Loughborough University **The Centre for Biological Engineering**	Safety Dep't' Use Only Ref No: CBE Use Only Ref No: CBE/BRA/161	Material(s) Classification Hazard Group 1 ☒ Hazard Group 2 ☐ GMO ☐ HTA Licensable ☒

FORM CBE-RA-FORM/002. Version 8.0

RISK ASSESSMENT AND PROJECT REGISTRATION FOR WORK INVOLVING BIOLOGICAL MATERIAL

PLEASE READ CAREFULLY

This form acts to register projects involving the use of Biological Agents and / or Genetically Modified Micro-Organisms, or of materials that may be contaminated with these agents. It assesses the hazards and risks associated with the project as well as identifying those at risk and the measures necessary for preventing, or controlling these risks. Please ensure that sufficient detail is provided when completing this form and that the relevant written SOPs are referenced where required. Once completed and approved, all risk assessments must be supplied to all those working within this project. The work described within this form must not commence until this risk assessment has been completed and approved and that all necessary control measures are in place.

Any changes to the work, or the persons involved, must be notified to the departmental Quality Manager (dQM). All changes requested must be recorded within the risk assessment change control form and may also need to be incorporated within an amended version of this form.

A separate risk assessment will be required for assessing risks associated with GMO activities.

Principal Investigator	
Name:	Dr Elizabeth Ratcliffe
Position	Lecturer
Department:	Chemical engineering
School:	Chemical engineering

Person conducting this risk assessment	
Name:	Dr Elizabeth Ratcliffe
Position	Lecturer
Department:	Chemical engineering
School:	Chemical engineering

The Project Activity			
Title: Storage of primary epidermal keratinocytes			
Reference No:			
Start:	26/04/2018	End:	30/11/2021

Risk Assessment Change History		
Date:	ID & Version No	Review date
Click here to enter a date.		Click here to enter a date.

The following declaration must be completed and undersigned by the Principal Investigator or Person Responsible for the project

☒All information contained in this form is accurate and comprehensive
☒All workers involved will be instructed that their work must remain within the boundaries of this project registration & assessment
☒All workers have been given, or will be given before they become involved, adequate training and where necessary their competency assessed
☒All workers have, or will be before their involvement begins, enrolled with Occupational Health for health clearance where necessary
☒It is understood that this risk assessment shall not be transferred to a third party without the PI/Supervisor/Line Manager named in this form either taking responsibility for the new activities, or ensuring that a new proposal is submitted
☒All changes to the work covered by this form will be reassessed & the changes submitted dQM before those changes are made to the work

Name: Elizabeth Ratcliffe	Signature: E. Ratcliffe	Date: 03/05/2018

Purple = mandatory	White – for all work	Pink = cells, tissues, body fluids or excreta	Green = non-GM biological agents

1. INTRODUCTION

This section must be completed	
1.1. Background & aim of project	Storage of primary epidermal keratinocytes only. Currently the CBE has 1 cryovial primary epidermal keratinocyte cells which will are being stored in the cryobank (location B7/R3/A/02). No work is currently planned for their use. However, when future work is planned, a full risk assessment will be carried out
1.2. Description of experimental procedures	No experimental procedures are to be performed, only storage of cells within the cryobank
1.3. Where will this work be carried out?	**Rooms/areas: Cryobank, Centre for Biological Engineering** **Building(s): Garrendon wing, Holywell park** **Campus: Loughborough University**

NOTE: *A brief background to the project provides the reviewer a better understanding of the aims of the work. For Q1.2, the author is encouraged to cover as much of their activities with a particular material or biological agent as possible within this form. Describe laboratory procedures to be used and highlight any non-standard laboratory operations (these may need cross reference to supporting documentation i.e. protocols).*

2. NATURE OF WORK & HAZARD IDENTIFICATION

If this material is to be used then all relevant parts of this section must be completed

TISSUES, CELLS, BODY FLUIDS OR EXCRETA

2.1. If human or animal tissues, cells, body fluids or excreta will NOT be used then hatch here ☐ and proceed to section 2.11.

2.2. List all cells, tissues, body fluid or excreta to be used. For cells indicate whether primary, continuous or finite.

