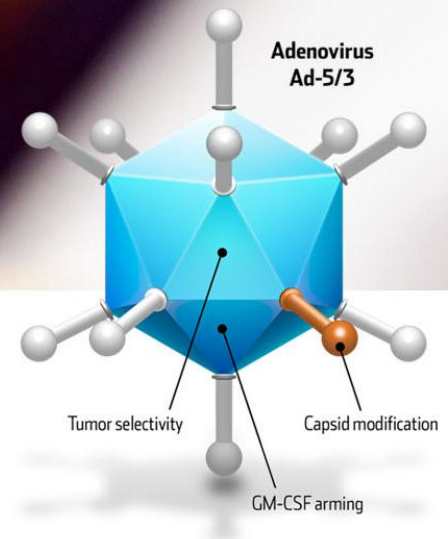


Oncos Therapeutics

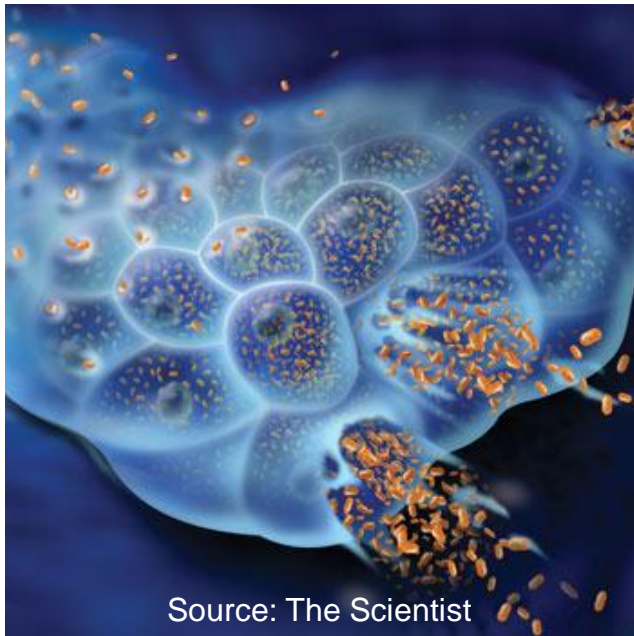
A paradigm shift in cancer immunotherapy



February 2013

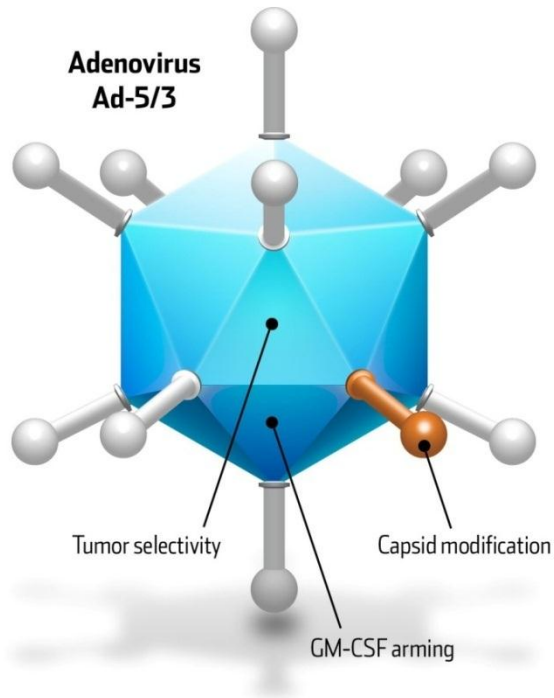
Oncolytic viruses activate each patient's immune system against their own tumor

Cancer is a patient specific disease, where every tumor develops a strategy to escape the immune system - cancer requires a patient specific therapy



- Oncolytic viruses replicate in cancer cells and kill them
- When tumor cells die, patient specific tumor epitopes are released and can be recognized by the immune system
- Oncolytic viruses can be armed with transgenes (e.g. GM-CSF) to enhance the immune response

Oncos' lead product candidate CGTG-102 is purposefully engineered



- Adenovirus was chosen for its established safety record as a cancer therapeutic
- D24-modification ensures tumor cell selectivity
- Replacement of the Ad-5 knob by Ad-3 improves binding to tumor cells and gene delivery
- Non attenuated virus design ensures high potency
- GM-CSF arming enhances immune response

