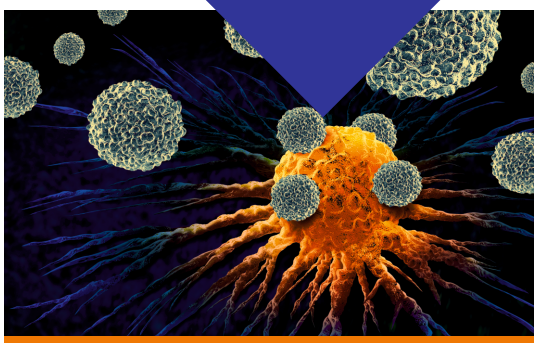
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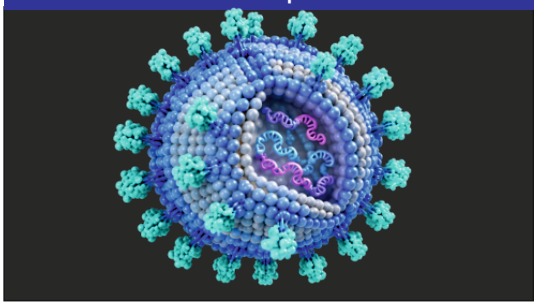
Personalized mRNA Cancer Vaccine Platform Based on TFR123

A TFR123-based personalized mRNA cancer vaccine platform is being developed to overcome one of the key limitations of current cancer vaccines: inefficient presentation of tumor-specific neoantigens to the immune system.



Tumor-specific immune response targeting malignant cells

The 3D modell of the TFR123 platform



The Challenge

Despite significant advances in cancer immunotherapy, effective personalized cancer vaccines remain an unmet medical need. Current mRNA-based cancer vaccines often suffer from suboptimal antigen presentation, leading to insufficient immune responses against short, patient-specific tumor neoantigens. As a result, no personalized cancer vaccine has yet achieved widespread clinical adoption as a standalone therapy.

The Solution

The TFR123 platform is a novel immunization technology that combines the manufacturing advantages of mRNA-LNP vaccines with the superior antigen presentation properties of peptide nanoparticle systems. The platform enables in vivo assembly of highly immunogenic antigen structures on cell membranes, improving the presentation of tumor-specific neoantigens and potentially generating stronger, more durable anti-tumor immune responses. The technology is designed for personalized cancer

TRL 4 TECHNOLOGY READINESS

$12+B global cancer vaccine market

PATENT PENDING

TFR123 combines platform scalability with patent-protected innovation, creating defensible value across multiple high-growth therapeutic markets.

INVSTMENT HOOK

A next-generation mRNA cancer vaccine platform that bridges the gap between mRNA and peptide vaccine technologies, enabling more effective personalized immunotherapy against solid tumors.

WHAT ARE WE LOOKING FOR?

Seeking investors and strategic partners to bring a patented next-generation personalized cancer vaccine platform to clinical development and global markets.

KEY VALUE PROPOSITION

Patented TFR123 platform technology
Personalized neoantigen cancer vaccines
Enhanced antigen presentation
Combines strengths of mRNA and peptide vaccines
Potentially stronger anti-tumor immunity
Applicable to multiple cancer types
AI-supported antigen selection
Scalable mRNA-LNP manufacturing
Strong IP position and licensing potential
Designed for precision oncology

Tradition & Innovation

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