

Challenge 39: Tat-Fit

Q. What would you consider to be a sufficient dose of tamoxifen? For example, what doses do you use in oral gavage or injection?

A. 25-200mg/kg for up to five days.

Q. Do different mouse strains require different doses of tamoxifen and does age affect the dose of tamoxifen required?

A. There are no comprehensive studies addressing this, but we know from experience and from our networks that different genetically altered lines of mice express CRE-ERT2 at different levels and therefore, are likely to require different doses. There is no current information on the effect of age or different genetic background on the dose required.

This is something we would like to study if we have a reliable and refined dosing method and would look to develop protocols with the successful applicant.

Q. Is the liquid used to dose tamoxifen *via* oral gavage, a suspension or a solution?

A. The protocol involves partially dissolving tamoxifen in ethanol and then mixing with oil. The preparation is very varied between laboratories, we can supply our current protocol to any applicant.

Q. Does the tasteful tamoxifen have to be delivered in food? Is addition to drinking water acceptable?

A. Absolutely- we are looking for any good solution (apologies for the pun!).

Q. In your experience, do mice readily eat tamoxifen dosed food?

A. No. This is evidenced by the frequently observed weight loss when tamoxifen is added to food.

Q. How do you measure that mice have received the desired dose of tamoxifen?

A. We measure the deletion of the targeted allele as a proxy of efficacy and sufficient dose, but we have ideas of more sophisticated methods which we are happy to discuss.

Q. Are you able to describe the volume of water that mice consume and how often they take water?

A. Mice consume between two to five 5mls per day typically and we have activity profiles from our Home Cage Monitoring which we can share with you to show you likely times of high consumption etc.

Q. I have expertise in certain areas, but not in all areas that are required to solve the Challenge. How can I find other expertise?

A. Speak to the NC3Rs office (crackitenquiries@nc3rs.org.uk) and we will do our best to help connect you with the expertise you are seeking. You can also make use of the [Challenge-specific LinkedIn pages](#) that have been established.

Q. Who should we email with questions?

A. General questions can be sent to the NC3Rs. Questions regarding a specific Challenge can be sent to the Sponsors, but enquiries should be sent to ALL Sponsor parties for a Challenge. If preferred, please email the NC3Rs to introduce you to the Sponsors at crackitenquiries@nc3rs.org.uk