

Stratified Treatment OPTimisation for HCV-1 STOP-HCV-1

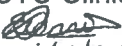
Laboratory Manual for Sites Sending Samples to HCV Research UK Biobank

Version: 4.0
Date: 01-Nov-2017

ISRCTN #: ISRCTN37915093

EUDRACT #: 2015-005004-28
CTA #: 19174/0370/001-0001
MREC #: 15/EE/0435

Written by:

Name: Emily Dennis
Roles: CTU Clinical Trial Manager
Signatures: 
Date: 01/11/2017

Name: Graham Cooke
Role: Chief Investigator
Signature: 
Date: 01/11/17

Version	Date	Author	Reason for revision
1.0	16-Mar-2016	Charlotte Russell and Sarah McDonald	Initial
2.0	30-Jan-2017	Charlotte Russell and Sarah McDonald	Release of protocol v4.0
3.0	30-Jun-2017	Emily Dennis	Release of protocol v5.0
4.0	01-Nov-2017	Emily Dennis	Release of protocol v6.0

1 CONTENTS

1	CONTENTS.....	2
2	CONTACT INFORMATION.....	3
2.1	STOP HCV-1 CO-ORDINATING CENTRE- MRC CTU AT UCL.....	3
2.2	STOP HCV-1 SPECIMEN RECEIVING LABORATORY	3
2.3	COURIER FOR SHIPPING SPECIMENS FROM STOP HCV-1 CLINICS TO RECEIVING LABORATORY	4
3	SCOPE.....	5
4	SUMMARY OF TRIAL.....	6
5	TRIAL SCHEMA	9
6	TRIAL ASSESSMENT SCHEDULE.....	10
7	SITE FACILITY REQUIREMENTS.....	15
8	MATERIALS PROVIDED.....	16
8.1	MATERIALS TO BE PROVIDED BY CLINICS FOR USE IN STOP-HCV-1 TRIAL SPECIMEN COLLECTION	16
8.2	MATERIALS TO BE PROVIDED BY STOP-HCV-1 TRIAL TEAM TO CLINICS FOR STOP-HCV-1 TRIAL SPECIMEN COLLECTION	16
8.3	MATERIALS TO BE PROVIDED BY STOP-HCV-1 BIOBANK TEAM TO CLINICS FOR STOP-HCV-1 TRIAL SPECIMEN COLLECTION.....	16
8.4	MATERIALS TO BE PROVIDED BY COURIER FOR SHIPMENT FROM STOP-HCV-1 SPECIMEN PROCESSING LABORATORIES TO STOP-HCV-1 SPECIMEN RECEIVING LABORATORY	16
9	LABELS.....	17
9.1	LABELS FOR BLOOD COLLECTION TUBES.....	17
9.2	INSTRUCTIONS FOR LABELLING COLLECTION TUBES	17
9.3	LABELS FOR SHIPPING FORM.....	17
10	STOP HCV-1 SPECIMENS: COLLECTION TABLES.....	19
10.1	TABLE 1: FIRST LINE (FL) TREATMENT SPECIMEN COLLECTION	19
10.2	TABLE 1: RE-TREATMENT SPECIMEN COLLECTION.....	20
11	STOP HCV-1 COLLECTION PROCEDURES.....	21
11.1	COLLECTION OF BLOOD FOR PLASMA PROCESSING	21
11.2	COLLECTION OF BLOOD FOR WHOLE BLOOD (FOR DNA ISOLATION) PROCESSING	21
11.3	COLLECTION OF BLOOD FOR WHOLE BLOOD (FOR RNA ISOLATION) PROCESSING	21
12	STOP HCV-1 SPECIMEN SHIPPING PROCEDURES	22
12.1	SHIPPING STOP HCV-1 SAMPLES FROM SITES TO SPECIMEN REPOSITORY	22
13	STOP-HCV-1 EXAMPLE SHIPPING FORMS.....	24

2 CONTACT INFORMATION

2.1 STOP HCV-1 CO-ORDINATING CENTRE- MRC CTU AT UCL

STOP-HCV-1 Co-ordinating Centre - MRC CTU at UCL		
MRC Clinical Trials Unit at UCL Institute of Clinical Trials & Methodology 90 High Holborn 2 nd Floor London WC1V 6LJ		Email: mrcctu.stophcv1@ucl.ac.uk Fax: 0207 670 4817
Clinical Operations Manager	Fleur Hudson	Email: mrcctu.stophcv1@ucl.ac.uk Tel: 0207 670 4782
Clinical Trial Manager	Emily Dennis	Email: mrcctu.stophcv1@ucl.ac.uk Tel : 0207 670 4660
Clinical Trial Manager	Cara Purvis	Email: mrcctu.stophcv1@ucl.ac.uk Tel: 020 7670 4930
Data Manager	Helen Ainscough	Email: mrcctu.stophcv1@ucl.ac.uk Tel: 020 7670 4652
Trial Manager with Laboratory Responsibilities	Aminata Sy	Email: a.sy@ucl.ac.uk Tel: 0207 670 4737