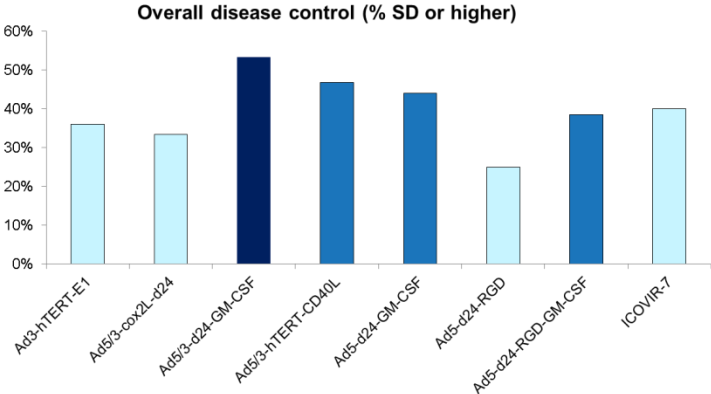
Our lead products have been extensively used in humans prior to clinical development

- A comprehensive preclinical program was used to select the best oncolytic virus constructs developed by University of Helsinki
- 290 patients with refractory, metastatic solid tumors were treated in an Advanced Therapy Access Program (ATAP) based on EU regulation
- Ten virus constructs with varying dose regimens were given – 115 patients were treated with CGTG-102, our lead product
- All treatments were given at a single site: Docrates clinic – one of premier cancer centers in Northern Europe

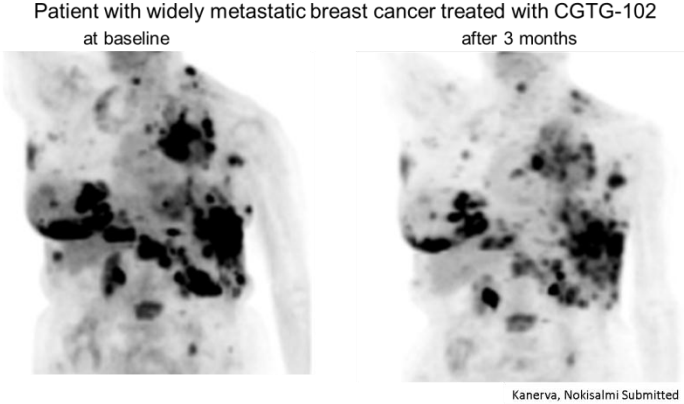


Lessons learned from ATAP clinical experience

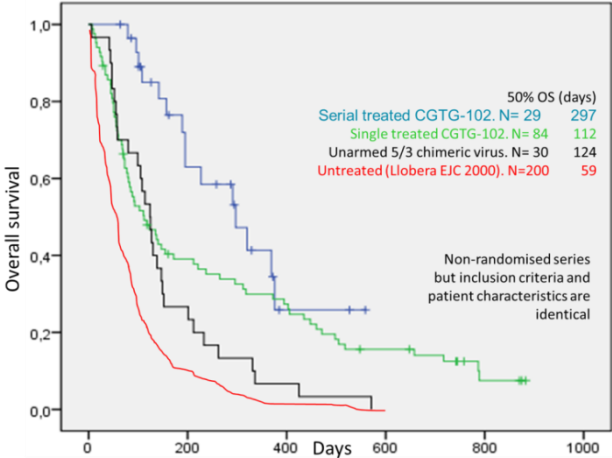
Arming the virus with a transgene is a good idea



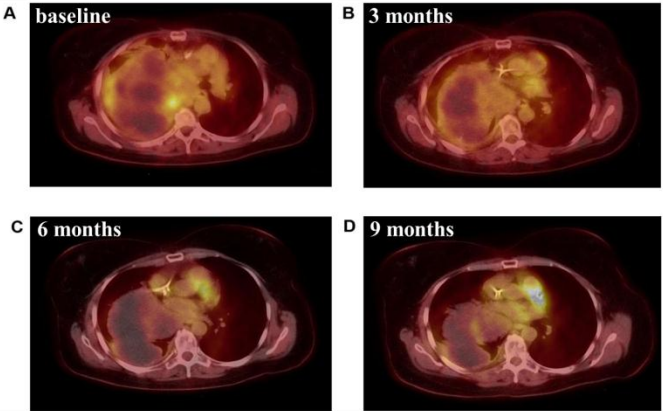
Systemic effects are seen after local administration



