assays so when this requirement is not met; it is necessary to reject the specimen.

**1.3. If specimens are unlabelled**

If there is no name on a sample, the sample must not be analysed. Inform the ward, referring source or clinician that the sample is unlabelled and a repeat is required.

**1.4. Clotted Baby samples for FBC**

If the clot is considered as small then the analysis is performed and a comment of SCLOT which is "sample contains a small clot the result may be inaccurate".

For large clots the sample is not analysed. The sample is reported as FCLOT in Hb slot, which expands to "FBC sample clotted please repeat."

**1.5. Laboratory specific requirements for the test are not met.**

Similar to 1.2 above only this may also relate to the way samples have been collected and specific timings of samples.

**1.6. Exceptional circumstances**

In exceptional circumstances e.g. if the patient is no longer available to be re-bled and the details given do not satisfy the '2 of 4' rule it may be possible to contact the requesting clinician to verify the sample identification. A senior member of staff MUST make this decision

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## 2. Reasons for Sample Rejection in Laboratories

### 2.1. Automated Clinical Chemistry

- Under filled specimens: Enter “IS” in result field.
- EDTA contamination
- Fluoride oxalate contamination
- One day old specimens
- Haemolysis affecting tests
- Lipemia interfering tests

### 2.2. Blood Transfusion

Blood transfusion have specific sample receipt criteria due to heavy regulations from MHRA so have detailed procedures in Q-Pulse

### 2.3. Molecular Pathology

#### 2.3.1. Molecular Haematology:

Refer to Molecular Pathology sectional SOPs.

### 2.4. Coagulation

#### 2.4.1. Under filled Samples

If the sample is received into the laboratory and is obviously under filled, then the sample does not require centrifugation, but the lab comment of “UNDF” is placed for the result for each coagulation investigation requested.

If the sample has been centrifuged and there is a questionable doubt as to whether the sample is under filled, then refer to G1.4a Under filled tubes Guidance a color laminated copy of this guidance is situated on the coagulation bench by the centrifuges for quick reference. If after consultation with the figure the sample is deemed to be under filled, then again the lab comment of “UNDF” is placed for the result for each coagulation investigation requested.

#### 2.4.2. Haemolysed Samples

If the sample has been centrifuged and there is a questionable doubt as to whether the sample is haemolysed, then refer to G1.4b BD Vacutainer Citrate tubes Haemolysis guidance. A laminated COLOUR copy is situated on the coagulation bench by the centrifuges for quick reference. If after consultation with the figure the sample is deemed to be haemolysed, then the lab comment of “LYSE” is placed for the result for each coagulation investigation requested.

#### 2.4.3. Clotted Samples

Coagulation samples should be rejected if clotted refer to:  
CORA 1.1 Sample receipt and Haemostasis acceptance guidance

#### 2.4.4. Old Samples

Coagulation samples should be rejected if the sample is too old ie not same day (unless warfarin only then up to 48 hours is fine) refer to:  
CORA 1.1 Sample receipt and Haemostasis acceptance guidance

## 2.5 – Haematology

- Under filled specimens: Enter “INSUF” in Hb result field.
- Over one day old specimens
- Haemolysis affecting tests
- Lipemia interfering tests
- Clotted samples
- Broken / leaked samples

Also refer to Haematology SOP:

*HMXN 7 – Sample quality and miscellaneous sample problems on the XN9000*

## 2.6 – Immunology

- Under filled specimens: Enter “IS” in result field.
- Samples for CH50, AP50, C3 Nephritic factor and C1 Esterase functional not received by the laboratory and frozen within 6 hours
- Cryoglobulin samples delivered to the laboratory, that have not been kept at 37°C using the flask available from the laboratory.
- Stool samples for Calprotectin greater than 7 days from production.
- For Flow Cytometry please see SOP FLOW009 and test specific SOPs.

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### 3 - Required Actions for Staff

A note of the problem **MUST** be made on the request card and initialled which should be scanned into Cardscan for image.

- (1) Put a Lab No on the top copy of the request and the specimen being rejected. E-quest already has a laboratory number assigned.
- (2) For Haematology = Request in the usual manner (see IT SOP 1.1) write on the request form why the specimen is rejected. Forward the card and specimen to automated haematology laboratory.
- (3) For Clinical Chemistry = Amend request to only have COM1 for all tests except for glucose. In COM1 enter reason for rejection. For glucose requests where no sample received, in result entry type NFR, which will expand to “no fluoride oxalate tube received for glucose analysis”. Write on the request card the reason and scan the form into Cardscan.
- (4) Send card to appropriate laboratory e.g. Haematology, Immunology or Clinical Chemistry BMS Helpdesk.
- (5) The source **MUST** be contacted to inform them the reasons for rejection. (For most GP, outpatient and inpatients by electronic means is acceptable)
- (6) Operator must state what tests were originally requested.
- (7) Scan and file the card in the usual manner.
- (8) Put the sample in the discard / spares rack. (It will be kept for a week).
- (9) A senior member of staff **MUST** make this decision.