

CONFIDENTIAL

Appendix 1

POSTAPPROVAL MONITORING (PAM) Checklist

Objective: to guide animal users to comply with approved IACUC protocols

PAM number :
Protocol number :
Protocol title :
PI :
Personnel present :
PAM Officer(s) :
Date and time :
Venue(s) :

	The Protocol and Personnel	Check (√) / NA
1.1	Does the laboratory keep a copy (soft or hardcopy) of the latest approved	
	version of the IACUC protocol (including amendment)?	
1.2	Are the lab personnel aware that there is an IACUC protocol and where it	
	is kept?	
1.3	Have all personnel read and understood the protocol?	
1.4	Do they know when the expiry date of the protocol is?	
1.5	Are all the people involved in the study listed on the protocol?	
1.6	Do personnel in the approved protocol have good knowledge of the animal	
	models described in the protocol, in particular the clinical manifestations	
	displayed by the animals upon procedures, and the criteria for early	
	euthanasia?	
1.7	REMARKS:	
2	Course and other Duesedouses	
2	Surgery and other Procedures	
2.1	Are the procedures performed consistent with those described in the	
2.2	approved protocol?	
2.2	Are lab personnel appropriately trained to perform these procedures?	
2.3	Is surgery performed in a location that has been approved by the IACUC?	
2.4	Are there proper equipment available for surgery?	
2.5	Can the surface of the area for surgery (eg. smooth, non-porous stainless	
2.5-	steel) be sanitized properly?	
2.5a	Are the equipment for non-surgical procedures sanitisable/working/safe	
2.6	for use with animals eg. restrainers, behaviour equipment? Is survival surgery performed with appropriate PPE, using sterile	
2.0	instruments, sterile gloves, sterile gown (for large animal surgery), a	
	surgery mask and aseptic technique?	
2.7	Is an appropriate heat source used to keep the animal warm throughout	
,	the procedure?	
2.8	Are the methods of anesthesia in compliance with the protocol?	
2.9	Are the location and method of animal preparation appropriate and in	
	accordance with the approved protocol?	
2.10	Is the surgical area defined and isolated, dedicated workspace for animal	



CONFIDENTIAL

	procedures properly maintained, cleaned and organized?	
2 11		
2.11	Are incisions closed appropriately and in accordance with the approved protocol?	
2.12	Is there an appropriate recovery area for the animals?	
2.13	Are animals kept warm eg. using heat source during recovery?	
2.14	Any measure to prevent injury and harm to animal recovering from	
	surgery by other animals in the same batch which are waiting for their turn	
0.45	for the surgery?	
2.15	Is post-surgical care in compliance with the protocol? E.g. hygiene, fluid	
2.16	and food intake, management of pain and control of infection.	
2.16	Is post-surgical, or post-procedural, monitoring in accordance with	
2.17	approved protocol? E.g. frequency and duration. Are the methods of analgesia consistent with the approved protocol? E.g.	
2.17	dose, frequency, duration	
2.18	REMARKS:	
2.10	NEWAKIS.	
3	Euthanasia	
3.1	Do personnel know the experimental end point of the study?	
3.2	Does the method of euthanasia correspond with what is written in the	
J.2	protocol?	
3.3	Is death assured by performing an appropriate physical method of	
	euthanasia when required?	
3.4	REMARKS:	
4	Animal care and general record keeping	
4 4.1	Animal care and general record keeping Is there an up-to-date and complete surgical/procedure log (which	
	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances,	
4.1	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)?	
	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the	
4.1	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards?	
4.1	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved	
4.1 4.2 4.3	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded?	
4.1	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early	
4.1 4.2 4.3 4.4	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints?	
4.1 4.2 4.3	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness	
4.1 4.2 4.3 4.4 4.5	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs?	
4.1 4.2 4.3 4.4	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and	
4.1 4.2 4.3 4.4 4.5	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key	
4.1 4.2 4.3 4.4 4.5	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and	
4.1 4.2 4.3 4.4 4.5	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry	
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates?	
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log	
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log sheet(s) properly maintained? E.g. date when solution is made, dilution	
4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log sheet(s) properly maintained? E.g. date when solution is made, dilution and mixing, amount of drug used and balance. Will images be taken? If yes, are there dedicated devices to capture and store the images?	
4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log sheet(s) properly maintained? E.g. date when solution is made, dilution and mixing, amount of drug used and balance. Will images be taken? If yes, are there dedicated devices to capture and store the images? Are researchers aware that the images must be submitted for review by	
4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log sheet(s) properly maintained? E.g. date when solution is made, dilution and mixing, amount of drug used and balance. Will images be taken? If yes, are there dedicated devices to capture and store the images? Are researchers aware that the images must be submitted for review by IACUC prior to presenting them in publications and/or conferences?	
4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	Is there an up-to-date and complete surgical/procedure log (which includes surgical procedures performed, administration of substances, blood collection, pre/post op drugs administration, etc)? Are animals identified by individual numbers or as a group indicated on the cage cards? Are criteria for early euthanasia monitored according to the approved protocol and recorded? Do members understand the difference between criteria for early euthanasia, humane endpoint and experimental endpoints? Do members know what to do if unexpected research outcomes or illness occurs? Are controlled substances stored appropriately? E.g. opaque storage and under lock and key Are drug(s), anesthesia, analgesia and antibiotic(s) used before their expiry dates? Are drug(s), anesthesia, analgesia and antibiotic(s) and controlled drug log sheet(s) properly maintained? E.g. date when solution is made, dilution and mixing, amount of drug used and balance. Will images be taken? If yes, are there dedicated devices to capture and store the images? Are researchers aware that the images must be submitted for review by	



CONFIDENTIAL

5	Breeding	
5.1	Do personnel know the difference between a breeding protocol and a	
5.2	research protocol? Is the breeding method according to the approved protocol?	
5.3	Are records of animals produced under the breeding protocols kept in accordance with IAUC policy?	
5.4	Are records of animal transfer from breeding to research protocols kept?	
5.5	REMARKS:	
6	Transportation	
6.1	Are animals transported out of the primary housing area?	
6.2	Are members familiar with methods of transportation?	
6.3	Are the route, mode and means of transport appropriate?	
6.4	Are the animal transport boxes appropriate and properly maintained (cleaned and sanitized)?	
6.5	Is the transport of animals between primary housing facility and approved location properly documented eg. records of forms from CM, date and time of move?	
6.6	Are animals returned to central holding? If not, what is done for disposal eg. euthanized for tissue harvest and carcasses to be disposed by CM? If yes, where are they returned to? Does the researcher know to bring them to the Return room in CeLS?	
6.7	REMARKS:	
7	Safety and other issues	
7.1	Do members know what to do in an accident or when bitten by animals? - Including how to take care of the wound and how to report the incident. - Where is the bite and scratch kit kept? Is the kit easily within reach?	
7.2	Are first aid kit(s) within easy reach in the laboratory?	
7.3	Is the contact list for CM (vet staff for animal emergency), IACUC (animal welfare concern) and OSHE (lab animal allergy and use of sharps, eg. needles) put up conspicuously in the lab such that lab personnel can refer to it to contact the relevant office/department when necessary? Do the lab personnel know who is the Emergency contact person and his/her phone number?	
7.4	Do personnel know about the whistle blowing policy and who to contact?	
7.5	Are sharps being used in the lab? Does the lab have the SOP for handling and disposal of sharps? Do lab personnel know how to handle and dispose sharps safely and in a proper manner?	
7.6	REMARKS:	