

SOP No: AHT 33

SUBJECT: Heart Bleed (Rat)

POLICY: Operator must be experienced and competent in this technique.
Only one survival bleed is permitted without AEC approval.

PRECAUTIONS: Gloves, eye protection, long-sleeve gown and closed in shoes.

EQUIPMENT: anaesthetic
blood collection tubes
5 - 10ml syringe with 21 - 22gauge needle.

PROCEDURE:

1. Anaesthetise rat with anaesthetic of choice (specify dose rate, route of injection and volume).
2. Insert the needle into the chest cavity where the strongest heartbeat is felt.
3. When blood is observed in the hub of the needle, draw back gently on the syringe.
4. Once the desired amount of blood has been withdrawn (1 ml for 200g rat, 2ml for 400gm rat), allow the animal to recover in a warm environment and monitor until the rat is fully conscious.

RECOMMENDATIONS:
A maximum of 7.5 – 10% of blood volume may be removed. Removal of a volume of 10 – 20% should be replaced with an equal volume of 0.9% saline or equivalent. Restoration of normal haematological values may take up to 2 – 3 weeks.

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REFERENCES

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3. J. Donovan and P. Brown. Blood Collection. In: Current Protocols in Immunology, (eds: A. Kruisbeek et al), John Wiley & Sons, New York, NY, USA, Unit 1.7.