This document supersedes the document on "Guidance to determine if ICF amendment is required, v6.1, 26 Nov 2018".

In Check 1: Step 3, the word "intervention" has been defined.

On 15 Jan 2019, MOH updated on the HBRA requirements for existing HBR studies.

The following checklists will help you determine what you need to do.

1: Check whether your study is a HBR
2: **[UPDATED]** Consent Requirements for Existing HBR Studies
3: **[UPDATED]** Check whether your ICF is compliant to the HBRA

Check 1: Check whether your study is HBR *[Extracted from: HBRA 2015, Part 1, Section 3(1) & HBRA 2015, Second Schedule – Research, Studies and Matters Excluded From Definition Human Biomedical Research]*

Step 1: Determine if your study is HBR.

Does this study involve

- ❑ a) Human gametes or human embryos; **or**
- ❑ b) Cytoplasmic hybrid embryos; **or**
- ☐ c) The introduction of any human-animal combination embryo into an animal or human; **or**
- ☐ d) The introduction of human stem cells (including induced pluripotent stem cells) or human neural cells into an animal at any stage of the development (including a prenatal animal foetus or animal embryo)
- ☐ e) Any entity created as a result of any process referred to in (c) or (d) above

If YES → This is HBR. → Please use the **Restricted HBR Checklist** to determine if the study is a restricted human biomedical research.

If NO → Proceed to Step 2.

Step 2: Identify if your study objective falls within the scope of HBR.

Does the intent of my study involve:

- ☐ The prevention, prognostication, diagnosis or alleviation of any disease, disorder or injury affecting the human body; **or**
- ☐ The restoration, maintenance or promotion of the aesthetic appearance of human individuals through clinical procedures or techniques; **or**
- ☐ The performance or endurance of human individuals.

If NO → This is Non-HBR.

If YES → Proceed to Step 3.

Step 3: Identify if the methodology employed also falls under the scope of HBR.

Does my study methodology involve:

- ☐ Subjecting an individual to any intervention★ (including any wilful act or omission) that has a physical, mental or physiological effect (whether temporary or permanent) on the body of the individual; **or**
- ☐ The use of any individually-identifiable biological material obtained from the human body; **or**
- ☐ The use of any individually-identifiable health information.

If YES → This is HBR.

**Note: Your study falls under HBR only if you have answered 'Yes' in steps 2 and 3.*

If NO → This study is not HBR as it does not deploy the methodology as listed under step 3.

★ *This refers to any procedure administered **for research purposes** (i.e. not part of standard care). If it has a physical, mental or physiological effect on participants, it is considered "interventional".*

⚠ **If your study is NOT HBR, you are not required to comply with HBRA requirements.**
You are recommended to keep a copy of this checklist in your investigator file.

Check 2: [UPDATED] Consent Requirements for All HBR Studies

1) For HBR studies **without** a waiver of consent

For all HBR studies without an IRB granted waiver of consent, appropriate consent must be obtained before the subjects' intervention and/or obtaining of individually identifiable human biological material (HBM)/ health information (HI).

However, if the study falls into either of the following scenarios, relevant consent can apply till end of 31 Oct 2019.

Scenario	Interventions		Use of identifiable HBM/HI		Consent requirements
	Performed before 1 Nov 2018	To be performed from 1 Nov 2018	Obtained before 1 Nov 2018	To be obtained from 1 Nov 2018	
1	✓	x	✓	x	1. Relevant consent valid till end of 31 Oct 2019. 2. Appropriate consent must be obtained if the use of individually identifiable HBM/ HI is expected beyond 31 Oct 2019.
2	x	x	✓	x	

2) For HBR studies **granted a waiver of consent by the IRB before 1 Nov 2017**

For HBR studies granted a waiver of consent by the IRB before 1 Nov 2017, such studies will be exempted from appropriate consent till end of 31 Oct 2019. Researchers are strongly encouraged to complete their study by 31 Oct 2019 or they will be required to:

- Seek waiver of consent again from the IRB, or
- Obtain appropriate consent in accordance with HBRA, or
- De-identify HBM/HI.