Material type	Organ source	Species	Where will it be obtained from (*include country of origin*)
1. Primary Epidermal Keratinocytes	Skin	Human	ATCC (UK), Product Code PCS-200-011, Lot 8221334 (Specific Lot is Passage 2)
2.			
3.			
4.			
5.			

2.3. Is any material listed in section 2.2 considered to be 'relevant material' under the Human Tissue Act 2004?* *If No, proceed to section 2.4* ☒Yes ☐No

2.3.1. List all HTA relevant material and indicate the source/provider *(please tick all appropriate boxes)*

Relevant Material type	Source/Provider *A=Commercial supplier;* *B=HTA licensed Biobank with REC approval for generic research use; C=Other HTA licensed organisation;* *D=Organisation with REC approval for research use;* *E=Imported*	
1. primary epidermal keratinocytes	☒ A ☐ B ☐ C ☐ D ☐ E	
2.	☐ A ☐ B ☐ C ☐ D ☐ E	
3.	☐ A ☐ B ☐ C ☐ D ☐ E	
4.	☐ A ☐ B ☐ C ☐ D ☐ E	
5.	☐ A ☐ B ☐ C ☐ D ☐ E	

* See https://www.hta.gov.uk/policies/list-materials-considered-be-%E2%80%98relevant-material%E2%80%99-under-human-tissue-act-2004#sthash.EliTXrB3.dpuf

2.4. Has any material listed in section 2.2 been genetically modified in any way? *If Yes, complete GMO Risk Assessment Form & provide Reference*	☐Yes ☒No	Ref No:
2.5 Has any of the material listed in section 2.2 been identified in the list of cross-contaminated/ misidentified cell lines? Check HPA website (http://www.hpacultures.org.uk/media/E50/3B/Cell_Line_Cross_Contaminations_v6_0.pdf *If Yes, provide details of the route of provenance back to the originator of the cell line, together with a Certificate of Analysis; identifying the*	☐Yes ☒No ☐N/R	

	methods used to qualify the cell type.		
	2.6. Has any of the material listed in section 2.2 been screened for infectious/communicable disease agents eg HIV, HBV, HCV, TSEs, HTLV etc. *If Yes, provide details.*	☒Yes ☐No	Certificate of Analysis provided including sterility test (bacteria/yeast/ fungi/mycoplasma), PCR virus testing (HIV-1, HIV-2, Hep B, Hep C)
	2.7. Will any clinical history or veterinary screening be provided?	☐Yes ☒No ☐N/R	
	2.7.1. If Yes, detail what this will include:		
	2.7.2. If Yes, will a policy of rejection of samples from diseased donors be adopted? Explain:		
	2.7.3. If Yes, and for human material, how will the information be disseminated in the course of the project?		☐N/R
	2.7.4. If Yes and for human material, will this information be anonymised?	☐Yes ☐No	☐N/R
	2.8. What is the likelihood of infection of any of this material? Consider the worst case if multiple materials are to be used.	☐Medium Risk ☐High Risk Go to Q2.9	☒Low Risk ☐None Go to Q3.1
	2.9. If medium or high risk of infection - name and classify the biological agents this material could be infected with	**Material type:**	
		Agent:	
		ACDP/Defra Classification:	
	2.10. Describe the type and severity of the disease that can be caused to humans or animals by each of the agents that could be present.		

	BIOLOGICAL AGENTS (i.e. micro-organisms such as bacteria, viruses, fungi, microscopic endoparasites)			
	2.11. If non-Genetically Modified biological agent will NOT be used then hatch here ☐ and proceed to section 3.1			
	2.12. List the biological agents to be used	**Name of agent**	**Strain(s)**	**ACDP/Defra classification**
	2.13. Describe the type & severity of the disease that can be caused to humans, animals or plants by each of the agents and if relevant, the particular strains in use *e.g. colonisation, infection, allergy, toxin-mediated disease*			
	2.14. Has any strain listed in section 2.12 been genetically modified in any way? *If Yes, complete the GMO Risk Assessment form*	☐Yes ☐No	Ref No:	