2.2 STOP-HCV-1 SPECIMEN RECEIVING LABORATORY

HCV Research UK		
MRC-University of Glasgow Centre for Virus Research Sir Michael Stoker Building Garscube Campus 464 Bearsden Road Glasgow G61 1QH		Tel: 0141 330 4635
Biobank Manager	Sarah McDonald	Email: sarah.mcdonald@glasgow.ac.uk Tel: 0141 330 2989
Biobank Support	Sharon Mackay	Email: sharon.mackay@glasgow.ac.uk Tel : 0141 330 4635
Director	John McLauchlan	Email: john.mclauchlan@glasgow.ac.uk Tel: 0141 330 4028

2.3 COURIER FOR SHIPPING SPECIMENS FROM STOP-HCV-1 CLINICS TO RECEIVING LABORATORY

Courier	
DX DX House Ridgeway Iver Bucks SL0 9JQ	Contact via Sarah McDonald, HCV Research UK Biobank Manager Account name: MRCVR

3 SCOPE

This document provides information about site procedures for collecting and shipping samples to the HCV Research UK Biobank in Glasgow for off-site processing. (Please refer to Section 14 for a list of sites that will be following this Lab Manual).

Sites processing and storing samples locally or via Imperial should refer instead to the relevant manual.

4 SUMMARY OF TRIAL

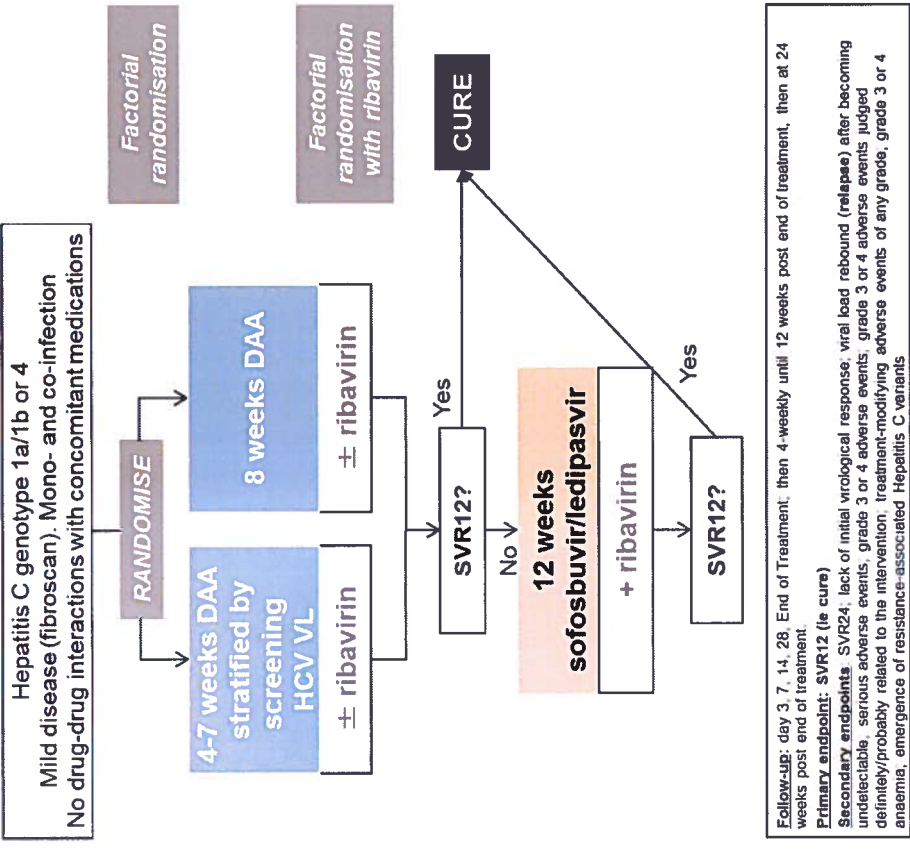
SUMMARY INFORMATION TYPE	SUMMARY DETAILS
Acronym	STOP-HCV-1
Long Title of Trial	Error! Reference source not found.
Version	6.0
Date	17-Aug-2017
ISRCTN #	ISRCTN37915093
EudraCT #	2015-005004-28
CTA #	19174/0370/001-0001
MREC #	15/EE/0435
Study Design	An open-label randomised controlled trial (RCT) testing biomarker-stratified short-course first-line and re-treatment direct-acting antiviral (DAA) oral treatment regimens to cure mild chronic Hepatitis C (HCV) disease.
Type of Patients to be Studied	Adults (≥ 18 years) infected with HCV genotype 1a/1b or 4 for ≥ 6 months, with detectable plasma HCV RNA and mild liver disease (Fibroscan score F0-F1 or biopsy proven minimal fibrosis), HCV viral load < 10 million IU/ml, no previous DAA exposure (previous pegylated-interferon/ribavirin allowed) and not pregnant. Patients co-infected with HIV are eligible if HIV viral load has been < 50 copies/ml for > 24 weeks on anti-HIV drugs.
Setting	NHS
Interventions to be Compared	The main intervention to be compared is varying (intervention) 4-7 weeks vs fixed (control) 8 weeks combination first-line DAA treatment, with or without ribavirin, in an open-label factorial design. - Varying intervention duration will be stratified by baseline HCV RNA on a sliding scale, with duration determined by estimated time for HCV RNA to decline to reduce levels to ~ 1 copy in the whole body at end of treatment. - As soon as viral failure is detected at any time post-randomisation (first-line failure), patients will stop first-line treatment (if still receiving it) and be immediately retreated with 12 weeks of a different regimen. - Ribavirin will be dosed twice daily, adjusted for weight Current first-line combination regimens are those licenced for use against Hepatitis C, namely: (i) a fixed dose combination of DAA active against genotype 1a/1b and 4; the Abbvie combination ombitasvir/paritaprevir/ritonavir (12.5mg/75mg/50mg) co-formulated film-coated tablets once daily (total daily dosage: 25/150/100mg) plus for genotype 1a/1b one dasabuvir 250

