Intravenous (i.v.) injection of Luciferin

Administering D-Luciferin i.v. can be done via tail vein or retro orbital.

1. The dose is the same 150 mg/kg. With IV you don't want to exceed 10% of the blood volume (or 200 µL).
2. Delivering as a bolus (as opposed to slow absorption) the signal will peak at 5 min post injection and disappear by 30 min. The peak is also several fold higher.
3. Recommended: 150 mg/kg in 10 mL/kg volume. This gives 15 mg/mL solution. Generally, a 1mL syringe and 26 gauge needles are used for injections.

For oral administration a 20 gauge needle is used with the 1mL syringe.

1. Dosing solution should be drawn up into the syringe so that no air bubbles are trapped inside the syringe.
2. Tap the syringe and move the plunger up and down to get rid of the bubbles.

Note: Syringes and needles should be changed between groups of animals to avoid contamination between the groups.

For IV dosing

1. Place the animals under a heating lamp for about 5 minutes to dilate the tail veins. Do not to put the lamp too close to the mice to avoid overheating (burning) the animals. The animals should never be left unattended when under the heating lamp.
2. Put the mouse in a restrainer and clean the tail with an alcohol swab. Inject the desired volume using a "slow push" of about 5 seconds to minimize acute toxic effects.