SINGAPORE SPORT INSTITUTE INSTITUTIONAL REVIEW BOARD – Expedited Review

The chairperson of Singapore Sports Institute's institutional review board or a member authorised by the board may decide that a research proposal or a class of research proposals may be reviewed through an expedited process if the proposal or class of proposals involves no more than minimal riskto the research subjects.

1. "Minimal risk", in relation to human biomedical research, means the probability and magnitude of harm and discomfort anticipated in the research are not greater, in and of themselves, than those ordinarily encountered[1]:
   1.1 in the daily life of normal and healthy persons; or
   1.2 during the performance of routine physical or psychological examinations or tests.

2. Under an expedited review procedure, the review may be carried out by not less than two experienced reviewers designated by the chairperson or the authorised member among members of the IRB. The following criteria may be considered by the chairperson or the authorised member for expedited review[2]:
   2.1 One or more minor changes to a research proposal which do not affect the substance of research proposals approved by that board;
   2.2 A research proposal that involves analysis of patient information without interaction with research subjects where the chairperson or authorised memberis satisfied that the researchers will take appropriate measures to protect the confidentiality of information relating to the research subjects;
   2.3 No proposal for restricted human biomedical research may be reviewed through an expedited process.

3. Categories of Research for Expedited Review

   3.1 Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:

      3.1.1 from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or

      3.1.2 from other adults and children, considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these

[1] Ref: *Section 2, General Interpretation, Human Biomedical Research Act 2015 (No.29 of 2015)*
[2] Ref: *Adapted from the Human Biomedical Research (Institutional Review Boards) Regulations 2017.*

subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.

3.2 Prospective collection of biological specimens for research purposes by non-invasive means.

3.2.1 Examples: (a) hair and nail clippings in a non-disfiguring manner; (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction; (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) un-cannulated saliva collected either in an un-stimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labour; (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulisation.

3.3 Collection of data through non-invasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays (with the exception of dual energy X-ray absorptiometry) or microwaves. Where medical devices are employed, they must be cleared/approved for marketing.

3.3.1 Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, near-infrared spectroscopy, doppler blood flow, and echocardiography; (e) moderate exercise, standard physical tests such as jumps, sprints, lifts, sports-related movements, tracking and wearables such as GPS, accelerometers, etc., body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual; (f) measurement of muscle temperature, skin temperature and core temperature (with the use of rectal probe and pill.)

3.4 Research involving materials (data, documents, records, or specimens) that have been collected (i.e. retrospective study), or will be collected solely for non-research purposes (such as medical treatment or diagnosis).

3.5 Collection of data from voice, video, digital, or image recordings made for research purposes.

3.6 Research on individual or group characteristics or behaviour (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behaviour) or research employing survey, interview, oral history, focus group, programme evaluation, human factors evaluation, or quality assurance methodologies.

3.7 Research involving exogenous ingestion or application of common substances or supplements not exceeding standard doses established in literature.

3.7.1 Examples: Caffeine, creatine, sodium bicarbonate, beta alanine, protein supplements, branched chain amino acids, beetroot concentrate, sports drink, carbohydrate gels, electrolytes, tart cherry, vitamins and minerals supplements, etc.

4. The above guidelines are written to assist applicants in assessing the type of review they may be eligible to apply for. They do not, by any means, represent approval criteria used by the SSI Institutional Review Board nor have any impact on the outcome of application and the decisions made by the SSI Institutional Review Board.