SUMMARY INFORMATION TYPE	SUMMARY DETAILS
	mg tablet twice daily (total daily dosage: 500mg) (using "ombitasvir/paritaprevir/(dasabuvir)/ritonavir" to denote the combination regimen) (ii) a fixed dose combination of 2 novel DAA active against all genotypes; the Abbvie combination glecaprevir/pibrentasvir (100mg/40mg) co-formulated tablets once daily (total daily dosage: 300/120mg) Current retreatment regimens are: (iii) a fixed dose double combination of sofosbuvir/ledipasvir (400mg/90mg) once a day plus ribavirin twice a day
Study Hypotheses	(i) HCV-RNA determined short-course (4-7 weeks) first-line will cure similar proportions with chronic, mild HCV disease as a fixed 8 week first-line course once failures have been retreated for 12 weeks (ii) Adjunctive ribavirin improves cure rates with biomarker-stratified short-course and fixed duration DAA first-line regimens (iii) Re-treatment with a longer 12 week regimen, given after detecting virological failure on or following first-line treatment, still achieve cures in the majority of the small proportion of patients failing first-line treatment.
Primary Outcome Measure	For the varying duration comparison the primary outcome will be: - Sustained Virological Response (SVR, plasma HCV RNA persistently <LLOQ (lower limit of quantification)) measured 12 weeks after the end of the combined first and any re-treatment phases (SVR12) For the ribavirin comparison the primary outcome will be: - SVR12 after first-line treatment only
Secondary Outcome Measure(s)	- SVR12 after first-line treatment (where not the primary outcome) - SVR12 after the end of the combined first and any re-treatment phases (where not the primary outcome) - SVR24 after the end of the combined first and any re-treatment phases - SVR24 after first-line treatment only - lack of initial virological response - viral load rebound after becoming undetectable - serious adverse events - grade 3/4 adverse events - grade 3/4 adverse events judged definitely/probably related to interventions - treatment-modifying adverse events (any grade) - grade 3/4 anaemia - emergence of resistance-associated HCV variants - sensitivity/specificity of point-of-care diagnostic for IL28 - costs and cost-effectiveness
Randomisation	Patients will be allocated 1:1 using a factorial design to each of biomarker-stratified varying vs fixed duration

