



A PROJECT OF THE BRITISH ASSOCIATION OF DERMATOLOGISTS

A-STAR DNA Laboratory Manual

Version 2.0 (01-MAY-2023)

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1. OVERVIEW AND CONTACT DETAILS FOR SAMPLE MANAGEMENT AND PROCESSING

A-STAR Study Co-ordinating Centre

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Laboratory

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Great Maze Pond, London SE1 9RT
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david.baudry@gstt.nhs.uk

2. SUPPLIES AND EQUIPMENT REQUIRED

> **Blood:** EDTA (K3EDTA) Vacuette tubes **Pink top**, Greiner bio-one, ref. 456252



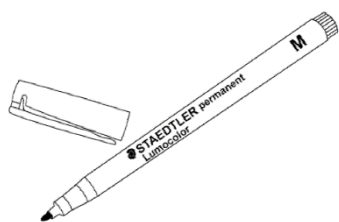
> **Saliva:** Oragene®-DNA self-collection kit from DNA Genotek (www.dnagenotek.com)



> **Royal Mail shipment boxes.** All sites except four former PSORT-D sites (KG, LV, MU and NE); further details on pages 4-5.



> Permanent markers.



- DO NOT use expired kits of tubes. The expiration date should be clearly marked on the collection kits and blood tubes. For all tubes and kits the expiry date is the last day of the month given. If supplies have expired, please request more supplies from the Central Laboratory (David Baudry; contact details listed on page 2).
- Saliva DNA kits will be shipped to the centres for specific patients only following agreement by the Study Co-ordinating Centre.

3. SAMPLE SCHEDULE

- Genetic samples will be collected following patient's optional consent. Only one sample will be required, which can be collected at any time throughout the patient's participation in the study.
- In exceptional circumstances where blood collection for genetic analysis is not feasible (such as in the case of a recent blood transfusion), a saliva sample may be collected. This must be discussed and agreed in advance with the Study Co-ordinating Centre.

4. COLLECTING AND PROCESSING SAMPLES INSTRUCTIONS

Blood DNA

- For participants >16 years old, 2 tubes of 6 ml of whole blood must be collected in the EDTA vacuette tube to prevent it from clotting. For children this volume will be kept in line with international recommendations based on body weight.
- Tube must be inverted several times to mix the blood.
- Label the tubes as per labelling instructions detailed on page 7.
- Register the sample within CAPTURE to generate a CAPTURE Sample ID.
- Complete the Sample Request Form (this form must be completed and sent along with all samples; further details on page 7).
- Either:
 - Keep samples in ambient conditions and post blood to the Co-ordinating Centre using the Royal Mail boxes provided (up to 50mL of blood per box (equivalent to 4 sets of adult patients)) on the day of collection. However this **does not** apply to some former PSORT-D sites; who are as follows:
 - **KG** - Kingston Hospital
 - **LV** - Liverpool University Hospitals NHS Foundation Trust (Broadgreen Hospital)

- **MU** - Salford Royal NHS Foundation Trust
- **NE** - Newcastle Upon Tyne Hospitals NHS Foundation Trust
- **Instead**, please can these four centres (**KG, LV, MU** and **NE**) store the whole blood at -20°C or colder until transported to the Co-ordinating Centre via dry-ice courier, alongside other study samples (e.g. BSTOP, PLUM).

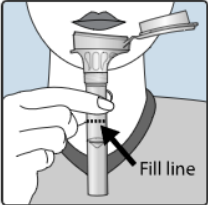
Saliva DNA

Collection precautions

- Patient must **NOT** eat, drink, smoke or chew gum for 30 minutes before giving the saliva sample.
- Do **NOT** remove the plastic film from the funnel lid.


Procedure: Most people take between 2 and 5 minutes to deliver a saliva sample following steps 1 to 5.

1



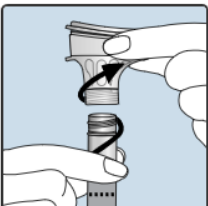
Spit into funnel until the amount of liquid saliva (not bubbles) reaches the fill line shown in picture #1.

