

3M Solid Microstructured Transdermal System

Patient-friendly microneedle technology designed to increase your commercial success.

Solid microneedle system (sMTS) from 3M offers potential for increased immunogenicity, dose sparing, cold chain elimination and the increased patient convenience needed in the growing global vaccine market.

Trusted expertise

- Proprietary 3M microreplication technology for solid microneedle array molding and production
- Expertise in meeting delivery needs of challenging drug formulations
- Fast-feasibility, preclinical capability and expertise for early-phase development
- Experience and capability to support scale up through commercialization
- Trusted drug delivery partner from development through manufacturing
- Phase I & II clinical studies completed with 272 patients, 45,000 doses self-administered via 3M sMTS

Microneedle solution for vaccine delivery

- Virtually painless* coated microneedle delivery system that offers an excellent alternative to a syringe
- Fast, bolus delivery of the vaccine to antigen presenting cells (up to 300 mcg) in the skin
- Enhanced immune response to a variety of vaccines due to delivery to the epidermis/dermis
- Proven formulation development expertise to design API-coated solid microneedle patches
- 1 cm² array molded out of durable medical grade polymer attached to an adhesive patch removable upon administration
- Available needle length - 250, 500 and 700 µm

Scalable manufacturing capabilities

- Manufacturing capabilities to support preclinical and clinical studies
- In-house molding expertise and technology
- GMP coating capabilities
- Semi-automated manufacturing process
- Array manufacturing and aseptic coating capacity up to 10,000 per day

*data on file



Learn more at:
go.3M.com/sMTS

EXPERTS AT COMMERCIALIZING INNOVATION



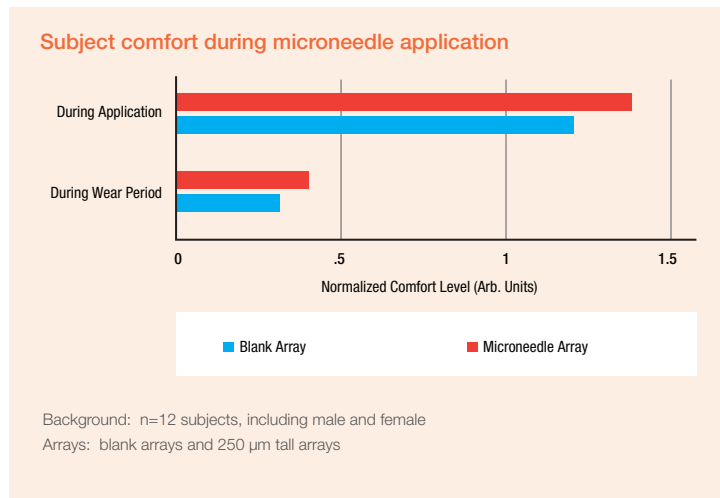
Gain a competitive edge when you partner with the expert in microneedle technology

For over 50 years, 3M has created innovative solutions for the pharmaceutical industry. Our product development and manufacturing specialists will work with you from preclinical studies through commercialization.

Say no to needle phobia

An estimated 10% of people requiring injectable treatments suffer from needle phobia. Patients may find vaccine delivery via tiny solid microneedles less intimidating than traditional injections.

By reducing anxiety associated with vaccinations, the use of sMTS may help improve patient compliance.



Get started

Contact us to learn more about 3M solid microneedle technology and its benefits for the delivery of vaccines.



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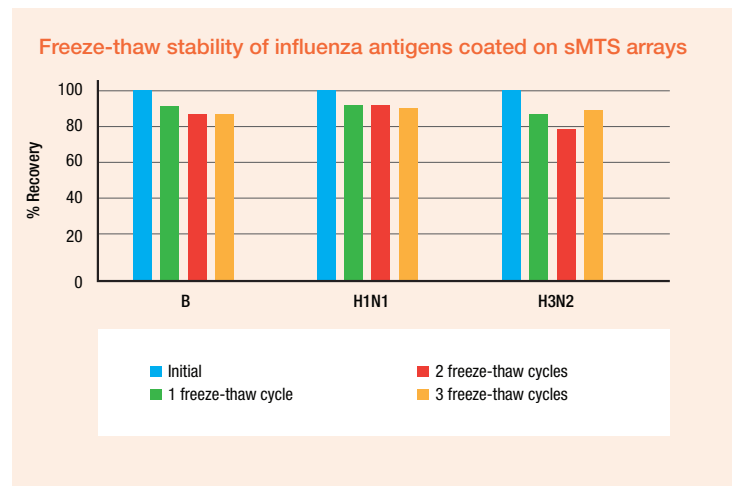
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Cut down on cold chain

To maintain potency of vaccines, a stable cold chain is required.

Effectiveness of immunization programs may be improved with 3M solid microneedle technology through its potential for improved stability of vaccines.



Increase immunogenicity

Delivery of vaccines via 3M solid microneedle system has demonstrated potential for dose-sparing and reduction of doses.