3. DECLARATION	**This section must be completed in all cases**	
	CLASSIFICATION OF HAZARD GROUP	
	3.1. Are you confident that any non-GM organism, tissue, cell, body fluid, excreta or any component thereof covered by this assessment cannot potentially pose a threat to humans or cause human diseases?	☒ Yes* - Classify as HG1 ☐ No
	3.1.1. If No, can any non-GM organism, tissue, cell, body fluid, excreta or any component thereof cause human disease and potentially be a hazard to humans but is unlikely to spread to the community and for which there is usually effective prophylaxis or treatment available?	☐ Yes - Classify as HG2 ☐ No
	3.1.2. If No, can any non-GM organism, tissue, cell, body fluid, excreta or any component thereof cause severe human disease and potentially be a serious hazard to humans and that may spread to the community, where effective prophylaxis or treatment may or may not be available?	☐ Yes – **DO NOT USE** Consult the DSO
	3.2. Do any of the materials contain pathogens or toxins covered by the Anti-Terrorism Crime and Security Act?	☒No ☐Yes – **DO NOT USE** Consult the DSO
	***NOTE: PLEASE READ CAREFULLY** *You must only answer 'YES' to question 3.1 if you believe that you have sufficient information to be confident that the material(s) covered by this risk assessment would be of no or of negligible risk to human health even in the event of a total breach of containment all the biological agents.*	
	ASSIGNMENT OF CONTAINMENT LEVEL	**CL2 (HG1)**
	PLEASE READ CAREFULLY *The laboratory Containment Level is directly related to each of the 4 Hazard Groups; organisms categorised as HG1 (lowest*	

hazard rating) should normally be handled in CL1 facilities (minimum level of containment), and likewise HG2 in CL2 facilities. ***All projects using HG1 and/or HG2 biological material(s) will be carried out under Containment level 2*** *(CL2) within the CL2 CBE Tissue Engineering Laboratory Unit or within the CL2 CBE Laboratory Unit at Holywell for reasons supplementary to worker protection; this includes the need to ensure research material protection/integrity (e.g. the use of a Class II safety cabinet) and to impose a quality assurance discipline.*

4. NATURE OF THE WORK

All relevant parts of this section must be completed

TISSUES, CELLS, BODY FLUIDS OR EXCRETA

4.1. If human or animal tissues, cells, body fluids or excreta will NOT be used then hatch here ☐ and proceed to Q4.8			
4.2. Will any culturing of the material described in section 2 take place? *If Yes, describe which cell(s) will be cultured and under what conditions.*	☐Yes ☒No		
4.3. If culturing, could HIV permissive cells be present*? *If Yes, describe the cells and for how long these cultures will be allowed to grow.*	☐Yes ☒No		
4.4. If culturing, what is the maximum volume of culture grown?	**Per vessel:**	**Number of vessels:**	**N/R**
4.5. Will the tissues, cells, body fluids or excreta be manipulated in any way that could result in the concentration of adventitious biological agent present? *If Yes, explain.*	☐Yes ☒No		
4.6. Will any of the tissues, cells or fluids be donated by you or your colleagues working in or with access to the labs?	Yes☐ No☒		
4.6.1. If Yes, detail who will provide these			☐ N/R
4.6.2. If Yes, detail how the materials will be used and the special risks involved*			☐ N/R
4.6.3. If Yes, provide justification for not using material from another safer source e.g. National Blood Service			☐ N/R
4.6.4. If Yes, how will confidentiality be assured?			☐ N/R
4.6.5. If Yes, has written consent been obtained from the donor?			☐ N/R
4.6.6. If Yes, has Ethics Committee approval been obtained?	Yes☐ No☐		

***NOTE 1:** If unsure seek advice. Refer to CBE Code of Practice for details on additional precautions.*

***NOTE 2:** Workers **MUST NEVER** culture, deliberately transform or modify their own cells or cells from their co-workers or workers otherwise associated with the experimental work. This presents a particular hazard since any self-inoculation injury could have potentially serious consequences as cells would essentially circumvent the normal protection of the immune system.*

BIOLOGICAL AGENTS (i.e. micro-organisms such as bacteria, viruses, fungi, microscopic endoparasites)

If non-Genetically Modified biological agent will NOT be used then hatch here ☐and proceed to section 5.

