

10th anniversary of Intravacc

# Some milestones are measured by reliability

Intravacc is one of the leading companies in the field of vaccine development worldwide with a long and successful track record in developing viral and bacterial vaccines. This position was recently emphasized again by trade magazine Insightscore, which chose Intravacc to one of the five most reliable vaccine production companies worldwide. It resulted in a nice cover story. CEO Jan Groen is proud of the milestones achieved. 'We have been an independent company for almost three years now, and we already obtain 50% of the orders from the market.'



Following the privatization of the Netherlands Vaccine Institute (NVI) in 2012, the R&D arm of the NVI became an independent vaccine research institute called Intravacc under the Ministry of Health, Welfare and Sport in 2013. In May 2020, virologist Dr. Jan Groen took over as CEO and with effect from January 1, 2021, Intravacc became an independent company. Groen worked at the RIVM, Erasmus MC and for a long time in America (Infectious diseases and breast cancer diagnostics), he was also CEO of MDxHealth for 9 years. In addition to Jan Groen, the ranks within Intravacc were strengthened with the arrival of Nathalie Laarakker as CFO and Prof. Dr. Virgil Schijns, as CSO. Intravacc, which has a leading international reputation, uses broad (inter)national collaborations as a Contract Development and Manufacturing Organization (CDMO). Groen: 'For example, we conclude contracts with biotech companies, major pharmaceutical companies, universities and government in the field of vaccine development as well as for phase 1 and 2 studies.'

Intravacc is therefore the connecting link between innovative inventions at universities and vaccine production on a large scale.'

Intravacc is an independent contract development and manufacturing organization (CDMO) for infectious disease and therapeutic vaccines. With many years of experience in the development and optimization of vaccines and vaccine technologies, Intravacc has developed, licensed and transferred technology worldwide for vaccines against polio, measles, diphtheria, Hib and influenza, among others. The company has ultra-modern research and production facilities; Intravacc's goal is to reduce the development risks and costs of new vaccines in order to contribute to global health problems.

## Powerful OMV technology

The Bilthoven-based company develops various innovative vaccine products under the brand name Avacc. They are based on the three platform technologies within Intravacc (Cell-VaccT, OMV-VaccT and CON-VaccT) and are in various stages of development. At the beginning of this year, the results of Avacc® 11 for gonorrhea were announced. The preclinical data of Avacc 11 showed significant protection against gonorrhea infection. Since this sexually transmitted disease affects as many as 87 million people worldwide each year, this data is crucial for global public health. It also proves that Intravacc's OMV technology is a powerful tool in mucosal immunity.

Another Avacc vaccine that has achieved good results is an intranasal booster vaccine for SARS-CoV. "Last year, a phase 1 study was started in Australia with Avacc 10," says the passionate CEO.

'The positive results are now known, and are rolling out the red carpet for further developments with Avacc 10, which is also based on the OMV-VaccT platform. Also based on this platform is the intranasal Avacc 101, which is being widely developed against SARS-COV-1, SARS-CoV-2 and MERS-CoV. CEPI, the Coalition for Epidemic Preparedness Innovations (CEPI), expressed its confidence in the product last year and

the development, through a grant of US\$4.8 million. In addition, the European Union provided a grant of € 2.5 million for the further development of an ALS vaccine and Intravacc is currently busy with a phase 1 study for a bladder cancer vaccine.

It is striking that Intravacc has opted for intranasal administration in many developments. Jan Groen explains: 'The advantage of this is that it is not only easily accessible, but also that it produces both mucosal and systemic immunity. While the intramuscular vaccination, which is generally the focus, only causes an antibody response. Intranasal administration therefore has a much broader field of protection, which also includes infections in the lungs, intestines and genitals.'

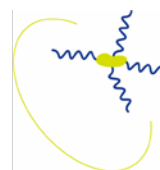
## FACTS

- Founded in 2013
- HQ at Utrecht Science Park Bilthoven
- Experts in vaccinology
- Clinical development & manufacturing organization
- 2000+ m2 state-of-the-art facilities, incl BSL-2/3 & GMP
- ISO 14001 certified
- >120 high qualified employees
- 50+ customers worldwide
- 300+ scientific publications in peer reviewed journals



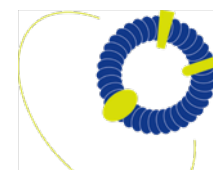
### Cell-based viral

- Vero and HEK293
- Viral (vector)



### Conjugation

- Infectious diseases
- Combination with OMV



### OMV

- Bacterial
- Viral