

RNA Vaccine-Nanoparticle Technology for Wart Treatment

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Executive Statement:

A groundbreaking medical invention that introduces a personalized RNA vaccine-nanoparticle approach to efficiently target and eliminate warts caused by papillomavirus.

Technology Overview:

This novel technology utilizes RNA vaccine-nanoparticle technology to create personalized vaccines against warts, which are infections caused by various strains of papillomavirus. By collecting a small sample of wart tissue for DNA sequencing, the technology identifies the specific virus strain and synthesizes mRNA encapsulated within lipid nanoparticles. This vaccine then stimulates the body's T cell response to specifically target and eradicate the virus, potentially requiring booster doses for complete effectiveness.

Key Advantages:

- Targets and eliminates specific virus strains causing warts, leveraging the body's immune system.
- Reduces the likelihood of wart recurrence compared to traditional methods.
- Promises fewer side effects, such as autoimmunity and excessive inflammation.
- Potential for cost-effective and practical application through an affordable kit for PCR and sequencing.

Problems Solved:

- High recurrence rates and side effects associated with traditional wart treatments.
- The challenge of effectively targeting specific strains of the papillomavirus.
- Limited treatment options that leverage the body's immune system for more natural, effective eradication of warts.

Market Applications:

- Human medical treatments for various strains of papillomavirus infections.
- Animal health applications, including treating papillomatosis in cows, sarcoids in horses, and canine papillomas.

- Development of affordable, at-home kits for DNA sequencing and personalized vaccine creation.