SUMMARY INFORMATION TYPE	SUMMARY DETAILS
	• adjunctive ribavirin or not Randomisation will be stratified.
Number of Patients to be Studied	408
Duration	▪ Patients are planned to be recruited over 2 years ▪ Each first-line intervention will be administered for 4-8 weeks ▪ Each patient will be followed for 24 weeks post end of first-line treatment: if they fail first-line, they will receive another 12 weeks re-treatment and be followed for a further 24 weeks post end of re-treatment ▪ The overall trial duration is planned for 4 years (including start-up and close-out)
Sponsor	Imperial College London
Funder	Efficacy and Mechanism Evaluation (EME) Programme, an MRC and NIHR partnership (14/02/17)
Trial Manager	Emily Dennis
Chief Investigator	Graham Cooke
MRC CTU at UCL Project Leader	Ann Sarah Walker

5 TRIAL SCHEMA

Figure 1:



6 TRIAL ASSESSMENT SCHEDULE

Table 1. Trial Assessment Schedule – first-line treatment real-time tests (see Table 2 for first-line sample storage)

	SCREENING†	DAY POST RANDOMISATION*					EOT	WEEK POST EOT			
		0	3	7	14	28		4	8	12	24
Control: 8 weeks treatment [continuing]		DAA	[DAA]	[DAA]	[DAA]	DAA		(see retreatment schedule below for any treatment after first-line EOT)			
Intervention maximum: 7 weeks treatment [continuing]		DAA	[DAA]	[DAA]	[DAA]	DAA					
Intervention minimum: 4 weeks treatment [continuing]		DAA	[DAA]	[DAA]	[DAA]	DAA					
Eligibility assessment	X										
Patient information sheet and consent	X										
Randomisation		X									
Clinical assessment ^(a)		X	X	X	X	X	X	X	X	X	X
Self-reported adherence			X	X	X	X	X				
Fibroscan or biopsy**	(X)										
Weight (kg)	X					X	X	X		X	X
Height (m)	X										
Urine pregnancy test if child-bearing potential		X				X	X			X	X
Quality of life ^(b)		X					X			X	
EDTA blood for haematology ^(c,h,i) (5ml)	(X)	X			X	X	X			X	X
Clotted blood for biochemistry ^(a,h,i) (5ml)	(X)	X			X	X	X			X	X
Coagulation markers (2.5ml)	(X)										
Real-time HCV viral load ^(h,i) (10ml)	(X)	X	X	X	X	X	X	X	X	X	X
Point of care IL28 polymorphism test (Epistem) ^(e,g)		X									
Total blood draw in ml for real-time tests	-	20	10	10	20	22.5	22.5	10	10	22.5	22.5
If HIV-infected	(X)						X				X
(additional)	(X)						(X)				(X)

() indicate tests that will have already been performed as part of standard management, but results will be recorded for the trial. Screening blood tests should have been performed within 60 days prior to randomisation.

On treatment visits should be within ± 1 day of the nominal visit day and end of treatment (EOT) visits within ± 3 days of the nominal visit day. The Day 3 visit must occur 3 or more calendar days before the Day 7 visit (that is, there should be two calendar days completely separating them). Any patient with a single HCV RNA >lower level of quantification (LLOQ) after two consecutive HCV RNA <LLOQ, or with a single value >2000 IU/ml and >1 log10 increase above the HCV RNA nadir on treatment or post EOT should be recalled for a second HCV RNA test at least one week after the initial value to confirm whether or not failure has occurred (See **Section Error!** Reference source not found. **pError! Bookmark not defined.**). Quality of life should also be assessed at this confirmation of failure visit.

* If a patient fails at any time point from day 14, then they move to the flow sheet for re-treatment below.

† Screening visit may be any time up to 60 days prior to randomisation, since patients with mild disease will be stable.

** Fibroscan or biopsy may be conducted within 180 days of randomisation

- (a) Including record of concomitant medications, grade 3 or 4 or serious adverse events, adverse events (including reactions) of any grade leading to treatment modification including interruption/early discontinuation, resource utilisation, pill count.
- (b) Quality of life will be assessed using the EuroQol (5 dimensions) (EQ-5D), the Medical Outcomes Study Short-Form 12 Item Survey¹ (SF-12, version 2) and the Cognitive Function Scale² (MOSCOG). Quality of life should also be performed at any additional visits to confirm HCV viral load failure.
- (c) For real-time measurement of haemoglobin, white cell count, lymphocytes, neutrophils, platelets.
- (d) For real-time measurement of alanine transaminase (ALT), alkaline phosphatase (ALP), bilirubin, albumin and creatinine, and calculation of creatinine clearance (Cockcroft Gault).
- (e) Only with specific consent for genetic testing.
- (f) Screening CD4 cell count from within 1 year of randomisation can be used.
- (g) EPISTEM test can be done at any time point if not possible on day 0.
- (h) If a participant is hard to bleed, the blood tests should be prioritised as follows: Biochemistry>haematology (FBC>differential)>HCV viral load>storage.
- (i) If unable to bleed on day 28, EOT or post-EOT week 12, the patient should be recalled, as these are critical visits for clinical care.