4.8. Describe ALL route(s) of infection (relevant to the laboratory setting) and the minimum infectious dose(s), if known	**Name of agent**	**Route(s)**	**Minimum infectious dose**
4.9. What is the highest concentration and volume of agent(s) to be worked with?	**Per experiment:**	**Total stored:**	
4.10. Are there any known drug resistances amongst the strains to be used? *If Yes, explain what these are and the consequences*			
4.11. What forms of agent will be used e.g. spores, vegetative forms and are there any issues over the robustness of these particular forms e.g. resistance to disinfectants or increased stability on dry surfaces?			
4.12. What will be the most hazardous procedure involving the use of this material?			

5. **All questions in this section must be answered and further details supplied when indicated**

Risk		If Yes, how will this be controlled?	Reference to SOPs/ other documentation
5.1. Might infectious droplets, aerosols or splashes be created, either deliberately or by accident?	☐ Yes ☒ No	*For e.g., will a safety cabinet or any other form of Local Exhaust Ventilation be required? Are there specific requirements for room ventilation or temperature control?*	Sealed vial, will not be opened for transfer to storage
5.2. Will this material be transported within the laboratory e.g. between BSC & incubator?	☐ Yes ☒ No	*Detail the containment measures which will be used to prevent or contain accidental splashes or spills.*	Storage only, no cell culture work
5.3. Will this material (including waste) be transported locally between sites on campus but outside the laboratory?	☐ Yes ☒ No	*Detail the containment measures which will be used to prevent or contain accidental splashes or spills.*	Storage only, if disposal of the vial is required this will be done within the laboratory according to local biological waste procedures
5.4. Will material(s) listed in sections 2.2 or section 2.3 be shipped to organisations elsewhere in the UK or abroad? *Refer to WHO guidance for transport of infectious substances: http://apps.who.int/iris/bitstream/10665/149288/1/WHO_HSE_GCR_2015.2_eng.pdf?ua=1	☐ Yes ☒ No	*Provide details of material(s) to be shipped.(include secondary hazardous substances eg dry ice)* *Provide details of mode of transport eg road, rail, air, sea, postal.* **Provide details of the packaging. If material is classified under the dangerous goods regulation, it must be packaged and labelled in compliance with its UN classification and associated packing instruction.*	**Provide reference to relevant Packing Instruction*
5.5. Will this material be received from organisations elsewhere in the UK or abroad?	☐ Yes ☒ No	*Provide details of the material to be received. What steps will be taken to ensure that the material is correctly packaged.*	
5.6. Will this material be stored?	☒ Yes ☐ No	*Provide details of how, where and in what this material will stored. If LN2 describe the additional precautions in place.*	The cryovial will be stored in the CBE cryobank location B7/R3/A/02 accordance with SOP013 (Safe Use and Maintenance of Liquid Nitrogen Stores) which describes additional precautions in place.
5.7. Will infectious material be centrifuged?	☐ Yes ☒ No	*Confirm whether sealed rotors and buckets will always be used..* *Describe where the rotors/buckets will be opened* *Describe the procedures in place to deal with leaks or spillages in the centrifuge or rotor*	
5.8. Are biological samples to be cultured in an incubator?	☐ Yes ☒ No	*Confirm what type of incubator (e.g. shaking or static) will be used and describe the measures used to prevent and contain spillages*	
5.9. Are sharps to be used at any stage during this activity?	☐ Yes ☒ No	*Describe the sharps, justify their use and describe the precautions in place to protect the user and others from injury*	
5.10. Are animals to be used in this project? *(If Yes, describe procedures involved, if shedding is possible and additional precautions or training required)*	☐ Yes ☒ No	Procedures: *Describe what procedures will be undertaken (e.g. inoculation of animals, harvest of tissues), who will perform the work and where.* Shedding: *Confirm if shedding of viable biological agent is possible (eg at site of inoculation, in faeces or urine) If Yes, detail the routes of shedding, risk periods and additional precautions to control*	

