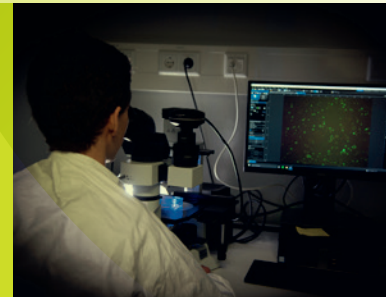


Cell-based viral platform technology



Intravacc's platforms form the solid basis for the development of new prophylactic and therapeutic vaccines. The cell based viral platform have been widely used in development and manufacture of vaccines. Our platform consists of a Vero cell line which we have used to develop vaccines since 1987, and the most recent addition to the platform is an in-licensed HEK293 cell line.

Vero cells technology

In the early sixties Vero cells were isolated and immortalized from the kidney of an African Green Monkey. Currently, the Vero cell line is the most widely used and most reliable cell line in viral vaccine production in terms of quality, yield and safety.

Why Intravacc's vero cell platform?

At Intravacc, we have been developing viral vaccines using the Vero cell line since 1987. Initially for the Dutch government but the last decade mainly for clients in biotech, big pharma and NGO's. Both attenuated and inactivated vaccines produced on our Vero cells have been successfully tested in clinical trials. Intravacc's cGMP-grade, regulatory approved Vero cell line is currently used by manufacturers around the globe in industrial vaccine production processes.

We offer tailored solution to your needs

Regardless of which virus you want to propagate, you will require a cell line that can produce this virus at high yields and excellent quality and is safe and robust. You will not only look for a cell line, but also for a proven platform to grow the cells in a scalable production system and technologies to purify and characterize your product of interest. Our Vero cell line and our expertise in viral vaccine production process can be what you are looking for.

Why Intravacc's HEK293 cells platform?

The cGMP qualified HEK293 cell line is the latest addition to Intravacc cell-based platform. Intravacc is currently developing prophylactic vaccines using this platform.

HEK293 cells were originally isolated and immortalized from the human embryonic kidney cells and have been extensively utilized in the production of AAV, Lentiviral and Adenoviral vectors for clinical applications.

Continuous improvement of the Vero and HEK293 cell line production process.

Thanks to our extensive expertise in up and downstream process development we know the platform thoroughly and can quickly design a production process based on our proven and sophisticated Vero and HEK293 based vaccine production platform.

We can provide you with an animal component-free production process with our cell lines. Our capabilities go from small-scale process development in scaled-down systems up to cGMP production in 50-200L single-use bioreactors. We can out-license the Vero cell line but also offer our research capabilities for both cell lines. In addition, we can produce cGMP virus seed lots and vaccines, ready to be tested in phase I/II clinical trials.

What are the benefits?

- cGMP-qualified cell lines
- Directly available Master and Working cell banks
- Extensive clinical use and regulatory history
- Scalable to large volumes at industrial scale

What is the current status?

- Over 10 cell-based vaccines candidates developed
- >10 scientific publications published
- 2 patents granted

What do we offer for partnering or licensing?

- Master and Working cell banks with extensive regulatory dossier
- Well defined process and analytics for technology transfer
- cGMP manufacturing capabilities up to 200L



Intravacc - innovating vaccines



Netherlands-based global CDMO

- Founded in 2013
- HQ at Utrecht Science Park Bilthoven
- Private company since 2021
- ~100 FTEs
- Leading OMV company



State-of-the-art facilities

- 1500+ m2 laboratories, incl. BSL-2 & GMP
- GMP certified
- ISO 14001:2015 certified
- In-house QA, QC and QP



Business focus

- Offering specialized CDMO services
- One-stop-shop for vaccine development
- Platforms & vaccines for partnering
- Bridge between bench- and large-scale manufacturing

Our proprietary scalable platform technologies



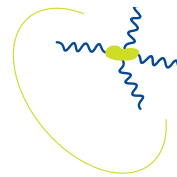
OMV

- Bacterial
- Viral



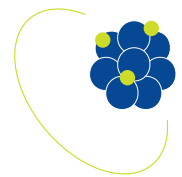
Cell-based viral

- Vero and HEK293
- Viral (vector)



Conjugation

- Infectious diseases
- Combination with OMV



Adjuvant

- OMV
- LPS



Distinctive technology

- 4 proprietary vaccine platforms
- 11 patent families
- Viral rescue
- Mass spectrometry
- Intranasal vaccine development



In addition we offer

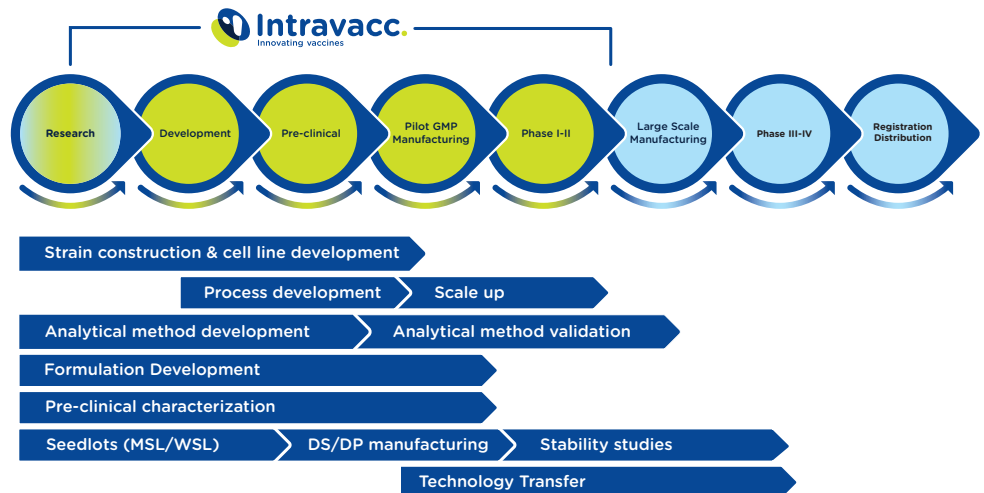
- Medium design
- Higher order structural analysis
- Physiochemical and immunological analysis
- Bench- and pilot-scale GMP



Stellar track record

- 2 OMV vaccines licensed
- 1 conjugate AMR vaccine licensed
- 3 cell-based viral vaccines licensed
- 300+ scientific publications
- 50+ customers worldwide
- >10 partnerships

Our services - from discovery to clinical proof of concept



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