TABLE 2 Sample Collection Schedule – first-line treatment sample storage

	DAY POST RANDOMISATION*					EOT	WEEK POST EOT			
	0	3	7	14	28		4	8	12	24
Storage: sites sending key samples to Glasgow and able to retrieve remnant plasma from local laboratory if virological failure occurs										
EDTA whole blood for DX to Glasgow (20ml blood)	X								X	
EDTA whole blood for DX to Glasgow (10ml blood)		X	X	X			X			
EDTA whole blood for DNA storage for DX to Glasgow ^(a, b) (2.5ml)	X									
Whole blood in PAXgene blood RNA tube (Qiagen) for DX to Glasgow ^(a) (2.5ml)	X									
Total storage sample blood draw in ml	25	10	10	10	0	0	10	0	20	0
Remnant plasma obtainable from local service laboratory on request from study team ^(e)					X	X		X		X

(a) Only with specific consent for genetic testing.

(b) Can be taken at any time point if not possible on day 0.

(c) These samples are most likely to be required from patients who experience virological failure.

Samples may be shipped outside of the UK to North America or Europe for additional tests after the end of the trial

TABLE 3 Trial Assessments and Sample Collection Schedule – Re-treatment

	START OF RE-TREATMENT (0) *	WEEKS FROM START OF RE-TREATMENT							
		2	4	8	12 (EOT)	16 EOT+4	20 EOT+8	24 EOT+12	36 EOT+24
12 weeks treatment [continuing]	DAA	[DAA]	DAA	DAA					
Clinical assessment ^(a)	X	X	X	X	X	X	X	X	X
Self-reported adherence		X	X	X	X				
Weight (Kg)			X	X	X	X		X	X
Urine pregnancy test if child-bearing potential	X		X	X	X			X	X
Quality of life ^(b)	X		X		X			X	
EDTA blood for haematology ^(c,g,h) (5ml)	(X)	X	X	X	X			X	X
Clotted blood for biochemistry ^(d,g,h) (5ml)	(X)	X	X	X	X			X	X
Coagulation markers ^(e) (2.5ml)	(X)								
Real-time HCV viral load ^(g,h) (10ml)	(X)	X	X	X	X	X	X	X	X
Storage: sites sending key samples to Glasgow and able to retrieve remnant plasma from local laboratory									
EDTA plasma for DX to Glasgow ^(g,h) (10ml blood)	(X)							X ^(e)	
Total blood draw in ml if not storing locally	32.5	20	22.5	20	22.5	10	10	32.5	22.5
Remnant plasma obtainable from local service laboratory on request from study team ^(f)		X	X	X	X	X	X		X
If HIV-infected - HIV viral load (9ml) (additional)	X				X				X
- CD4 cell count	(X)				(X)				(X)

* If laboratory tests and plasma storage have already been performed in the prior 7 days as part of the first-line schedule above, then they do not need to be repeated at the start of re-treatment.

(a) Including record of concomitant medications, grade 3 or 4 or serious adverse events, adverse events of any grade leading to treatment modification including interruption/early discontinuation, resource utilisation, pill count;

(b) Quality of life will be assessed using the EuroQol (5 dimensions) (EQ-5D), the Medical Outcomes Study Short-Form 12 Item Survey¹ (SF-12, version 2) and the Cognitive Function Scale² (MOSCOG).

- (c) For real-time measurement of haemoglobin, white cell count, lymphocytes, neutrophils, platelets
- (d) For real-time measurement of alanine transaminase (ALT), alkaline phosphatase (ALP), bilirubin, albumin and creatinine, and calculation of creatinine clearance (Cockcroft Gault).
- (e) For sites shipping unprocessed samples to the HCV Research UK Biobank, on the occasion a participant has a detectable HCV viral load at or after retreatment EOT, EOT +12 week storage sample should be taken, this sample however should not be sent to Glasgow, contact the STOP HCV-1 team for further shipment instructions.
- (f) These samples are most likely to be required from patients who experience virological failure
- (g) If a participant is hard to bleed, the blood tests should be prioritised as follows: Biochemistry>haematology (FBC>differential>INR)>HCV viral load>coagulation markers>storage.
- (h) If unable to bleed on week 4, EOT or post-EOT week 12, the patient should be recalled, as these are critical visits for clinical care.