			exposure. Additional Precautions: *Provide details on any other additional precautions necessary and any additional training required for those handling animals.*	
	5.11. Will a fermenter/bioreactor be used to culture a biological agent or material?	☐ Yes ☒ No	*Confirm the size, type and location of the bioreactor. Describe any supplementary containment measures required (e.g., the use of a BSC or spill tray).*	
	5.12. Is there any stage within the experimental procedures when an infectious material is inactivated (other than for disposal)?	☐ Yes ☒ No	*Describe how will this be done and what will then happen to the material*	
	5.13. Is there any of the following to be used in conjunction with this project? *If Yes, provide details*	☐ Yes ☒ No	☐Liquid nitrogen ☐Ionising radiation ☐Carcinogens/mutagens ☐Toxins ☐Lone working	
	5.1.4. Are there any conditions associated with the hazards described in section 5.13 that require additional control measures?	☐ Yes ☒ No	*Describe the control measures required to prevent hazards e.g. avoiding incompatibilities with disinfectants (e.g. Virkon) or hazardous product decomposition associated with high temperatures e.g. autoclaving*	

6. PPE AND HYGEINE

All questions in this section must be answered

Control measure	Details	Reference to SOPs/ other documentation
6.1 When will gloves be worn?	During all activity	SOP037 - Use of Personal Protective Equipment (PPE)
6.2 What type and where will they be stored?	Purple nitrile gloves (lab entry & all labs), cryogloves for LN2 work (next to cryobank)	
6.3 When will laboratory coats be worn and what type are these?	Howie style white laboratory coat worn during all activity.	
6.4 Where will lab coats be stored and what are the arrangements for cleaning or disposal?	Lab entry (First change room), arrangements for regular cleaning described in SOP037	
6.5 Is any other type of PPE to be used? If Yes, provide details	Refer to SOP037	
6.6 Describe the lab hygiene facilities available and where they are located	Hand washing and eye wash stations located at lab entry and in all main lab entry points	

7. WASTE

All questions in this section must be answered

7.1. How will waste be treated prior to disposal

(Note that all differently treated wastes must be included e.g. if some liquid is autoclaved, but others not, then describe both)	Treatment prior to disposal	Is the treatment validated?	Reference to SOPs/ other documentation
Liquid waste	Virkon Decontamination according to SOP003 *"Disposal of Biological Waste"* All waste will be labelled appropriately and only processed by those persons involved in the project to ensure correct processing occurs.	☒Yes ☐No	SOP003 -Disposal of Biological (Healthcare) Waste
Solid waste	Autoclave Decontamination according to SOP003 *"Disposal of Biological Waste"* All waste will be labelled appropriately and only processed by those persons involved in the project to ensure correct processing occurs Minimum 121˚C for 15 mins (under	☒Yes ☐No	SOP003 - Disposal of Biological (Healthcare) Waste. SOP024 - Maintenance of

	clinical vacuum) CYCLE#4 Treatment Cycle (4) is validated according to SOP024 "Maintenance of Systec VX-95 Autoclave CBE044". Annual validation is conducted by an external contractor.		Systec VX-95 Autoclave CBE044.
Other (specify)		☐Yes ☐No	

7.2. If waste is to be autoclaved confirm the following:

All cycles have been validated for the actual load types used?	Yes X No ☐ *If Yes, documentary evidence of the validation must be available*	Annual validation is conducted by an external contractor, records of validation are held by CBE Laboratory Manager.
The successful completion of every load is checked prior to disposal?	Yes X No ☐	Autoclave tape monitoring and operator checks and records successful cycle completion

7.3. How will liquid waste be disposed of?

To drain?	Yes X No ☐	After 1% Virkon decontamination for 24 hours, waste is poured down the drain with copious amounts of water. Refer to SOP003 "*Disposal of Biological Waste*"
As solid waste?	Yes ☐ No X	
Other (specify)?	Yes ☐ No ☐	

7.4. How will solid waste be disposed of?

Categorisation	**Waste stream: Colour Code**	**Disposal method**
☐ Sharps	Orange	Yellow/Orange lidded sharps bin > autoclave sterilisation if known or potentially infected > clinical waste disposal (incineration)
☐ Sharps contaminated with cytotoxic or cytostatic material	Purple	Yellow/Purple lidded Sharps bin >clinical waste disposal (incineration @ 1000C)
☒ Human body parts, organs, including blood bags and blood preserves and excreta that have been pre-treated before leaving the site	Orange	Disinfection or sterilisation in the lab site > Yellow/Orange lidded rigid one way sealed tissue bins > clinical waste disposal (incineration) **#Human tissue waste must be placed in separate containers from non-human waste and labelled 'HTA waste'**
☐ Animal body carcasses or recognisable parts that have been pre-treated before leaving the site	Orange	Disinfection or sterilisation in the lab site > Yellow/Orange lidded rigid one way sealed tissue bins > clinical waste disposal (incineration
☐ Potentially or known infected lab wastes contaminated or potentially contaminated with	Purple	Yellow/Purple clinical waste bags > clinical waste disposal (incineration)

