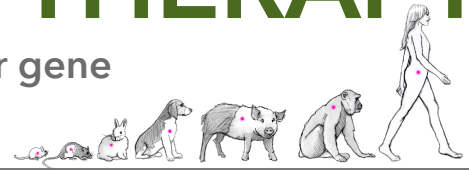


GENE AND CELL THERAPY

Monitored longitudinally by nuclear reporter gene imaging in all creatures great and small



Why use NIS imaging?

Are your gene therapy vectors capable of highly efficient gene delivery and organ specific gene expression? Is the delivery method scalable from mice to larger animals and humans? Can you convincingly prove that?

If not, then you need to conduct some longitudinal reporter gene imaging studies. Just clone a suitable reporter gene into the vector and determine the biodistribution and durability of gene expression in vector treated animals by performing radio tracer imaging studies.

NIS imaging reveals why a Phase 2 clinical trial could have failed

A Phase 2b CUPID 2 trial of intracoronary administration of AAV-SERCA2a failed to meet trial endpoints.

Using NIS reporter gene imaging in canines, Mouley et al. (2015, Molecular Therapy) reported that direct epicardial or endocardial injection of AAV-NIS vector resulted in strong cardiac expression, whereas expression after intracoronary infusion or cardiac recirculation was undetectable.

This seminal paper elegantly illustrates the importance of adopting reporter gene imaging for early R&D of gene transfer vectors to achieve targeted and durable gene expression.