Researchers to note when drafting the ICF:

- All informed consent form (ICF) elements under HBRA 2015 Section 12(1) (with the exception of 12(1)(e) and (j) which can be omitted if not relevant), must be included in all ICFs for studies governed under the HRBA.
- All sections of HBRA 2015 Section 12(2) will apply if biological samples are stored for future research.
- There must be a witness section in the ICF

The requirement for a witness is exempted where the HBR study is (i) not invasive, (ii) not interventional and (iii) not restricted HBR.

Check 3: Check whether your study ICF is compliant to the HBRA (where applicable)

Instructions:

- Use Checklist A if your study does not involve the removal, donation or use of *Human Tissue.

- Use Checklist A & B if your study includes the removal, donation or use of *Human Tissue.

*Human Tissue - means any human biological material but excludes human biological materials as stated (First Schedule) below:

1. Hair shaft, cur without dermal hair root or follicle
2. Nail plate, cut without underlying dermal tissue
3. Naturally-excreted bodily fluids and waste products e.g. saliva, swear, urine, faeces
4. Human biological material that is not individually-identifiable, and has been processed in such a manner that its functional, structural and biological characteristics are substantially manipulated as compared to the time of collection.
5. For the purpose of and without prejudice to the generality of section 4, human biological material is not deemed to be **substantially manipulated merely because it has been processed by any of, or any combination of, the following methods:
   a) Cutting;
   b) Grinding;
   c) Shaping;
   d) Centrifugation;
   e) Soaking in antibiotic or antimicrobial solutions;
   f) Sterilization;
   g) Low-level irradiation;
   h) Cell separation, concentration or purification;
   i) Filtering;
   j) Lyophilisation;
   k) Freezing;
   l) Cryopreservation;
   m) Vitrification.
6. Human biological material that has been substantially manipulated (e.g. culture expanded, immortalized cell lines, transfected cells/ tissues) and is no longer individually-identifiable, is not considered to be “human tissue”.

*** Please refer to “Guidance on Prohibition against Commercial Trading of Human Tissue” found on MOH website (www.MOH.gov.sg)*

Checklist A: For Human Biomedical Research without the removal, donation or use of human tissue.

[Extracted from: HBRA 2015, Section 12 (1)]
If you are conducting **human biomedical research**, you must ensure that appropriate consent is obtained. Your appropriate informed consent form must include **all** of the following elements.
Note: All the 12(1) elements must be included in the ICF except (e) and (j) where applicable.

HBRA 2015 Section 12 (1) elements	Yes	No	NA
a) The investigational nature of the biomedical research			
b) Purpose of the biomedical research			
c) The reasonable foreseeable risks, discomforts or inconveniences to a living research subject arising from this biomedical research			
d) The benefits which the research subject may reasonably expect from the biomedical research			
e) Where applicable, whether there are any alternative procedures or treatments available to the research subject, and the potential benefits and risks of such alternatives *Note: If there are no alternative procedures/ treatments available, the study team may omit this element.*			
f) Any compensation and treatment available to the research subject in the event of injury arising from participation in the research			
g) Any anticipated expenses the research subject is likely to incur as a consequence of participating in the biomedical research			
h) The extent to which information identifying the research subject will be kept confidential			
i) Whether individually-identifiable information obtained from the research subject will be used for future biomedical research *Note: If the study is not storing research data collected for future research, the study team is advised to state that any individually-identifiable information obtained will not be used for future biomedical research.*			
j) Where applicable, whether biological material taken from the research subject will be destroyed, discarded or stored for future biomedical research *Note: If the study does not involve the collection of any biological material, the study team may omit this element.*			
k) Whether the participation of the research subject involves information in individually-identifiable form			
l) The circumstances, if any, under which, the research subject or the person authorised to give consent under this Part will be contacted for further consent, including but not limited to changes in the proposed research, serious adverse events that would lead to a change in the proposed research, the development of capacity by minors to make decisions and any other circumstances which could be specific to a particular research proposal			
m) Whether the research subject would wish to be re-identified in the case of an incidental finding if the proposed biomedical research expressly provides for such re-identification *Example: "Incidental findings" are findings that have potential health or reproductive importance to research participants like you and are discovered in the course of conducting the study, but are unrelated to the purposes, objectives or variables of the study. For this study, no incidental findings are anticipated and no such re-identification will be provided."*			
n) The research subject's right or any person who is authorised to give consent on the subject's behalf at any time; withdraw his or her consent to the consent to the subject's participation in the human biomedical research. The withdrawal of consent does not affect the research information obtained before the consent is withdrawn and such information may be retained and used for the research. Any penalty or damages imposed solely by reason of the withdrawal of consent permitted is void and unenforceable			
o) The person or persons to contact to obtain further information on the biomedical research and to provide feedback in relation to the biomedical research, respectively			
p) Such other information as the institutional review board may require			

