Ultrasound-Guided Delivery of Gene Editing Proteins

NEXT STEPS
INVESTMENT
LICENSING
RESEARCH

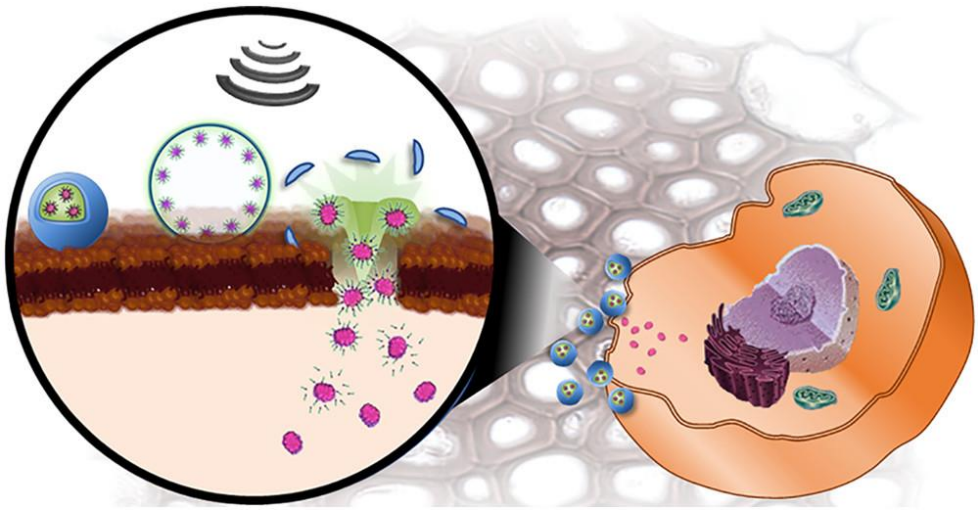

Figure 1. Schematic representation of delivery of gene editing proteins into target cell by ultrasound activation.

Technology Summary

Researchers have developed a fluorous, peptide-based nanotechnology that allows for spatial control over delivery of gene-editing proteins in tissues. The technology relies on a mechanical method of transfection, eliminating drawbacks from chemical delivery methods and allowing for targeted deep penetration of gene editing tools into 3D tissues.

Competitive Advantage

- Efficient targeted delivery
- Real time monitoring by ultrasound
- Deeper tissue penetration
- Reduced toxicity

Application & Market Utility

This technology has broad application in the medical field for the delivery of protein therapeutics into targeted tissues. Treatment of cancers, autoimmune disorders, and diabetes could benefit from the direct delivery of treatments with reduced off-target effects. The direct delivery of protein therapeutics and gene editing tools also allows for improved stability during transfection, providing clear value to the field.

Next Steps

Researchers are currently looking to license this technology for commercial use.

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Keywords

- Drug Delivery
- Gene Editing
- Nano-emulsions

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