

Your access to autogenous vaccines just got *easier.*



Streamlined
availability and
development of
autogenous
vaccines.





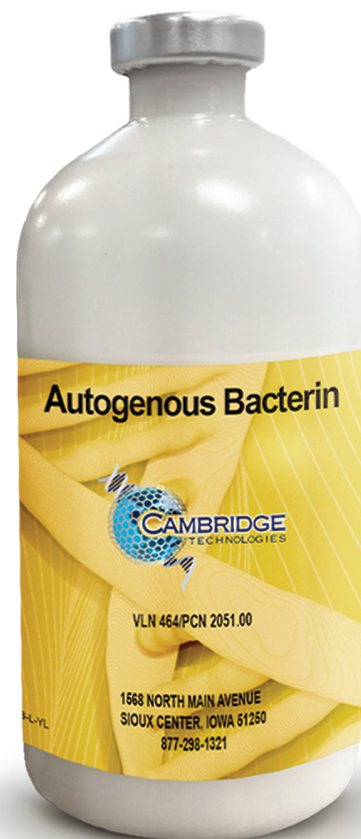
Merck Animal Health and Cambridge Technologies ease development of AUTOGEN

+ TARGETED, SPEEDY, FLEXIBLE

- Autogenous vaccines offer veterinarians a targeted response to disease challenges, customized to individual needs in a timely manner.
- Unlike commercial vaccines and bacterins which can take years to license, autogenous biologicals can be formulated, manufactured, tested, and released in a matter of months, if not weeks. This speedy turnaround enables veterinarians to manage the most current disease threats.
- Autogenous biologicals allow great flexibility in formulation. Just as disease strains and threats evolve and change over time, autogenous products can easily be reformulated to continue mirroring current field challenges.

+ EASING THE PROCESS

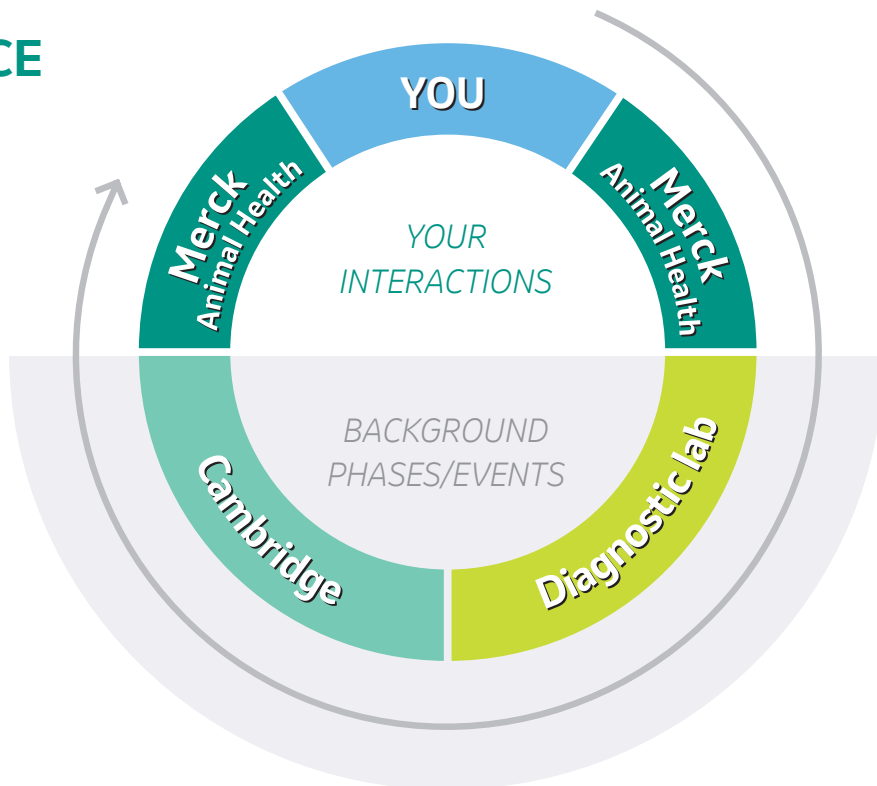
- Poultry veterinarians often find the process required to access autogenous biologicals cumbersome and time-consuming.
- To help reduce obstacles, Merck Animal Health and Cambridge Technologies have partnered to market innovative autogenous poultry vaccines.
 - Cambridge (based in Worthington, MN) is a major independent producer of fully customizable autogenous vaccines.
 - Cambridge vaccines are formulated and produced at its USDA-licensed, 37,000-square-foot manufacturing facility featuring state-of-the-art viral production and fermentation suites.
 - Cambridge vaccines feature a unique oil-in-water adjuvant which optimizes immune system response and minimizes injection site reactions.
- This new alliance links the industry-leading customer-service expertise of Merck Animal Health field product support and marketing teams with the diagnostic, formulation, and regulatory expertise of Cambridge scientists to provide flock-specific biologics with customized options.



