

BIMEDA® BIOLOGICALS SWINE OFFERING



BIMEDA BIOLOGICALS – OVERVIEW



In December of 2019, Bimeda Inc. purchased a vaccine production, research and diagnostic company named Texas Vet Lab®, Inc. (TVL) in San Angelo, Texas.

TVL has been producing USDA-approved cattle products, as well as custom-made autogenous vaccines, since 1977.

In 2020, the TVL business was formally renamed Bimeda Biologicals.

Throughout 2021, the company has made significant investments into the business in order to enter the swine autogenous market.

Investments made in order to enter the swine autogenous market:



Expanded the San Angelo, TX production facility



Hired experienced, swine-focused R&D team that are experts in strain selection and vaccine formulation



Opened state-of-the-art R&D Lab in St. Paul, Minnesota

CAPABILITIES & OFFERINGS

Research & Diagnostics:

Our experienced swine R&D team – located in St. Paul, MN – is able to assist customers with:

- Pathogen characterization and disease diagnosis by Next Generation Sequencing (NGS)
- Strain selection and potential vaccine formulation recommendations based on immune targets and challenge study databases
- Custom adjuvant formulation to meet needs based on disease pressure and target pathogen(s) in the field
- Unique, customer-specific and region-specific database for outbreak analysis and vaccine performance
- Database management + bioinformatics
- Knowledge, experience, customer support and troubleshooting

Adjuvant Offerings Suitable For:

- Killed viral and bacterial antigens
- Mycoplasma and viral antigen combinations.

Unique Adjuvant Portfolio:

Bimeda gained USDA approval for four adjuvants specifically developed for swine autogenous vaccines; each of which have a 21-day slaughter withdrawal. These adjuvants are prepared with proprietary oil-in-water or a polymer combination to form stable emulsions without animal origin ingredients.

These Adjuvants Enable Bimeda Biologicals To:

- Provide a flexible adjuvant combination format
- Have a very low adjuvant inclusion rate in vaccines
- Formulate vaccines with appropriate antigenic mass
- Develop autogenous vaccines that:
 - Are easily syringeable
 - Cause no anaphylaxis
 - Increase target antigenic mass to meet disease challenge
 - Contain multiple antigens without interference
 - Are stable and can withstand temperature fluctuations

Autogenous Bacterin Production – Focus Pathogens:

- *Clostridium perfringens*
- *Clostridioides difficile*
- *Escherichia coli*
- *Mycoplasma hyorhinis*
- *M. hyopneumoniae*
- *M. hyosynoviae*
- *Glaesserella parasuis*
- *Streptococcus suis*