Repeat administrations are more efficacious



Complete metabolic response in patient with fibrosarcoma

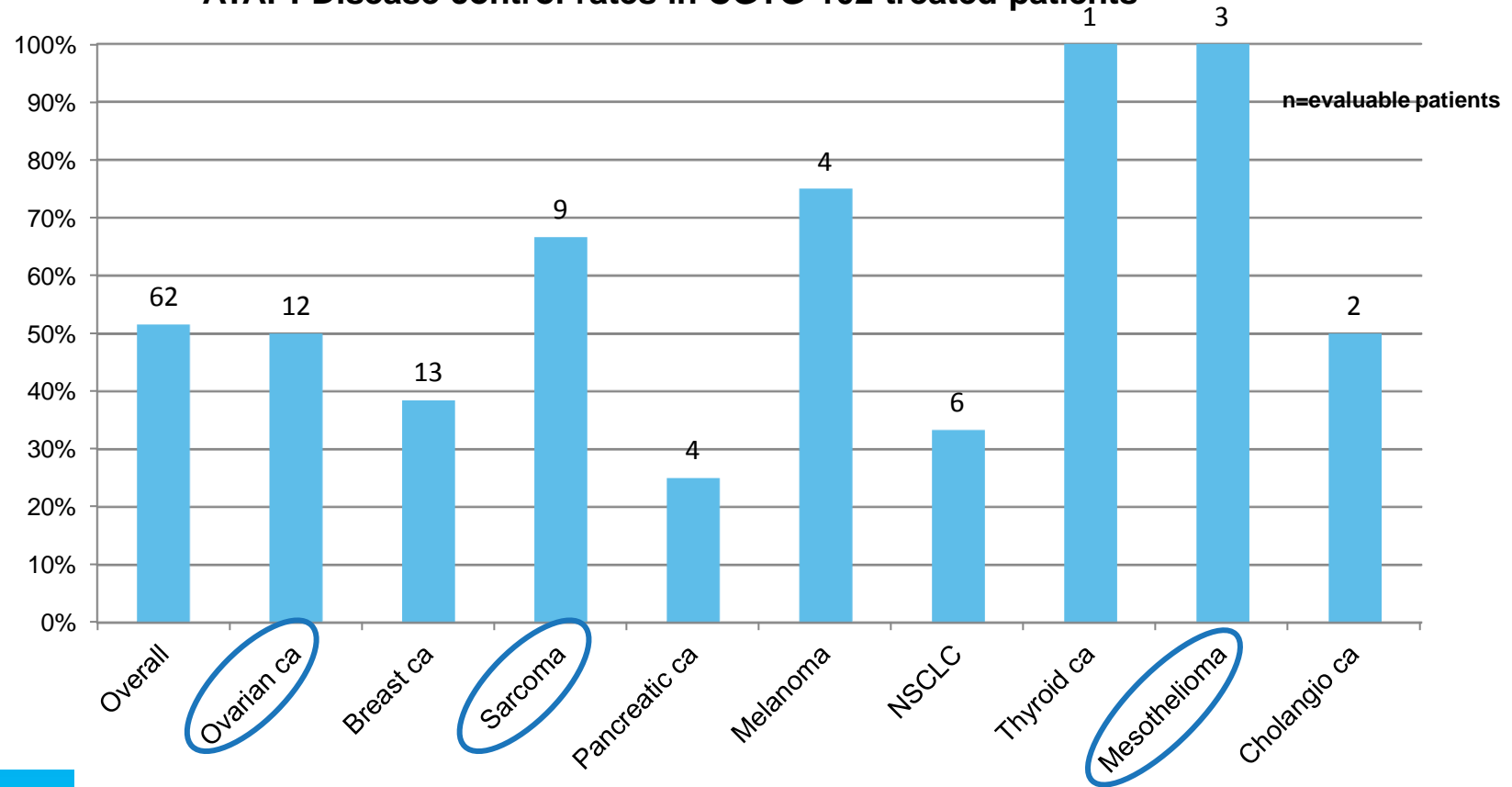


• 76% reduction in tumor volume 9 months after treatment



Certain cancer types may benefit more than others

ATAP: Disease control rates in CGTG-102 treated patients



We are scaling up our manufacturing capabilities

In-house manufacturing

- In-house experience in production for clinical use
- Custom-built GMP facility for production (ATAP, phase I), process development, and QC development

Successful GMP production campaign with FDA and EU clearance

- Fully characterized GMP-quality Master Viral Seed Stock and Master Cell Bank

Proof-of-concept in commercial scale bioreactor

- Straightforward scale-up to 100,000 doses / batch
- Highly cost efficient



Structure follow strategy: we shall match our organization with our development

