

# GenVec's Vaccine Technology

## A Proven, Flexible, Differentiated and Proprietary Platform

**Proven Technology** – GenVec's technology platform is being used to develop and manufacture vaccines for HIV, Malaria, Foot and Mouth disease, and Influenza utilizing a cell culture-based manufacturing process. The technology is based on a proprietary adenovector delivery platform which has been demonstrated to stimulate a broad and strong immune response for a variety of diseases, including protection against disease in a number of animal models for Ebola, Rabies, and Anthrax.

The robustness of this technology platform lies in its flexibility. Multiple adenovector serotypes can be utilized to facilitate repeat administrations, if needed, and a variety of antigens can be readily incorporated, either singly or in multivalent vaccines.

**Clinical Stage Program** – GenVec has established a very effective collaboration with the Vaccine Research Center (VRC/NIAID/NIH) for the HIV and Influenza programs. Clinical data from the HIV program support the potent immune stimulation advantages seen in pre-clinical testing even in people that have pre-existing antibodies to the adenovector. This multi-antigenic, multi-clade, adenovector based vaccine has been given to >200 volunteers in six completed Phase I studies and an ongoing 480 volunteer worldwide Phase II clinical study targeting the global AIDS problem, and is proving to be safe and generally well tolerated.

**Broad Applicability** –The technology is broadly active, including activity against parasites, such as malaria, as well as infectious diseases caused by viruses and bacterial diseases such as anthrax for human or veterinary vaccines. Multiple antigens or immune modulators can be included in a single vaccine.

**Manufacturing Advantages** – GenVec's proprietary 293-ORF6 cell line is one of the most well characterized mammalian cell line production systems in the world and a Biological Master File is on file with the FDA for vaccine production. The manufacturing process itself is a very robust, scalable and cost effective process and we have extensive experience in product characterization and release.

**Intellectual Property**—GenVec's technology is proprietary, including strong IP in adenovectors and their manufacture.

**Collaborations with World Leaders**—GenVec has funded collaborations with the following:

### HIV and Influenza

Vaccine Research Center (VRC),  
National Institute of Allergies and  
Infectious Diseases (NIAID), of the  
National Institutes of Health



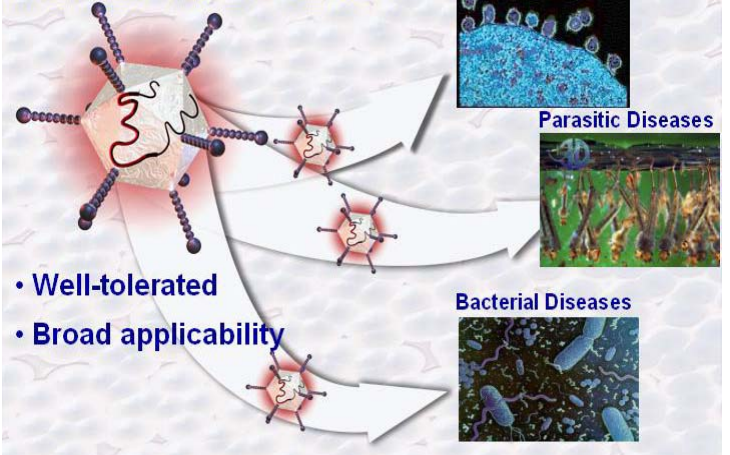
### Malaria



### Foot & Mouth Disease



### Adenovirus Vectors: A Versatile Vaccine Platform



- Well-tolerated
- Broad applicability



Malaria testing