Oncoinvent AS

Company Presentation – Arctic Biotech Webinar

22. April 2021

Jan A. Alfheim
CEO

A global leader in alpha-emitting radiotherapeutics

Advancing a pipeline of radiopharmaceutical products across a variety of solid cancers that leverages robust internal supply and manufacturing capabilities to enable a clinical supply of radioisotopes

Innovative Radiopharmaceuticals

Alpha-emitting radiopharmaceutical products for various solid cancers supported by internal supply chain and manufacturing capabilities

1. Radiopharmaceutical-based pipeline to deliver innovative therapies to cancer patients
2. Internal manufacturing and supply chain capabilities
3. Versatile and potentially transformative lead product candidate, Radspherin, applicable across numerous cancer types
4. Multiple inflection points expected over 2021
5. Experienced management team with over 11 decades of experience

Built on a World Class Foundation

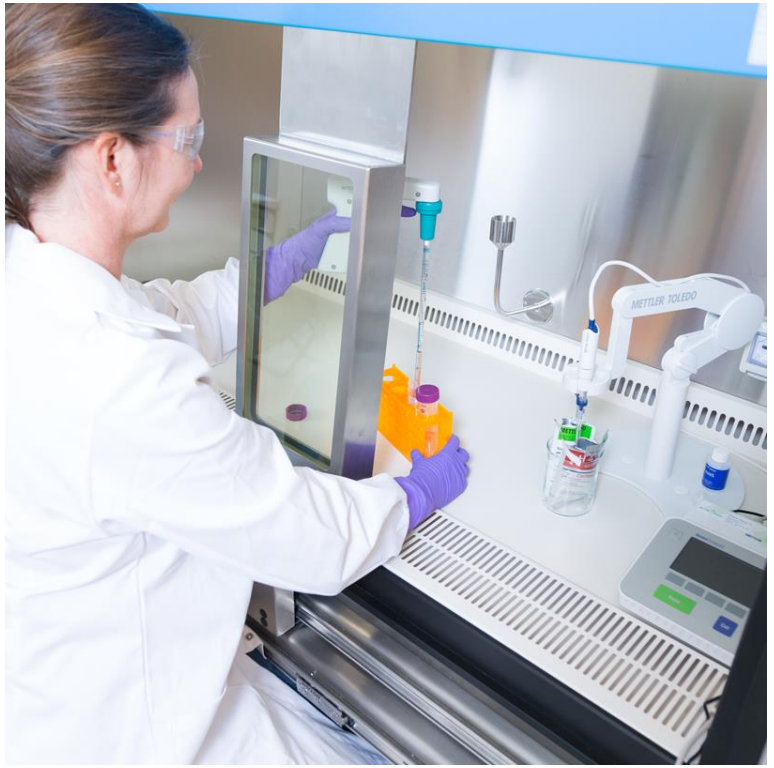
- Founded in 2010
- Employees:
  - 31 full time and 2 part-time employees
  - 2 industrial Ph.D. students
  - Over 11 decades of experience in the development and manufacturing of radiopharmaceuticals and successful company formations such as Algeta AS, which was subsequently sold to Bayer for $2.6 B
- 3rd company founded and 3rd product invented by serial entrepreneurs Dr. Roy H. Larsen and Professor Øyvind S. Bruland

Dr. Roy H. Larsen, Ph.D.

