Challenge 32: Transgene Track Surgery Q&As

Q. Should the technology developed focus on a specific CAR?

A. No. The Sponsors want the focus to be on developing the imaging technology that can then be applied/ adapted to specific CARs of interest. Use of a 'tool' CAR during the project would be appropriate.

Q. Do you have interest in the development of CAR-T cell tracking for solid tumours?

A. Definitely. The Sponsors have a strong interest in addressing the solid tumour aspect of CAR- T cell tracking but this is not a requirement to deliver the Challenge. However, applicants are encouraged to address this where possible.

Q. Would the development of a surrogate marker be of interest?

A. Yes this could be a strategy. Although you need to be able to show the function of the transduced cells so this would need to be considered if a surrogate marker approach was taken.

Q. Is there a requirement to develop novel Intellectual Property?

A. No. The aim is to provide a technology that fulfils the Challenge brief and is made widely available across the bioscience sector. This could be achieved through developing novel Intellectual Property or by adapting and combining existing technologies.

Q. In tracking the AAV, are you interested in the viral particles themselves as well as the transduced cells?

A. The primary interest is in the transduced cells. However, there is growing interest in the fate of viral particles, so the ability to track them would also be of interest.

Q. How specific are the requirements around the level of detection/ imaging sensitivity for the transduced cells?

A. The sensitivity should be as high as possible- the numbers provided in the brief represent the current state of the art.

Q. Would applications tracking CAR-T cells or AAVs in a disease model during the technology development be attractive, and if so, is there a preferred preclinical *in vivo* model?

A. We have no preference for a particular *in vivo* or specific disease model but are happy to discuss this with applicants. All animal studies should be designed in line with NC3Rs guidance which can be found in Section 1.4.1 in the Guidance for Participants.

Q. For biodistribution, are you interested in specific organs/ areas of the body?

A. The Sponsors are interested in whole body imaging rather than specific organs.

Q. Would cell culture data be sufficient to demonstrate proof-of-concept for Phase 1?

A. For Phase 1, the Sponsors require evidence that the approach is compatible *in vivo* and can be imaged.

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 particular Challenge. If preferred, please email the NC3Rs to introduce you to the Sponsors at crackitenquiries@nc3rs.org.uk