2



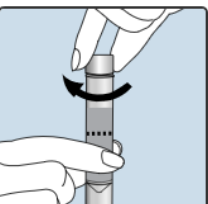
Hold the tube upright with one hand. Close the funnel lid with the other hand (as shown) by firmly pushing the lid until you hear a loud click. The liquid in the lid will be released into the tube to mix with the saliva. Make sure that the lid is closed tightly.

3



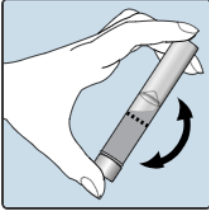
Hold the tube upright. Unscrew the funnel from the tube.

4



Use the small cap to close the tube tightly.

5



Shake the capped tube for 5 seconds. Discard or recycle the funnel.

- Following collection keep at ambient temperature and ship within a week.

- If you do complete one, please do include it with the shipment you are sending, and if possible send it electronically to the lab and the Study Co-ordinating Centre.

Example of completed sample manifest*:

A*STAR - DNA sample shipment manifest			Site Code	GY	Site name	Guy's Hospital
					Date of shipment	25/07/2018
	Patient study ID	Patient Initials	Date of Sample	Pink Top (DNA) Number of samples (number of tubes collected)	Shipped to St John's Institute of Dermatology Yes/No	
1	GY 0001	AA	22/05/2018	2	Yes	
2	GY 0002	BB	06/06/2018	2	Yes	

* It is not mandatory to complete this manifest, but we advise so.

6. SHIPMENT

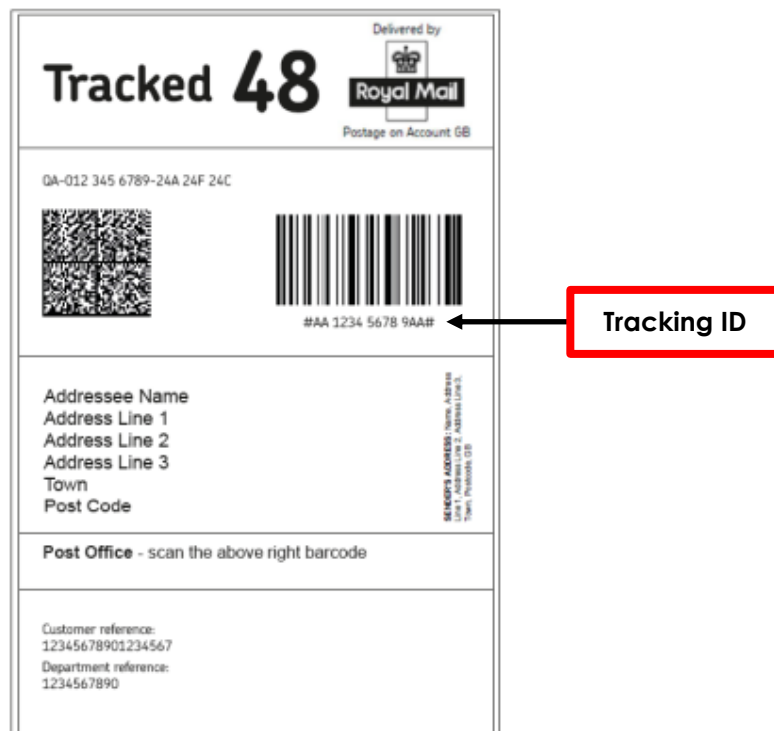
- DNA tubes should be shipped on collection day, or the following day at the latest, via Royal Mail. The postal kits provided meet the UN3373 requirements for sending human blood samples through the post and are the A-STAR method for sending ambient blood samples in the post. All packaging material and postage labels (Tracked Returns 48) are provided.
- Up to 50mL of blood (equivalent to 4 sets of adult patients) can be included in one box.
- If samples have been frozen for a batched shipment (for centres **KG, LV, MU** and **NE**), contact the Central Laboratory (David Baudry; contact details listed on page 2) to arrange collection.
- Saliva samples should be placed in a plastic bag with biohazard logo, with absorbent material. These can then also be shipped using the postal kits, packaging material and postal labels (Tracked Returns 48) provided.
- Samples must be shipped to the following address. Please ensure full details are always given, to ensure the samples reach the intended recipient:

FAO: David Baudry (A-STAR)
Skin Therapy Research Unit
9th Floor - Tower Wing,
Guy's Hospital,
Great Maze Pond,
London,
SE1 9RT.