7 SITE FACILITY REQUIREMENTS

The sites in the STOP-HCV-1 trial must meet the following requirements:

- Be able to ship specimens to the receiving laboratory in a timely manner
- Under no circumstances must personal information (e.g. participant name, initials, doctor name etc.) be put on any vial, container, label or form that may be seen outside the local processing area.
- Samples may be transported by air or road; therefore **both IATA/ICAO and ADR** guidelines must be followed. The International Air Transport Association (IATA) produces a manual based on the International Civil Aviation Organization (ICAO) Technical Instructions, which outlines the procedures that must be followed to ensure safe transport; and ADR produce an equivalent manual. Training is an essential part of the process. Samples infected with HCV are classified as Biological Substances Category B UN3373. **All individuals involved in collection and transport of these substances are required to be properly trained.** In line with present regulations, the investigator site is responsible for ensuring that their personnel are properly trained. For more information about IATA guidelines visit <http://www.iata.org>. Information on correct packaging of samples can also be obtained in the **DX User Guide** (a copy of this should be sent to you by the STOP-HCV-1 Co-ordinating Centre).

8 MATERIALS PROVIDED

8.1 MATERIALS TO BE PROVIDED BY CLINICS FOR USE IN STOP-HCV-1 TRIAL SPECIMEN COLLECTION

- Blood Collection Containers: EDTA – 4-6ml or 8-10ml size

8.2 MATERIALS TO BE PROVIDED BY STOP-HCV-1 TRIAL TEAM TO CLINICS FOR STOP-HCV-1 TRIAL SPECIMEN COLLECTION

- PAXgene RNA blood tubes (BD Biosciences, Cat No: 762165)
- Pre-printed STOP-HCV-1 Thermal Transfer Labels

8.3 MATERIALS TO BE PROVIDED BY STOP-HCV-1 BIOBANK TEAM TO CLINICS FOR STOP-HCV-1 TRIAL SPECIMEN COLLECTION

- Barcode labels for use on blood collection tubes, pre-printed in triplicate.
- Forms: STOP-HCV-1 Transport form and Shipping Instructions (**Section 13**).

8.4 MATERIALS TO BE PROVIDED BY COURIER FOR SHIPMENT FROM STOP-HCV-1 SPECIMEN PROCESSING LABORATORIES TO STOP-HCV-1 SPECIMEN RECEIVING LABORATORY

- DX Shipping boxes suitable for UN3373 Biological Substance Category B

9 LABELS

9.1 LABELS FOR BLOOD COLLECTION TUBES

For use on the EDTA blood collection tubes or PAXgene collection tubes when collecting specimens as specified in the collection table ([Section 10; Table 1](#)).

Label Format from STOP-HCV-1 Trial Team:

- Study Name
- Collection
- Participant Partial Trial ID No.: Eight digit code. Letter H followed by three digit site number.
- **The other three digits and letter need to be written on the label.**
- Visit
- ***Write on the Date, Month and Year (DD/MM/YY) that the specimen was collected***

Label Format from STOP-HCV-1 Biobank Team:

- Barcode

9.2 INSTRUCTIONS FOR LABELLING COLLECTION TUBES

- Please attach the two labels (STOP-HCV-1 trial label and Barcode) to the EDTA blood collection tube/PAXgene tubes that are being sent in the DX box.
- Use a unique barcode label for each blood collection tube – these identify the individual sample not the patient.
- Please ensure the labels don't cover the entire circumference of the tube – there should be a clear window the full length of the tube to aid processing.
- If you need additional labels for any of the specimens please contact the STOP-HCV-1 team.

9.3 LABELS FOR SHIPPING FORM

Label Format:

- Study Name
- Participant Partial Trial ID No.: Eight digit code. Letter H followed by three digit site number.
- **The other three digits and letter need to be written on the label.**
- Visit
- Sample type (Plasma, PAXgene Whole Blood)
- ***Write on the Date, Month and Year (DD/MM/YY) that the specimen was collected***

Please attach to the Shipping form along with the barcodes (**Section 13**) so Glasgow Biobank can link the STOP-HCV-1 Trial number to the barcoded samples received.

10 STOP-HCV-1 SPECIMENS: COLLECTION TABLES

Important: This table does not include the blood needed for routine bloods taken as part of the STOP-HCV-1 trial.

