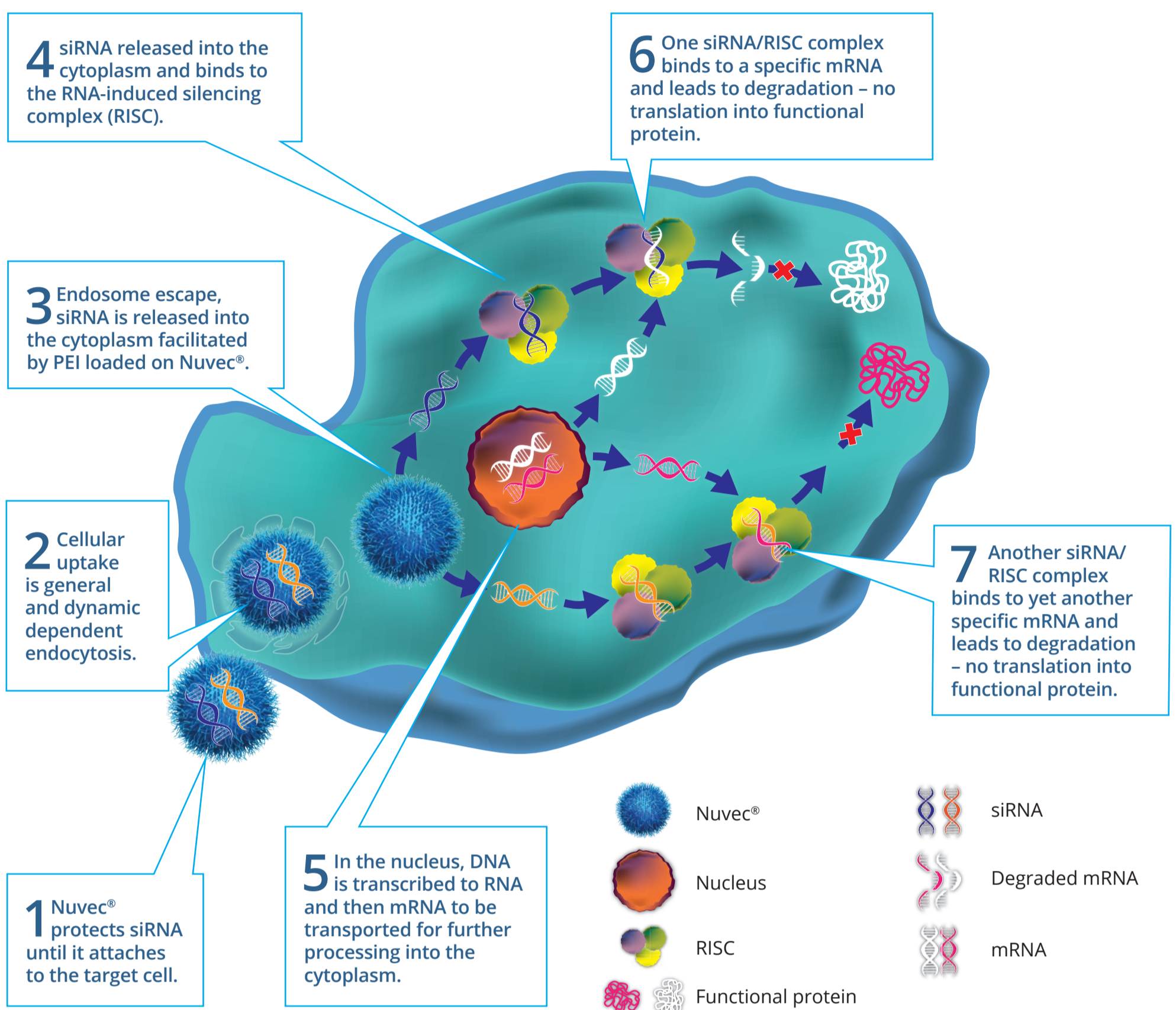


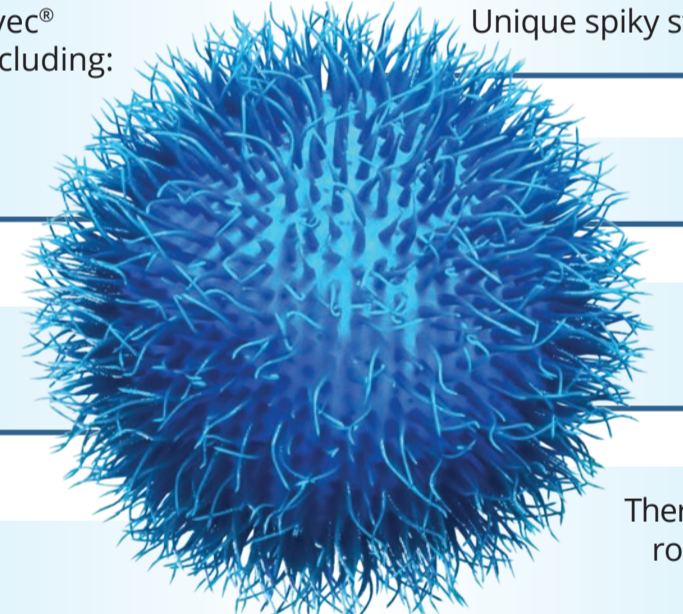
N4 Pharma is a pre-clinical stage specialist pharmaceutical company developing a unique technology, Nuvec®, a novel silica nanoparticle designed to deliver siRNA as therapeutics. Nuvec® is available to license to partners for areas such as cancer treatments and gene therapy. Specifically, Nuvec® is suited for the delivery of more than one siRNA into the same cell.

HOW DOES NUVEC® WORK?

- Nuvec® has a unique irregular structure that binds single or multiple siRNA to the filamentous structure of the particle and after endocytosis, delivers the load into the cell.
- There, after endosomal escape, the particle releases the siRNA into the cytoplasm to generate the desired response.
- Nuvec® is designed to overcome some of the drawbacks of existing delivery systems, which can negatively impact treatment effectiveness and safety profile.



WHAT IS DIFFERENT ABOUT NUVEC®?



- Compared to other delivery systems, Nuvec® has significant operational advantages including: LNPs, electroporation, viral vectors, easy manufacture and chemical modification to allow targeting.
- Ability to load multiple payloads (both large and small).
- Ability to adapt to add ligands to target specific cells.
- Unique spiky structure to bind and deliver siRNA to cells.
- Simple process to load multiple siRNAs.
- Protects siRNA from enzymatic digestion and pH exposure.
- Thermostability - Nuvec® can be dried, stored at room temperature, and reconstituted without degradation of RNA.

