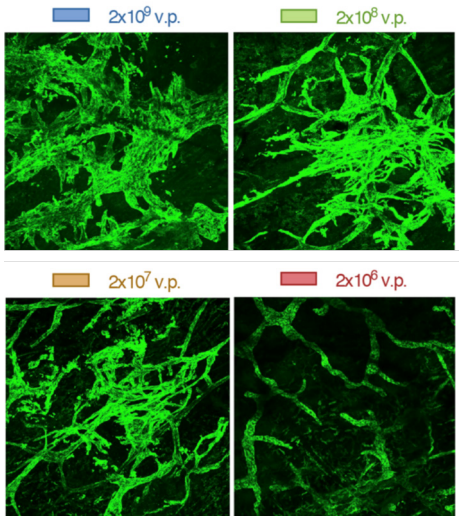
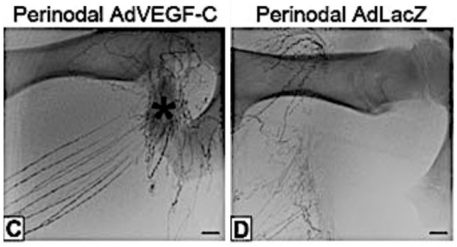
HERANTIS PHARMA

PIPELINE PROGRAMME SUMMARY: LYMFACTIN® GENE THERAPY

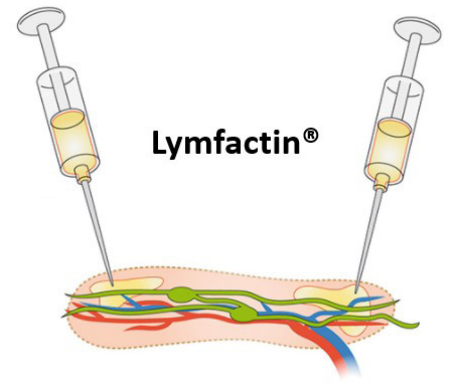


Dose-dependent growth of lymph vessels in mouse ear-skin model. LYVE-1 staining images taken 14 days after administration of 2x10⁶, 2x10⁷, 2x10⁸ and 2x10⁹ Lymfactin® viral particles.



13.7 ± 4.0	Total no of lymphatic vessels	5.8 ± 5.5
9.9 ± 4.9	Lymphatic vessels connected	2.8 ± 3.4
27.7 ± 12.4	Size of lymph node (cm^3)	11.54 ± 4.7

Lymphangiograms taken 2 months post treatment (Lymfactin® or LacZ negative control) show Lymfactin® significantly improved lymphatic vessel regeneration



VLNT surgery with Lymfactin®: adenovirus containing VEGF-C transgene injected into lymphatic tissue flap immediately before transplantation.

Lymphedema (LE) is a progressive, chronic swelling condition caused by failure of the lymphatic vascular network to drain interstitial fluid. While primary lymphedema is a relatively rare genetic disorder, secondary lymphedema is common, affecting over 200 million people worldwide, and is caused by physical damage, infection, cancer or surgical removal of parts of the lymphatic network during cancer therapy.

Herantis has developed Lymfactin®, a unique gene therapy for the treatment of breast cancer-related lymphedema (BCRL). Lymfactin® induces temporary local expression of VEGF-C, an endogenous protein that is naturally expressed in lymph nodes and is responsible for driving the growth of lymphatic vessels. By stimulating the expression of VEGF-C, the lymphatic vasculature may be regenerated, thereby restoring normal flow of interstitial fluid to the blood stream and reducing swelling.

Currently, there are currently no approved pharmaceutical products for lymphedema or BCRL. Vascularised Lymph Node Transfer (VLNT) surgery is a relatively new treatment option for BCRL patients that involves the removal and relocation of inguinal nodes from the groin to the axillary region of the affected limb. In many cases, the surgery reduces limb volume, pain and the need for compression therapy, though results may be variable. Herantis is developing Lymfactin® as an adjunct therapy to VLNT surgery in BCRL, whereby the adenoviral vector is injected into the explanted tissue flap before re-implantation. Expression of VEGF-C typically begins within the first 24 hours after the procedure.

In our Phase I clinical study, the safety and tolerability of the Lymfactin® adenoviral vector was successfully demonstrated in combination with surgical vascularised lymph node transfer surgery in 15 BCRL patients (NCT02994771). Herantis recently announced the results from the 12 & 24 month study readouts, which concluded that Lymfactin® continued to be safe and well-tolerated, with no severe adverse events and no dose-limiting toxicities. Although this study was not placebo controlled, and therefore is not considered an efficacy study, clinically meaningful decrease in affected arm volume was observed in 6 out of 12 patients at the 12-month timepoint and in 4 out of 7 patients at the 24-month timepoint (high dose cohort).

Armed with the highly encouraging results, Herantis launched a Phase II, double-blind, placebo-controlled, randomized study in a larger cohort of 39 BCRL patients to assess efficacy and safety (AdeLE, NCT03658967). All patients are currently in the 12-month blinded follow-up phase, and headline results from this study are expected in Q1 2021.

Lymfactin® is currently the only drug candidate in clinical development for cancer-related LE. KOLs are strongly enthusiastic about a Lymfactin® adjuvant to VLNT surgery. Herantis reasonably expects to capture up to 40% of all VLNT surgeries in the USA, and 30% of surgeries in the EU. With further evidence of clinical efficacy, Herantis may also pursue Lymfactin® as a standalone therapy for other secondary lymphedema forms. We therefore project at Lymfactin® peak sales could reach $600M in the USA and top five European markets.