10.1 TABLE 1: FIRST LINE (FL) TREATMENT SPECIMEN COLLECTION

Visit	Type of Collection Container	Volume of Specimen Collected
FL-Day 0	EDTA Blood Collection Tube	<u>20 ml</u>
	EDTA Blood Collection Tube	2.5 ml
	PAXgene tube	2.5ml
FL-Day 3	EDTA Blood Collection Tube	10 ml
FL-Day 7	EDTA Blood Collection Tube	10 ml
FL-Day 14	EDTA Blood Collection Tube	10 ml
FL-Day 28	EDTA Blood Collection Tube	Remnant if requested
FL-EOT	EDTA Blood Collection Tube	Remnant if requested
FL-EOT+4	EDTA Blood Collection Tube	10 ml
FL-EOT+8	EDTA Blood Collection Tube	Remnant if requested
FL-EOT+12	EDTA Blood Collection Tube	<u>20 ml</u>
FL-EOT+24	EDTA Blood Collection Tube	Remnant if requested

FL = First Line

EOT = End of Treatment

Please note standard blood draw is 10 ml except at **FL-Day 0** and **FL-EOT+12** when it is **20ml**.

- All participants will have specimens collected for storage on FL-Day 0, FL-Day 3, FL-Day 7, FL-Day 14, FL-EOT+4 and FL-EOT+12.
- As stipulated in the protocol remnant plasma **MUST** be able to be obtained from the diagnostic lab at time points listed above.

10.2 TABLE 1: RE-TREATMENT SPECIMEN COLLECTION

Visit	Specimen	Type of Collection Container	Volume of Specimen Collected
R-Week 0*	Plasma	EDTA Blood Collection Tube	10 ml

For sites shipping unprocessed samples to the HCV Research UK Biobank, on the occasion a participant has a detectable HCV viral load at or after retreatment EOT, EOT +12 week storage sample should be taken, this sample however **should not** be sent to Glasgow, contact the STOP-HCV-1 team for further shipment instructions.

*If laboratory tests and plasma storage have already been performed in the prior 7 days as part of the first line schedule above, they do not need to be repeated at the start of re-treatment.

11 STOP-HCV-1 COLLECTION PROCEDURES

Refer to **Section 10** to determine collection requirements at a given visit for processing.

11.1 COLLECTION OF BLOOD FOR PLASMA PROCESSING

- 1) Collect the participant's blood in EDTA blood collection tubes (please refer to tables in section 10 for appropriate volume at each timepoint).
- 2) Gently invert the tube 8-10 times to mix the blood and additive.
- 3) If possible store at 4°C (i.e. in a fridge or cold room) prior to shipping. Shipping must occur no later than the day after collection.

11.2 COLLECTION OF BLOOD FOR WHOLE BLOOD (FOR DNA ISOLATION) PROCESSING

- 1) Collect the participant's blood in one 2.5ml EDTA blood collection tubes.
- 2) Gently invert the tube 8-10 times to mix the blood and additive.
- 3) If possible store at 4°C (ie in a fridge or cold room) prior to shipping

11.3 COLLECTION OF BLOOD FOR WHOLE BLOOD (FOR RNA ISOLATION) PROCESSING

- 1) Collect the participant's blood in a **PAXgene RNA tube** (BD Biosciences); ensure this is the **last tube drawn** in phlebotomy procedure.
- 2) Maintain tube upright at room temperature (18°C to 25°C) for a maximum of 48hr before shipment

12 STOP-HCV-1 SPECIMEN SHIPPING PROCEDURES

12.1 SHIPPING STOP-HCV-1 SAMPLES FROM SITES TO SPECIMEN REPOSITORY

- 1) Ensure tubes are securely closed. Guidelines for transport of biological materials **require sample containers to be leak-proof**. The easiest way to achieve this is to secure the lids with adhesive tape such as Micropore or masking tape.
- 2) Sample tubes should be packed in the provided DX boxes. Each box can hold up to 12-16 blood tubes. Boxes should be packed according to the **DX user guide** (a copy of this should be provided to you by the STOP-HCV-1 Co-ordinating Centre). Each box has a barcoded label with a tear-off section. Put this part of the label in the log book at the collection point with details of the samples in the box. Fill in the address label as described in the user guide.
- 3) Fully complete, check and sign a Sample Transport Form (**Section 13**) for each box filled. Keep a copy of the Sample Transport Form, and put the original **between the plastic container** and outer box. Ensure that the address page of the Sample Transport Form is included in all shipments.
- 4) When box is fully packed, close and take to the designated collection point (aka DX Exchange) at your centre and pack into green sacks.
- 5) Make sure boxes are labelled with full DX addresses for both the sender and recipient, as detailed on the Sample Shipping Instructions sheet given to each site.
- 6) DX guidelines state boxes should be ready for collection by **5pm**. There may be local exceptions where the cut off time is **4pm** or even earlier, this will be notified when the DX account is activated. Please adhere to this wherever possible. **Ensure samples collected on a Friday are at the collection point by the cut off time.**
- 7) Boxes should be collected from designated collection points by DX couriers. Please monitor this closely and ensure your boxes have been collected wherever possible. Inform the Study Co-ordinator and/or Biobank Manager promptly of any problems.
- 8) Boxes will be taken to local sorting centres before being transported overnight to Glasgow, and should arrive at the Glasgow Biobank before 9am the following day. Biobank staff will receipt each sample and will contact the centre to investigate any discrepancies.
- 9) Contact the Biobank Manager (sarah.mcdonald@glasgow.ac.uk) when you need to re-order shipping boxes, bearing in mind this usually takes around 10 working days for delivery but may be longer.
- 10) **Notify the Biobank staff by email that specimens have been shipped. Scan and attach a copy of the Sample Transport Form to the email and include the tracking number in the email body. The following people must be included in all email notifications:**

