Submission No 268

INQUIRY INTO USE OF PRIMATES AND OTHER ANIMALS IN MEDICAL RESEARCH IN NEW SOUTH WALES

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Use of primates and other animals in medical research in NSW

As a practicing veterinarian with further qualifications in species commonly utilised in a research setting, and with a strong interest in animal welfare, I would implore the Legislative Council to address the use of primates and other animals in medical research in NSW being mindful of their sentience, capacity for suffering, and questionable validity of the experimental information obtained in terms of human relevance. Furthermore, transparency and openness must be a focus to justify the social licence of ongoing animal use, in order to have public faith in the industry.

All scientific procedures, especially those which involve aversive experiences and impingement on animal welfare, should be analysed for societal cost and benefit prior to proceeding. This is especially true for the use of primates and other animals in the laboratory setting, where research is often contentious, theoretical, still require follow up with human-centric studies and may not have results which are translatable to a real world scenario. The marked differences in anatomy and physiology of animals utilised in medical testing and the human population must be considered. Even in terms of study populations, animals utilised for testing are invariably purpose-bred, housed consistently and of a specific genetic lineage, even bred to be free of specific pathogens at times. Contrary to this, humans have a wide variety of lifestyles and diverse genetic backgrounds. In addition to this, species differences between humans and test animals is even more vast. It must be recognised that even if therapeutics which undergo animal testing have a positive outcome, this is not a guarantee of a successful human drug. The risk of the opposite outcome must also be recognised; medications which do not proceed to human clinical trials based solely on lack of efficacy in animal studies could be ideal medications, and their development not pursued due to assessing them in a species with different physiology. This could potentially jeopardise human patients by denying them access to effective medications based on incorrect assumptions. While the potential benefits to humans of trialling medications in animals prior to advancing to clinical trials is relevant in some cases, the issues and risks associated with the process, not just to the animals who have their welfare jeopardised by testing, but also to hypothetical and actual human patients for the reasons discussed above, should be acknowledged.

The ‘Three R’s’ of Replacement, Reduction and Refinement are required to be paramount to all involved in the use of animals in medical research. Upholding these principles, combined with appropriate transparency, can facilitate animal use in medical testing facing public scrutiny with confidence. An industry which is proud of the level of ethics, necessity, and societal value it holds has nothing to hide. The author endorses the current development of an Australian Openness Agreement on Animal Research. Transparency as to the nature, necessity and numbers of animals used in testing being performed is particularly pertinent where public funds are utilised. Government should consider funding additional grant opportunities to encourage and promote the use of non-animal based and human-centric research.

The continued global push to recognise the sentience of animals – their intrinsic value and capacity to experience subjective emotional states – should highlight a changing international perception shifting animals from being considered as commodities or property, through to being individuals. As such, compromised welfare, and often sacrifice, of one individual to the benefit of another, regardless of species, must be given due consideration as to whether the positives to be gained from the research to the population as a whole is justified.

While the care of animals bred for research is governed by Codes of Practice such that basic welfare needs are met, it is difficult to argue that it is possible for the majority to live an enriched life with the full range of positive experiences that could be afforded, especially where this may influence experimental results. As such, the impact not only of the research directly on the animal, but the less tangible loss of welfare being housed in the experimental setting, utilised for breeding, etc. must be factored into welfare deliberations.

While it is recognised that the ongoing development of an Australian Openness Agreement is a major positive step, in general, transparency regarding animal use in medical research in Australia is currently poor. The general public has very limited access to information regarding the nature of animal experimentation performed within Australia, including no central national database as to where to find this information. Even those who are savvy in interpretation of the scientific literature will find the specifics of animal care and welfare poorly defined in

published studies. In order for animal experimentation and use in medical research to be justifiable to the public, accountability and basic transparency is paramount.

With regard to the use of primates specifically, this work is seen as further guarded given the increased welfare concerns and potential for suffering of highly intelligent species, with complex social needs from which they are deprived in an experimental setting, and a wide belief that given their cognitive similarities to humans, their welfare will be further jeopardised compared to non-primates. The public concern regarding the use of primates in medical research was highlighted following the escape of laboratory baboons in Sydney in 2020. The associated public outcry also drew attention to the fact that the general public was unaware primate experimentation was occurring in Australia.

Conversely, the similarity of primate species to humans makes them more representative of the anticipated effects of procedures and pharmaceuticals on humans when compared to studies in non-primate species. As such, the perceived value of their use in medical research is acknowledged.

As previously, transparency and accountability to the public is non-negotiably required for any sort of primate experimentation to maintain a social licence. That being said, given the similarities to humans and social needs which will be unable to be met in an experimental setting, utilisation of these species for human medical research is unjustifiable. It is the opinion of the author that primate experimentation should be phased out. However, while acknowledging the complexities of primates, all other species used in research should not be discounted, and the transition away from animal use in medical research should ultimately also be pursued. Progressive technologies such as ‘organs on a chip’ and other technological advances mean a future where animal testing is seen as antiquated, and much more likely to yield fallacious results compared to newer, human orientated research. Funding decisions should be reflective of this, and ongoing use of animals should be fully transparent and open to allow for public scrutiny, to instil confidence that any animal use in medical testing is justified and animal welfare is paramount at all stages in the process. A centralised database where the public can find information regarding animal testing in Australia should be established.

Thank you for the opportunity to contribute to this important Inquiry.

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