

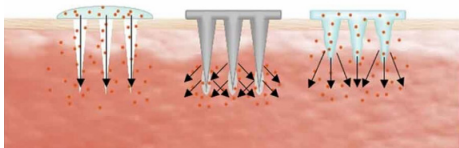
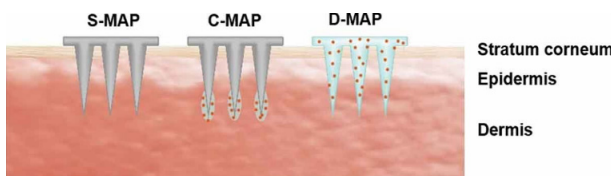
Vaccine Safety Testing

OUR TOXICOLOGY EXPERTS ARE READY TO SUPPORT YOUR VACCINE TESTING NEEDS

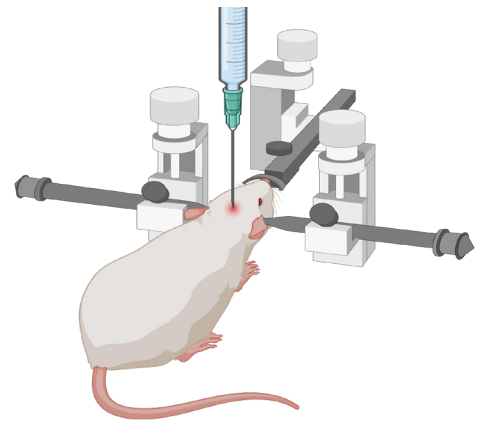
At Southern Research, we conduct rigorous vaccine safety studies to support your pre- IND and NDA regulatory submissions. SR has conducted many pivotal biodistribution, immunogenicity, and GLP safety studies for SARS-CoV-2, yellow fever, and many other vaccines. We offer novel delivery methods, including direct injection into the brain for neurovirulence testing and local delivery of oncolytic viruses.

We are seeing increasing demand for vectored vaccines that stimulate the immune system against novel antigens for endemic diseases in Africa. We have also tested novel vaccine delivery technologies including microneedle array patches to overcome barriers to vaccine use. All this work is conducted in our biosafety level 2 and 3 facilities, so we can test live viral vaccines and mRNA based immunology products.

SR also offers embryofetal development testing of novel vaccines to allow for safety testing in pregnant animals. This safety data allows for clinical enrollment of women of childbearing potential with less stringent pregnancy control measures.



Application of solid, coated, or dissolving microneedle array patches to improve immune system activation.



Stereotaxic Injections into brain for neurovirulence and oncolytic viruses

ANIMAL MODELS

- o Golden Syrian Hamsters
- o Rodents and Ferrets
- o New Zealand White Rabbits
- o Non-Human Primates

IN VIVO SERVICES

- o Biodistribution and Immunogenicity
- o General Toxicology After Repeated Dosing
- o Neurovirulence Testing in Mice or NHPs
- o Evaluation of Effects on Embryofetal Development

IN VITRO SERVICES

- o RT-qPCR
- o TCID50
- o Analysis of Cytokines (ELISA, Luminex®)
- o Histological & Pathology Evaluation
- o ELISA for Immunogenicity and Anti-drug Antibodies
- o Histopathology & Immunohistochemistry