sarah.mcdonald@glasgow.ac.uk

sharon.mackay@glasgow.ac.uk

g.cooke@imperial.ac.uk

k.topping@imperial.ac.uk

Senders should be aware that they are responsible for ensuring samples are appropriately packaged and labelled. Senders will be responsible for any incidents that occur while samples are in transit.

13 STOP-HCV-1 EXAMPLE SHIPPING FORMS

STOP-HCV-1 Sample Shipping Instructions



Correctly packed, labelled and closed DX boxes should be taken to the collection point at St Stephen's Centre before 5pm; earlier if possible.

If samples cannot be shipped before 5pm please store securely and take to the collection point the following day. Please notify Sarah McDonald, the Biobank Manager and **<name>** if samples are to be shipped any later than the day of collection.

Please ensure the label on each box is completed with the following details:

Sender's Details:

Sender's DX Name:

DX Number:

Exchange:

Name & Tel No of person responsible for the shipment:

(name and contact number of person preparing the samples for shipping)

Recipient's Details:

Receiver's Name:

Sarah McDonald

Hospital/Lab/Site Name:

MRC-~~Uni~~ of Glasgow Centre for Virus Research

DX Number:

DX 6493500

Exchange:

Glasgow 95 G

STOP-HCV-1
Sample Transport Form



Transport of Samples to Centre for Virus Research, Glasgow from
(Site Number: _ _ _)

Shipping date:		Box barcode:	
Packed by: (Print name and sign)			
Date of receipt: (CVR use only)		Checked by: (CVR use only)	

All fields must be legibly completed for each participant. Attach a STOP HCV Label to link the trial ID to barcodes. Attach a copy of the sample's barcode label to each box. Record any additional comments on the reverse of this sheet.

*File a copy of this form in the site file, send original with samples and email a Sample Log (Excel file) to the following when sending samples:

sarah.mcdonald@glasgow.ac.uk

sharon.mackay@glasgow.ac.uk

g.cooke@imperial.ac.uk

STOP HCV Log Label

Affix STOP HCV label here

Collection Date.....

EDTA for plasma	EDTA for plasma	EDTA for whole blood	PAXgene
<i>Affix barcodes here</i>			

STOP HCV Log Label

Affix STOP HCV label here

Collection Date.....

EDTA for plasma	EDTA for plasma	EDTA for whole blood	PAXgene
<i>Affix barcodes here</i>			

STOP-HCV-1
Sample Transport Form



STOP HCV Log Label

*Affix STOP HCV label
here*

Collection Date.....

EDTA for plasma	EDTA for plasma	EDTA for whole blood	PAXgene
<i>Affix barcodes here</i>			

Details of contents of package

This package contains human blood /tissue samples known or suspected to be infected with hepatitis C virus (HCV), human immunodeficiency virus (HIV) and/or hepatitis B virus. These pose a potential risk to humans of infection and are classed as a UN3373 – Category B Substance.

These materials are being transported from:

To: Dr Sarah McDonald/Dr John McLauchlan
Biobank laboratory room 412
Sir Michael Stoker Building
Garscube Campus
464 Bearsden Road
Glasgow
G61 1QH
Tel: 0141 330 2989/0141 330 4635

Samples are being transported using DX Tracked Specimen service and local/company policy should be followed

14 SITES SHIPPING SAMPLES VIA DX TO HCV RESEARCH UK BIOBANK

- 74 – Western General Hospital, Edinburgh
- 190 - Glasgow, Glasgow Royal Infirmary
- 544 – Royal Hallamshire Hospital, Sheffield