	cytotoxic or cytostatic material that have NOT been pre-treated before leaving the site		
	☐ Potentially or known infected lab wastes that have NOT been pre-treated before leaving the site	Yellow	Yellow clinical waste bags > clinical waste disposal (incineration)
	☐ Infected or potentially infected lab wastes that have been pre-treated before leaving site	Orange	Disinfection or sterilisation in the lab site > orange clinical waste bags > clinical waste disposal (incineration)

8. MAINTENANCE

All questions in this section must be answered

8.1. Are preventative maintenance and monitoring regimes in place for the following laboratory equipment?
If Yes, detail frequency

		Inspection, servicing	Cleaning/ disinfection	Monitoring/ Alarms	Reference to SOPs	N/R
Centrifuges	☒Yes ☐No	Annual	weekly	weekly	SOP015 - Use and maintenance of BOECO U-32R Bench top Centrifuge	☒
BSCs	☒Yes ☐No	Annual	weekly	daily	SOP009 - Use and Maintenance of the HERAsafe KS Class II Biological Safety	☒
Autoclaves	☒Yes ☐No	Annual	weekly	Daily	SOP024 - Use and Maintenance of Systec VX Autoclave No CBE044 / 45	☐
Incubators	☒Yes ☐No	Annual	weekly	Daily	SOP053 - Use and Maintenance Sanyo MCO-18AIC CO2 Incubator v2.	☒
LN2 Stores	☒Yes ☐No	weekly		Twice weekly	SOP013 - Safe Use and Maintenance of Liquid Nitrogen Stores	☐
Freezers	☒Yes ☐No	Annual	weekly	weekly	SOP016 Use and Maintenance of Fridges & Freezers	☒
Fridges	☒Yes ☐No	Annual	weekly	weekly	SOP016 Use and Maintenance of Fridges & Freezers	☒
Others (specify)	☐Yes ☐No					☐

9. TRAINING

All questions in this section must be answered

9.1. Have all project research workers under taken safety training for working with hazardous or potentially hazardous biological materials and agents at CL2?

Name of researcher		Date training completed or will be completed	If No ,please state why
Junaid Ali	☒Yes ☐No	May 2016	
Elizabeth Ratcliffe	☒Yes ☐No	Oct 2008	
	☐Yes ☐No		
	☐Yes ☐No		
	☐Yes ☐No		

9.2. If work involves HTA 'Relevant Material', confirm that all project research workers have undertaken HTA training ☐N/R

Name of researcher		Date HTA training completed or will be completed			If No ,please state why
		Induction	On-line	In-house	
Elizabeth Ratcliffe	☒Yes ☐No	25/05/2017		26/06/2017	
Junaid Ali	☐Yes ☒No				Not working with the material, the material is only stored, if there are plans for the researcher to work with the material they will undertake HTA training before doing so
	☐Yes ☐No				
	☐Yes ☐No				
	☐Yes ☐No				

10. EMERGENCY PROCEDURES

All questions in this section must be answered

10.1. Are procedures in place for dealing with spillage of infectious or potentially infectious material

Equipment		Reference to SOPs	N/R
Within the BSC	☒Yes☐No	SOP009 - Use and Maintenance of the HERAsafe KS Class II Biological Safety SOP038 - Biological Spill Response	☒
Within the centrifuge	☒Yes☐No	SOP015 - Use and maintenance of BOECO U-32R Bench top Centrifuge SOP038 - Biological Spill Response	☒
Within the laboratory but outside any primary control measure e.g. BSC	☒Yes☐No	SOP038 - Biological Spill Response	☐
Outside the laboratory	☒Yes☐No	SOP038 - Biological Spill Response	☒

