Technology Licensing Opportunity: Mastitis vaccine

Non-Confidential Summary

Background
VIDO-InterVac has developed a subunit recombinant chimeric vaccine using antigens from *Streptococcus uberis*, *S. agalactiae* and *S. dysgalactiae*. This vaccine has demonstrated immunogenicity and efficacy in vivo.

Development Stage:
Immunogenicity and efficacy data available. The vaccine against *S. uberis* includes two recombinant proteins, a chimeric protein composed of the *S. uberis* plasmin-binding GapC protein as the backbone and non-conserved regions of the *S. agalactiae* and *S. dysgalactiae* GapC proteins. The adjuvant was a proprietary adjuvant - VSA3. The second recombinant antigen is a chimeric protein containing the *S. uberis* CAMP factor as the backbone and non-conserved regions of the *S. agalactiae* CAMP protein. The results show that the milk somatic cell counts (SCC) were significantly decreased in animals challenged with *S. uberis*. The immunogenicity of the vaccine may be enhanced by using alternate adjuvants.

Intellectual Property
The Intellectual property includes issued U.S. patents (as follows) plus additional patent applications.

- 7,749,516 Immunization of dairy cattle with GapC protein against Streptococcus infection
- 7,700,117 Camp factor of *Streptococcus uberis*
- 7,273,930 Immunization of dairy cattle with GapC protein against Streptococcus infection
- 7,258,992 Immunization of dairy cattle with chimeric GapC protein against Streptococcus infection

![Figure 1: SCC from milking cows vaccinated with recombinant chimeric proteins. Challenge *S. uberis*. * P<0.05](image-url)
• 6,936,259 CAMP factor of *Streptococcus uberis*
• 6,908,619 CAMP factor of *Streptococcus uberis*
• 6,887,686 Cloning and expression of *Haemophilus somnus* transferrin-binding proteins
• 6,875,853 Immunization of dairy cattle with chimeric GapC protein against *Streptococcus* infection
• 6,866,855 Immunization of dairy cattle with GapC protein against *Streptococcus* infection
• 6,833,134 Immunization of dairy cattle with GapC protein against *Streptococcus* infection
• 6,740,322 Immunization of dairy cattle with Mig protein
• 6,660,270 Immunization of dairy cattle with chimeric GapC protein against *Streptococcus* infection
• 5,863,543 Camp factor of *Streptococcus uberis*

**Publications**


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