Note: Dry ice shipments will include pre-printed labels, provided by the courier.

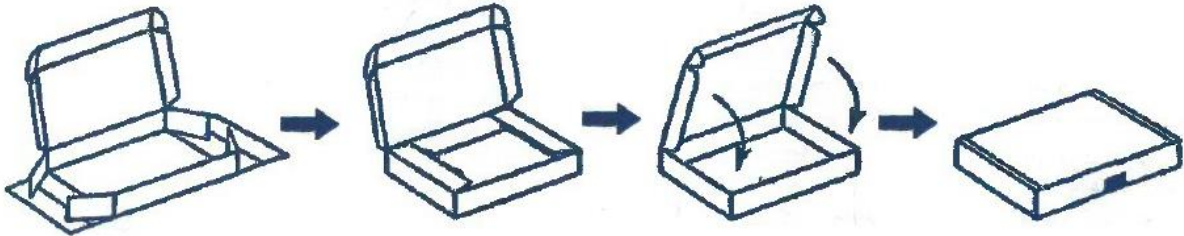
Note: When shipping samples via Royal Mail, the address is already listed on the Tracked Returns postage label.

- Please remember to include the corresponding sample slip with the sample
- All samples coming to us, regardless of the study, can go in the same box (BSTOP, PLUM, A-STAR, BEACON, etc.), as long as the total amount is not more than 50mL.
- Make sure the box does not bulge once closed – this will ensure we are charged the correct price by Royal Mail.
- Boxes can be posted via your hospital post room, or dropped in any Royal Mail mailbox (the use of Post Office shops should be avoided as it will incur extra cost).
- Labels are provided – make a note of the Tracking ID before posting the samples. Labels should be applied at the back of the box (above assembly instructions) as to not cover the UN3373 markings.
- Make sure CAPTURE is updated to document the transfer (do not forget to report the Tracking ID).
- Ideally notify the receiving laboratory of shipments made (by using the laboratory email address provided). Sample reception will always be confirmed. All shipments (whether by post or on dry ice) must be documented on CAPTURE - this will act as the manifest. Please refer to the CAPTURE Training Manual for guidance.
- **Where possible avoid posting blood samples over the Christmas/New Year holiday period.**

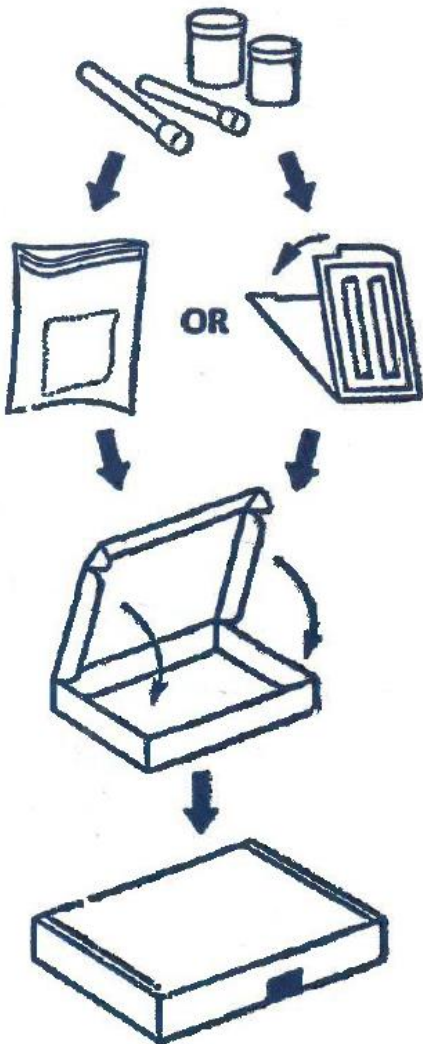


Ambient Shipment Instructions:

Box Assembly



Sample Packing



Place the samples in the 95kPa bag alongside the material. Follow the instructions on the bag to close it.

Close the box and apply the security seal.

Apply label provided and post, and update CAPTURE.