You are encouraged to keep this checklist in your investigator's file.

Please refer to www.research.nhg.com.sg for the latest NHG DSRB Informed Consent Form Template.

Checklist B: For Human Biomedical Research involving the removal, donation or use of human tissue.

[Extracted from: HBRA 2015, Section 12 (2)]
If your HBR involve the **removal, donation or use of human tissue**, you must ensure that appropriate informed consent is obtained. Your appropriate informed consent form must include **all** of the following elements, including those in Checklist A.

HBRA 2015 Section 12 (2) elements	Yes	No	NA
a) The specific research purpose for which the tissue is intended to be used, if this information is available but if not available, the purpose for which the tissue is intended to be used may be stated as for general research			
b) Whether the tissue will be used for any purpose other than research and if so, the specific purpose for which the tissue will be used			
c) The proposed areas of research approved by the institution review board in a case where it has waived the requirement that the removal of the tissue is primarily for a therapeutic or diagnostic purpose under section 37(3). Only applicable to the following populations: (a) an adult who lacks mental capacity; (b) a minor who lacks mental capacity; (c) a minor who lacks sufficient understanding and intelligence to give consent.			
d) The reasonably foreseeable risks, discomforts or inconveniences to a living donor arising from the removal of the tissue			
e) The donation of the tissue is voluntary and the renunciation of the donor's rights to the tissue and any intellectual property rights that may be derived from the use of the tissue			
f) The donor's right to withdraw his or her consent in the circumstances specified in section 14 and the limitations of such withdrawal as specified in that section			
g) Any compensation and treatment available to the donor in the event of injury arising from participation in the process of tissue donation			
h) Any anticipated expenses the donor is likely to incur as a consequence of donating tissue			
i) The extent to which records identifying the donor will be kept confidential			
j) Whether individually-identifiable information obtained from the tissue donor will be used for future research			
k) Where applicable, whether biological material taken from the tissue donor will be destroyed, discarded or stored and used for future research			
l) Whether, and the circumstances under which, the donor or the person authorised to give consent under this part, as the case may be, will be contacted for further consent.			
m) Whether the tissue donation would result in the use of the donor's tissue in an individually-identifiable form			
n) Whether the tissue will be used in restricted human biomedical research involving human-animal combinations			
o) Whether the donor or the person authorised to give consent under this Part, as the case may be, would wish to be re-identified in the case of an incidental finding if the future research expressly provides for such re-identification			
p) The person or persons to contact to obtain further information on the purposes for which the tissue will be used and to provide feedback in relation to such purposes, respectively			
q) Whether the tissue will be exported or removed from Singapore to a place outside Singapore			

You are encouraged to keep this checklist in your investigator's file.

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