Cambridge Technologies have PARTNERED to CUSTOMIZED BIOLOGICS specific for your flocks.

+ TURN-KEY CONVENIENCE

- You will interact with your Merck Animal Health field support team.
- *Everything else involved in the process will be streamlined and turn-key, occurring with little further effort on your part.*
- In just a few weeks, your customized autogenous vaccines will be formulated and delivered for your use.



+ SEQUENCE OF EVENTS

YOU (and your Merck Animal Health Field Support Team)

- Place an order by completing the autogenous order form and send to Merck Animal Health

MERCK ANIMAL HEALTH FIELD SUPPORT TEAM

- Coordinate the delivery of antigens (or samples) to Cambridge.
- Provide Cambridge's US samples transport permit and material transfer agreement (MTA) to university diagnostic lab.

UNIVERSITY DIAGNOSTIC LAB: *Preparation of isolates for Cambridge*

- Request authorization from customer veterinarian to transfer isolates/samples.
- Send the isolates to Cambridge.

CAMBRIDGE TECHNOLOGIES: *Manufacture autogenous vaccine*

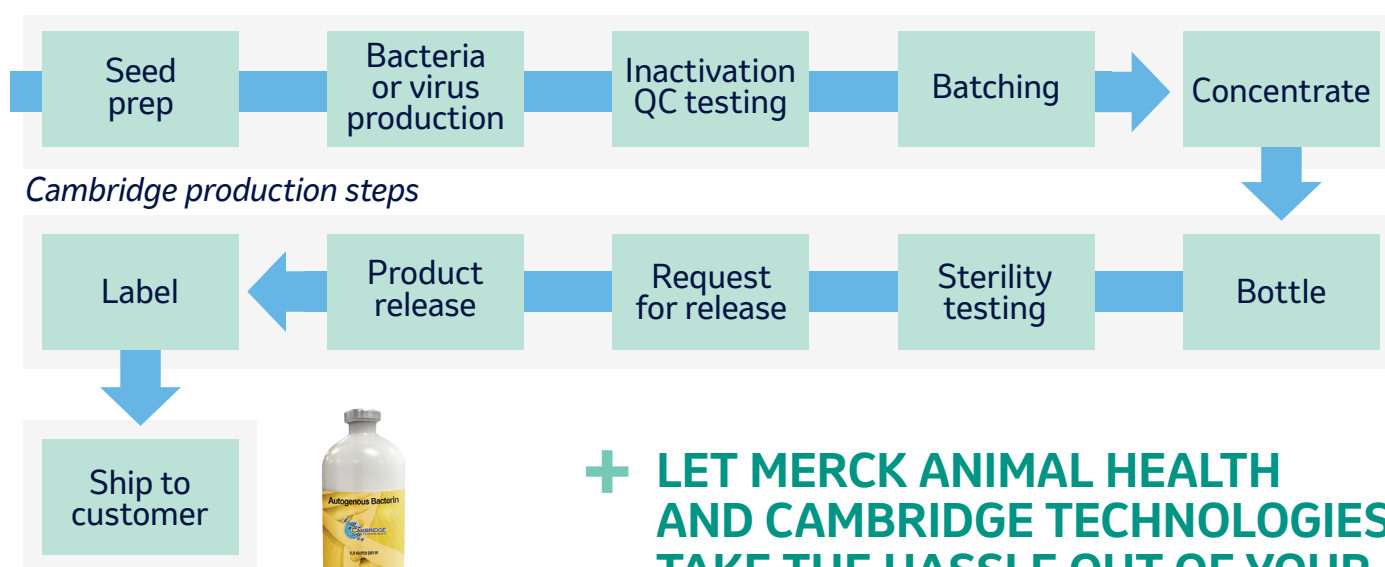
- Reception, confirmation, and selection of isolates, review of antigens.
- Confirmation of manufacturing process and time for release to customer.
- Submit invoice to customer and provide Merck Animal Health copy of invoice.
- **DELIVER VACCINES TO YOUR LOCATIONS.**

MERCK ANIMAL HEALTH FIELD SUPPORT TEAM

- Evaluate vaccine administration and serological responses.

+ AUTOGENOUS BIOLOGIC MANUFACTURING AND QUALITY

- An autogenous biologic goes through the same safety and purity testing as a commercial vaccine.
- The Cambridge Technologies team of experts use science, experience, and research to create your quality-assured flock-specific biologics, and handle all issues with regulatory authorities.
- A customized autogenous bacterin or vaccine can typically be produced by Cambridge in a matter of *months or even weeks*.



+ LET MERCK ANIMAL HEALTH AND CAMBRIDGE TECHNOLOGIES TAKE THE HASSLE OUT OF YOUR NEXT BATCH OF AUTOGENOUS BIOLOGICS.