10.2. Describe the procedures in place for an accidental exposure		Reference to SOPs
Immediate action	Labelled Biological Spill kits are located in each laboratory within the CBE Laboratory Unit. Signs are posted throughout the Laboratory Unit to enable workers to locate the nearest biological (and chemical) spill kits. Posters are also displayed in each laboratory within the Unit to advise on spill response (outside the BSC) and reporting procedures.	SOP038 - Biological Spill Response
When and whom to report the incident	Immediately upon making the area safe, local users, Laboratory Management	SOP038 - Biological Spill Response

11. ACCESS

All questions in this section must be answered

		Reference/SOP
11.1. Is the lab(s) adequately separated from other areas (e.g. offices)? *If No, explain*	☒Yes ☐No	
11.2. Is the lab(s) or other work areas shared with other users not involved in the project? *If Yes, explain who and what procedures are in place to control any risk to them.*	☒Yes ☐No The cryobanks are a shared storage facility for the CBE, all users go through mandatory training for safe working within CBE and specifically the cryobank. Only authorised trained users can gain access to the cryobanks	SOP013 - Safe Use and Maintenance of Liquid Nitrogen Stores
11.3. Describe the measures in place to ensure that hazardous biological agents or material is secure	Cryostores are locked at all times and only authorised trained users can gain access to the cryobanks	SOP013 - Safe Use and Maintenance of Liquid Nitrogen Stores

12. OCCUPATIONAL HEALTH	All questions in this section must be answered	
	12.1. All workers involved with handling unscreened blood, blood products and other tissues are recommended to have Hepatitis B immunisation. Have all workers involved in this project been immunized?	☐Yes ☒No
	12.2. Is health surveillance required?	☐Yes ☒No

13. NOTIFICATIONS	All questions in this section must be answered		
	13.1. Are any of the cells, tissues or fluids covered by the Human Tissue Act (HTA) under the University HTA Licence?	☒Yes ☐No	*If Yes, provide Licence No.12577*
	13.2. Are any of the cells, tissues or fluids obtained from a HTA licensed biobank with REC approval for generic research use?	☐Yes ☒No	*If Yes, provide details (including dates) and reference to evidence of approval.*
	13.3. Does this work have ethical approval from a recognised NHS Research Ethics Committee?	☐Yes ☒No	*If Yes, provide details (including dates) and reference to evidence of approval*
	13.4. Does any of the work require approval from the University Ethical Committee?	☐Yes ☒No	*If Yes, provide details (including dates) and reference to evidence of approval.*
	13.5. Do any of the materials require approval for use from the UK Stem Cell Bank Steering Committee (MRC)? *(e.g. embryonic stem cells sourced from UK sources but not available through the UK Stem Cell Bank)*	☐Yes X No	*If Yes, provide details (including dates) and reference to evidence of approval.*
	13.6. Do any of the materials or biological agents listed require any other licenses? *(e.g. HSE notification under COSSH; Home Office notification under anti-terrorism, crime and security act; Defra/SAPO license for import of animal products and pathogens etc.*	☐Yes ☒No	*If Yes, provide details (including dates) and reference to evidence of approval.*

14. APPROVALS	All relevant approvals must be completed before work is started		
	For work involving HG1 biological agents or materials: Review and approval is required by the departmental Quality Manager or an authorised, designated member of CBE staff before the work begins. A signed copy of this form must be sent to the University Safety Office. NOTE: Explicit approval will also be required from the Departmental Biological Safety Advisor and the University Biological Safety Officer before work begins, if you answered 'Yes' to Q13.5. **For work with HG2 biological agents or materials:** Explicit approval is required from the Departmental Biological Safety Advisor and the University Biological Safety Officer (or deputy) before work begins. **For all work involving HTA 'Relevant Material':** If you answered 'Yes' to Q13.1, explicit approval will also be required from the departmental Person Designate. If the biological agent has been Genetically Modified this form, (approved by the relevant authority, as above) should be submitted with the GMO risk assessment to the Departmental Biological Safety Advisor and both forms forwarded to the LU GM Safety Committee for final approval.		
	NAME:	**SIGNATURE:**	**DATE:**
	1. Departmental Quality Manager or other authorised personnel *(please indicate position):*		11.06.2018

	2. Departmental Person Designate *(as applicable)*:		18/6/2018
	3. Departmental Biological Safety Advisor:		
	4. University Biological Safety Officer (or Deputy):		