Spectacular early stage results in Pancreatic Cancer, one of the most difficult to treat cancers.

OncoLize BV (Maastricht/Leiden, NL) is in advanced pre-clinical stages of developing a very straightforward way of dealing with some of the most difficult to treat tumors, like pancreatic cancer, gastric cancer and colon cancer.

The company's approach drastically increases the effectiveness of well-known and novel drugs, and at the same time reduces the serious side-effects that cancer drugs can inflict on patients. And it can be kept affordable as well, in contrast to many of the new drugs and therapies entering the oncology Pharma-market.

Targeting Pancreatic Cancer

OncoLize partnered with experts from LUMC (Leiden University Medical Center) and recently presented spectacular survival rates in pancreatic cancer models (PDAC).

PDAC is one the most notorious cancers, not only for the poor survival rates (8-12% in 5 years' time), but also because of the very low Quality of Life for the patients and their loved ones due to the intensive and high chemo treatments. Despite the poor survival rates, it is also one of the most expensive cancer treatments for national healthcare. The reason why PDAC is so difficult to treat with drugs is because of a thick layer of normal cells around the actual tumor cells, that effectively shield the tumor cells from exposure to the drugs.

100% survival, no side effects

The company can load its injectable drug depots (ChemoGell™) with a wide range of well-known chemo drugs, in this case Gemcitabine. With that, and by injecting their product directly into the tumor mass, they demonstrated 100% survival of the mice treated with their product ChemGem™ until the end of the study (8 weeks), while the mice in the control arms did not survive beyond 3-5 weeks (after injection of saline or empty drug depot). Even better, there were no signs of side-effects in the organs, the overall well-being and the behaviour of the mice treated with the ChemGem™ injections.
The tumors were harvested from human patients and then transplanted under the skin of mice to test the product. Experiments in another mouse-model with gemcitabine-resistant tumors also showed a significant increase for ChemGem™ in efficacy and again no side effects.

ChemoGell™ product platform

The technology behind the ChemoGell™ injectable drug depots is quite remarkable in itself. ChemoGell™ is a highly versatile hydrogel platform consisting of well-known polymers that transforms from a free-flowing liquid at room temperature, into a drug depot once is reaches near-body temperature inside the targeted tumor. This 'Thermo-gellation process' is complete within seconds after injection.The drug that is mixed in is physically entrapped and is released at very high concentrations inside the tumor mass over the course of 7-14 days. The company has also shown this in animal trials for 4 different chemo drugs and a novel peptide, and has received patent grants from the USA, China and Japan, with final approval in EU this year.

The products are delivered into solid tumors using endoscopes, catheters, and fine injection needles. Delivering generic chemo or novel drugs in this localized manner offers precision: 10-100x higher concentration at target with much smaller total doses and up to 1000x lower drug levels outside the tumor...

Why localized delivery of drugs?

As 90% of all cancers are solid tumors, and 70% of all tumors are diagnosed before metastasis is clinical, local treatment is a powerful alternative to the standard oral or intravenous delivery that first needs to fill up the entire body in the hope to have sufficient drug levels inside the actual tumor. Overall, for solid tumors the mean age of patients is 66 years when first diagnosed. At that age their immune-, hormonal- and metabolic-systems are more vulnerable, which they need to support the eradication of tumors. So, systemic treatment often hampers the ability of the patient to support the eradication of tumors, further increasing the levels of drugs to unsustainable levels with further increase of side-effects. Local and sustained release offers a powerful proposition to treat patients with better outcome, far less side effects and making it Triple A: Affordable and Accessible for All.

Raising €3.5 million and then €17 million to start clinical trials in 2026

The company is now raising €3.5 million to achieve all the approvals from the EMA and the FDA to start their first clinical trials by end of 2026, next to scale-up their production to source the products for pancreatic cancer and other indications. OncoLize features a highly experienced founders' team now preparing a Seed B round of €3.5 million in 2025 and it expects to raise a Series A of €17 mln by end of 2026 to execute CT phase I/II studies in up to 3 indications, along with developing a pipeline of multiple product market combinations, scale-up of products for clinical trials and early commercialization potential.

The company also seeks to partner for impact in less privileged communities, so collaboration with NGO's and impact investors is as much welcomed as VC-backed funding.

ONCOLIZE
LOCALIZED CANCER TREATMENT