

Superovulation for Oocyte Recovery

1.0 Equipment

- 1.1** Cage changing station
- 1.2** Sharps Disposal Bin

2.0 Supplies

- 2.1** 1ml syringe
- 2.2** 25G or 26G needle
- 2.3** PMSG
- 2.4** hCG
- 2.5** Clean cage
- 2.6** 70% alcohol
- 2.7** 2% Distel
- 2.8** Gloves
- 2.9** Mask

3.0 Procedure

3.1 General Information

- 3.1.1 Injections for mice destined for IVF should be carried out at 4pm. Injections for mice destined for embryo harvest should be carried out at 11am.
- 3.1.2 If both hormones are being injected in one session, mice destined for PMSG injections should be injected first, then the mice destined for hCG.

- 3.1.3 Ensure both hormones are injected in alternate sides with the PMSG injected on the left side of the mouse (injectors right) and hCG injected on the right side of the mouse (injectors left).
- 3.1.4 A new needle should be used for each mouse.

3.2 Superovulation Procedure

- 3.2.1 Collect the appropriate amount of hormones and leave to thaw on the bench for approximately 1 hour. In an emergency, thaw in a water bath at room temperature.
- 3.2.2 Once the hormones have thawed, invert the tubes 5-6 times to mix the solutions.
- 3.2.3 Ensure the PMS and hCG are clearly labelled and kept separate if being injected in the same session.
- 3.2.4 Prepare the cage changing station. A clean cage will be required in the cage changing station to place the mice into before injecting and returning to the home cage. A sharps bin and the rack(s) containing the hormones, needles and syringes should also be placed in the cage changing station.
- 3.2.5 Before injecting, check to ensure the correct hormone is being administered for those mice on the correct day.
- 3.2.6 Administer 0.1ml of 5.0iu PMSG by I.P injection on the appropriate day (Table 1). Discard needle and attach a new one for next mouse. Expel air from the syringe and needle before injecting.
- 3.2.7 48 hours later, administer 0.1ml of 5.0iu hCG by I.P. injection (Table 1). Discard needle and attach a new one for the next mouse. Expel air from the syringe and needle before injecting.

Table 1

Day of oocyte recovery	Day of PMSG	Day of hCG
Monday	Friday	Sunday
Tuesday	Saturday	Monday
Wednesday	Sunday	Tuesday
Thursday	Monday	Wednesday
Friday	N/A	N/A
Saturday	N/A	N/A
Sunday	N/A	N/A

- 3.2.8 After all the mice have been injected, check the welfare of the mice that were injected and clean down the cage changing station.
- 3.2.9 The mice will be for use on the appropriate day (Table 1).