

3M Collaborates with AVANT on Vaccine Adjuvants

3M Drug Delivery Systems announces the signing of a non-exclusive license agreement with Celldex Therapeutics, Inc. (a wholly-owned subsidiary of AVANT Immunotherapeutics). Under the agreement, 3M will provide its patented toll-like receptor (TLR) agonist compounds to Celldex for an undisclosed licensing fee, milestones and royalties.

3M's patented TLR immune response modifier compounds, which may be useful as vaccine adjuvants, will be used by Celldex to develop new vaccine products. Once commercialized, Celldex will pay 3M royalty usage fees for IRM compounds.

"The use of TLR agonists topically as well as conjugated to Celldex's vaccines show the broad applicability of our TLR adjuvant platform for use in combination with Celldex's proprietary APC-targeting technology," said Dr. Mark Tomai, PhD, Vaccine Business Development, 3M Drug Delivery Systems.

3M's TLR compounds, also called TLR7 and TLR8 agonists, are small organically synthesized molecules that offer flexibility in formulating and route of delivery, and ease in manufacturing, unlike most other TLR agonists, which are much larger and not as easy to manufacture.

"This license agreement provides a great opportunity to combine synergistic technologies designed to treat various cancers and infectious diseases." said Tibor Keler, Ph.D., Chief Scientific Officer of Celldex Therapeutics. "We are very pleased to enter into this relationship with 3M and look forward to pursuing our clinical studies using 3M's unique TLR agonists."

Dr. Steven Wick, Technical Director, 3M Drug Delivery Systems adds, "Our toll-like receptor agonist platform is a major part of our vaccine offering that also includes our Microstructured Transdermal System* for needle-free delivery of vaccines. This technology coupled with our TLR compounds can provide both new vaccine adjuvant and delivery technology to further enhance vaccine regimens."

About 3M Drug Delivery Systems Immune Response Modifiers

3M Drug Delivery Systems has a portfolio of patent protected toll-like receptor TLR7 and TLR8 agonists that have shown promise as vaccine adjuvants. There are a variety of assets in the portfolio that can be used topically, admixed or in conjugatable form. The lead candidate, resiquimod (TLR7/8 agonist) has shown promising results in a number of animal models and has an extensive toxicology and clinical data package to support further development as a vaccine adjuvant. In addition, 3M offers other TLR7 and TLR8 agonists, some of which can be attached to various proteins that enhances vaccine efficacy in a number of models. As small molecules, 3M's TLR7 and TLR8 agonists offer unique advantages over other TLR agonists with regards to delivery and manufacturing. 3M is actively seeking partners to license these assets on a non-exclusive basis. For more information, or to contact Dr. Tomai, go to www.3m.com/dds.

In addition, 3M Drug Delivery Systems has a variety of immune response modifier compounds that may be useful in oncology and dermatology.

About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. 3M's core strength is applying its more than 40 distinct technology platforms – often in combination – to a wide array of customer needs. With \$24 billion in sales, 3M employs 75,000 people

worldwide and has operations in more than 60 countries.

About Celldex

Celldex is an innovative biotechnology company focused on the discovery, development and commercialization of targeted immunotherapies. Our core focus includes the use of tumor-specific targets and human monoclonal antibodies as precision delivered therapeutic agents for the treatment of cancer, infectious diseases and immune system disorders through our novel 'active immunization' approach.

**3M Microstructured Transdermal System (MTS) is a state-of-the-art solid microneedle system for transcutaneous or intra-dermal drug delivery. MTS bypasses the barrier properties of the stratum corneum and provides a means to deliver a wide variety of molecules that ordinarily would not penetrate the skin, including vaccines. MTS enhances the efficacy of vaccines by targeting the antigen presenting cells within the skin, thereby improving delivery efficiency and reducing dose requirements. MTS is a painless, easy-to-use system with the potential to greatly improve the delivery of vaccines.*

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