

New technology to enhance efficacy of DNA vaccination

Supratek Pharma Inc., Canada, has announced the results of pre-clinical studies using SP1017-Vac, a novel agent that enhances the efficiency of DNA vaccines. SP1017-Vac is one of Supratek's novel Biotransport™ carriers, which enhances the efficiency of DNA vaccination. DNA vaccines are the third generation in vaccine technology, and work by delivering a gene to stimulate the immune system of the patient. A major challenge for this technology has been to increase the level of expression of the immune-stimulating gene.

SP1017-Vac increases the immune response by about 10-fold as compared to naked DNA, accelerates the immune response development, eliminates the need for boost immunization and significantly prolongs the duration of the immune response. Studies suggest that SP1017-Vac represents a unique combination of non-viral gene delivery vehicles that increase gene expression and act as a biological response modifier that recruits dendritic cells. This recruitment appears to be a major event during cellular immune response development. SP1017-Vac is the only system that is capable of efficiently attracting dendritic cells *in vivo*. These advances in increasing the safety and efficacy of DNA vaccination would help create a new portfolio of gene-based medicines that provide safe and efficient products.

Supratek's Biotransport™ carrier technology uniquely combines drug delivery and biological response modification, providing drugs with novel mechanisms of action and improved biological activity. The Biotransport™ carrier systems are based on highly flexible and manageable chemistries, and are applicable to a wide variety of both conventional and biotechnology drugs. *Contact: Mr. Oleg Romar, Supratek Pharma Inc., Suite 700, 275 St. Jacques, Montreal, Quebec H2Y 1M9, Canada. Tel: +1 (514) 8496 094; Fax: +1 (514) 2821 338; Website: <http://www.supra tek.com>.*