POLICY ON USE OF ANIMALS IN RESEARCH

1. Introduction

Cancer Research UK is committed to bringing forward the day when all cancers are cured. We do this by funding research into new ways to prevent, diagnose and treat cancer, and to optimise the effectiveness of existing cancer treatments.

We fund a broad range of research, including laboratory studies, clinical trials involving patients and population studies involving healthy volunteers. In certain areas, however, animal research currently remains essential if we are to save the lives of more cancer patients in the future. We fund research involving animals only where there are no feasible alternatives.

As an Association of Medical Research Charities (AMRC) member charity, and a funder of research involving animals, Cancer Research UK is strongly committed to ensuring the animal work we fund is as robust and reproducible as possible, and that the highest standards of animal welfare are met. We also recognise the importance of the principles of replacement, reduction and refinement of animals in research (the 3Rs), and actively support their implementation.

Further information on our approach to research involving animals is available on our website.

2. Statement of policy

Cancer Research UK is a member of the AMRC and endorses its statement on the use of animals in medical research. CRUK expects our funded researchers to adhere to the cross-funder guidance produced by the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) outlined in the ‘Responsibility for the use of animals in bioscience research’ and NC3Rs Guidelines: Primate Accommodation, Care and Use documents.

We will fund research involving animals only where we are satisfied that:

- The study design is scientifically robust and the animal model is appropriate and relevant to the research question being addressed;
- There are no feasible alternatives;
- All reasonable efforts have been made to address the principles of the 3Rs by:
  1. **Replacing** with non-animal models and tools where possible;
  2. **Reducing** the number of animals used to as few as possible, whilst still maintaining appropriately designed and analysed animal experiments that are robust and reproducible;
  3. **Refining** the experimental methods to minimise suffering and improve welfare standards, including exploiting the latest *in vivo* technologies;
- All animal work will be done in strict compliance with local ethics committee requirements (in the UK, the Animal Welfare Ethical Review Board), sector standards and applicable law including, in the UK, the Animals (Scientific Procedures) Act 1986, as amended. The highest standards of animal care are to be applied, in line with Home Office regulations and the NC3Rs guidance documents referred to above;
• Welfare standards are consistent with the principles of UK legislation and that the guidance documents set out above are applied and maintained, even where the funded research is to be performed outside the UK;

• The research has been successfully independently peer reviewed. Where a research proposal involves the use of specially protected species (SPS) or pigs, this also includes independent review by the NC3Rs (usually conducted in a timely manner in parallel with CRUK’s other peer review processes) and CRUK expects researchers to adequately respond to any concerns raised by NC3Rs as a condition of funding.

CRUK recognises that horses, cats, dogs and non-human primates (NHP) are designated as SPS under the Animals (Scientific Procedures) Act 1986, as amended, due to public concerns regarding their use in research and their additional welfare needs. CRUK will only support the use of these species in the limited circumstances of veterinary oncology studies or for toxicology and safety pharmacology studies where required for safety or regulatory purposes. Every possible measure will be taken to avoid the use of SPS.

3. How we implement our policy and support the 3Rs

CRUK is committed to ensuring that our policy on animal research is implemented effectively, particularly with respect to the 3Rs. This is important not only in helping to reduce animal use and improve welfare standards, but also due to the scientific benefits of ensuring appropriate models are used, and that experiments are scientifically robust and reproducible. We support the 3Rs through a variety of mechanisms:

• **Funding conditions** – it is a condition of funding that researchers working with animals act strictly in accordance with law and comply with cross-funder guidance documents published by the NC3Rs, in particular ‘Responsibility for the use of animals in bioscience research’ and the ARRIVE Guidelines. Should CRUK fund work involving NHP, this will also be on condition that the research complies with NC3Rs Guidelines: Primate Accommodation, Care and Use.

• **Grant application requirements** – applicants who request funding for research involving animals must provide detailed information to allow appropriate evaluation of the proposed research. This includes clear justification regarding the species, type and number of animals to be used and the experimental design and statistical analyses. Researchers are encouraged to use the NC3Rs experimental design resources, including the online Experimental Design Assistant and the ARRIVE guidelines, to improve the reproducibility and reporting of research involving animals.

• **Peer review** – all research involving animals is rigorously reviewed by appropriately qualified independent scientific experts. CRUK funding committee and panel members are specifically asked to consider in their review the extent to which the applicant has followed the 3Rs, including the principles set out in NC3Rs guidance. A discussion of these requirements is also included in induction to CRUK funding committees. Where a research proposal requests the use of SPS, additional review is also required from the NC3Rs peer review service and a senior CRUK panel including the CEO, either the Chief Scientist or Chief Clinician, and a Trustee (or their delegates). CRUK expects researchers to adequately respond to any concerns raised by NC3Rs as a condition of funding.

• **Funding for research that supports the 3Rs** – CRUK continues to fund cancer-relevant research initiatives and projects that may replace or reduce the need for animals in cancer research in future, including through contributions to biobanks, organoid projects and the development of new in vitro models. We also recognise that in some cases, addressing the principles of the 3Rs requires additional resources (such as equipment or additional statistical support) and we will...
fund these costs. We also strongly promote and encourage the archiving and sharing of resources such as genetically altered mouse strains as a means of both reducing and refining animal use.

4. Openness in animal research

As a signatory to the Concordat on Openness on Animal Research, we strive to be open and honest about how, why and when we use animals in research. Using animals in research is not a decision we take lightly; we believe this research is vital if we are to save the lives of more cancer patients in the future.

5. Document information

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<thead>
<tr>
<th>Policy Sponsor</th>
<th>Dr Iain Foulkes, Executive Director Research and Innovation</th>
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<tr>
<td>Policy Owner</td>
<td>Dr Nigel Blackburn (Director of Centre for Drug Development) and Dr David Scott (Director of Discovery Research &amp; Research Communications)</td>
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<tr>
<td>EB or Trustee approval required?</td>
<td>Yes – approved by EB on 12 June 2017 &amp; Council on 22 November 2017. Future amendments may be approved by SEB. EB and Trustee approval required for only for updates that involve a substantial change in policy position.</td>
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<td>November 2017</td>
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<td>Next review due</td>
<td>November 2019</td>
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<td>Superseded Documents</td>
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