

# ENCITE Mission Statement on the implementation of the 3 R's

**A minimum number of animals will be used in all experiments to achieve statistically significant data. All animals will be treated humanely according to Institutional Animal Care and Use Committee guidelines. The three R's Principle will be implemented as follows:**

## Replace

Wherever possible, animal studies will be replaced by experiments in silico or in cell cultures in vitro. This principle has been employed extensively, e.g., in the sections dealing with cancer.

## Refine

Refinement will be applied in breeding, accommodation and care and in animal experiments, where methods will be applied eliminating or reducing to the minimum any possible pain, suffering, distress or lasting harm to the animals.

## Reduce

The replacement and refinement principles will both contribute to the overall goal of reducing the use of animal experiments. Animal studies will only be used at advanced stages of investigations when few, specific and highly relevant questions can be addressed by a limited number of experiments. In addition, minimum number of animals will be used in all experiments to achieve statistically significant data. Experimental methods reducing significantly the number of animals will be preferred, e.g. MR imaging will be used because it allows for repetitive and safe measure of status of animals during long time periods. Via the ENCITE Management Board, all animal experiments will be controlled to avoid potential overlaps and unnecessary duplication of animal experiments.

**Furthermore, the care and welfare of laboratory animals is ensured as:**

- a.** Animals are kept under standardized environmental conditions of temperature and humidity and a day/night cycle; animals are kept in appropriate cages. Any restrictions on the extent to which an animal can satisfy its physiological and ethological needs are kept to a minimum. Animals are provided an environment, food, water and care which are appropriate to their health and well-being.
- b.** Surgical procedures are always performed under local or general anaesthesia. Analgesia or another appropriate method is used to ensure that pain, suffering and distress are kept to a minimum.
- c.** At the end of experiments animals are killed using a painless, quick and appropriate method (as specified in the Directive).
- d.** Methods alternative to the use of animals, such as cell cultures, are employed where possible and applicable, and the assessments of biological actions of novel probes for imaging is always first carried out and validated in vitro, prior to animal studies.

Please click here to read the new **Directive on the protection of animals used for experimental and other scientific purposes**, signed by the European Parliament in September 2010.