Silencing protein expression with siRNA loaded onto Nuvec®

- siRNA are increasingly in development as therapeutics, particularly in oncology.
- At present, delivery of multiple siRNAs would require multiple carriers, decreasing the probability of transfecting the same cell with more than one siRNA, thus hitting multiple aspects of a cellular pathway is less likely.
- Delivery of two siRNA acting on two complementary pathways in the same cell has the potential to provide an improved clinical response with fewer adverse events compared to conventional chemotherapy.
- We recently completed initial testing in vitro on loaded Nuvec® with two generic siRNA probes:
 - GFP (Green fluorescent protein) + EHMT-2 (Euchromatic Histone Lysine Methyltransferase 2) loaded at the same time.
- An in vitro dose response was seen that was comparable to lipofectamine transfection.
- In addition, loading Nuvec® with both siRNA together also demonstrated the ability to still silence each gene in the same cell.
- A unique platform for developing novel combination therapies for cancer and vaccine treatments.



“The ability of Nuvec® to load multiple siRNA onto the same particle and deliver them into the same cell represents a significant advancement in combination target therapies for use in cancer treatments and vaccines.”

Nigel Theobald, CEO, N4 Pharma

Nuvec is also available to license to partners for oligonucleotide vaccine development.

Get in touch to explore collaboration opportunities. Visit: www.n4pharma.com for more information.