Professor of clinical oncology Øyvind S. Bruland

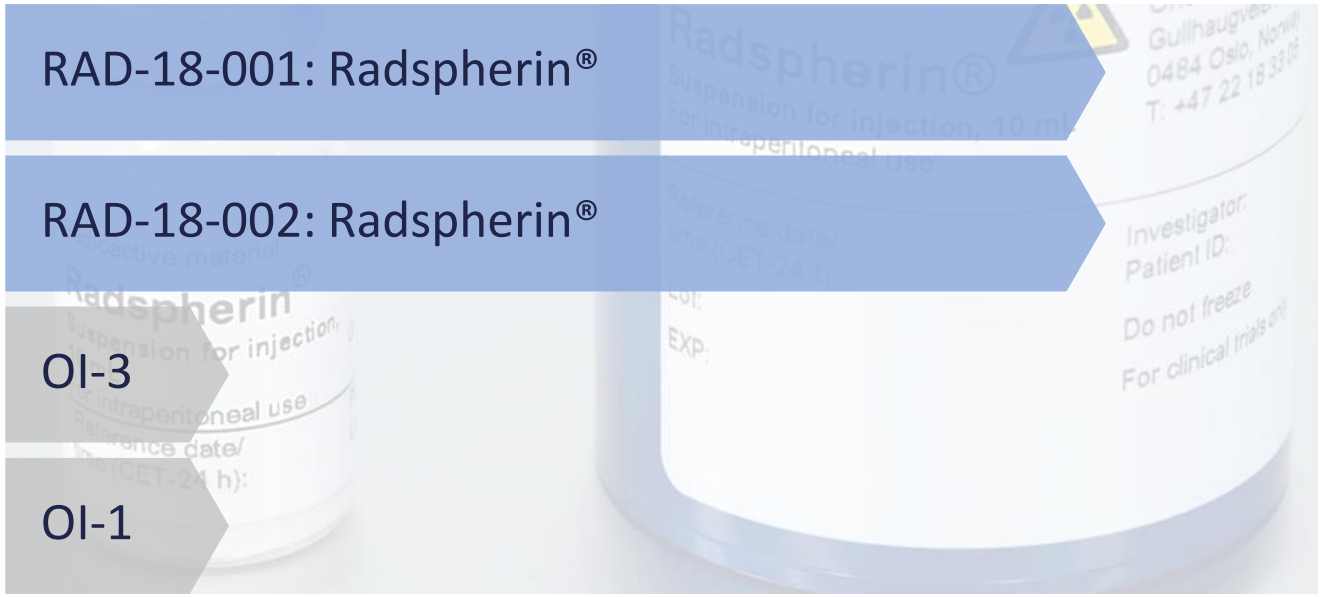
Internal Production and R&D Facilities

R&D and production facility was inspected and authorized for production of clinical grade Radspherin® by Norwegian Medicines Agency in 2019



Radiopharmaceutical-Focused Pipeline

Target	Discovery	Preclinical	Phase I
Peritoneal carcinomatosis from ovarian cancer	RAD-18-001: Radspherin®		
Peritoneal carcinomatosis from colorectal cancer	RAD-18-002: Radspherin®		
Ongoing discovery program in solid tumors	OI-3		
Ongoing discovery program in solid tumors	OI-1		



Radspherin®

Versatile and transformative product candidate for the localized treatment of micrometastic cancer

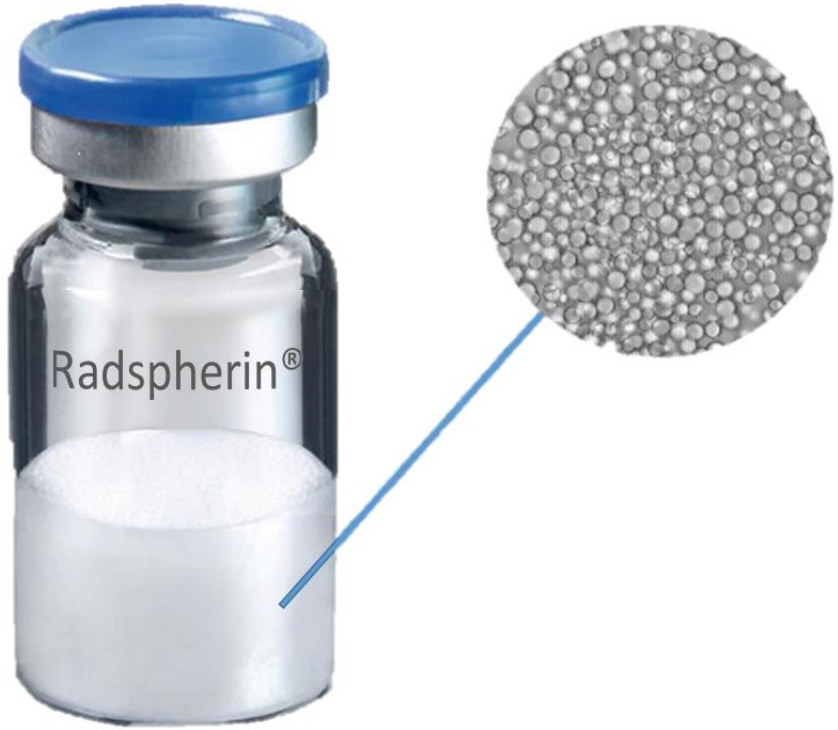
Radspherin® Design

$CaCO_3$ microparticles specifically designed to deliver precise, alpha-emitting particles

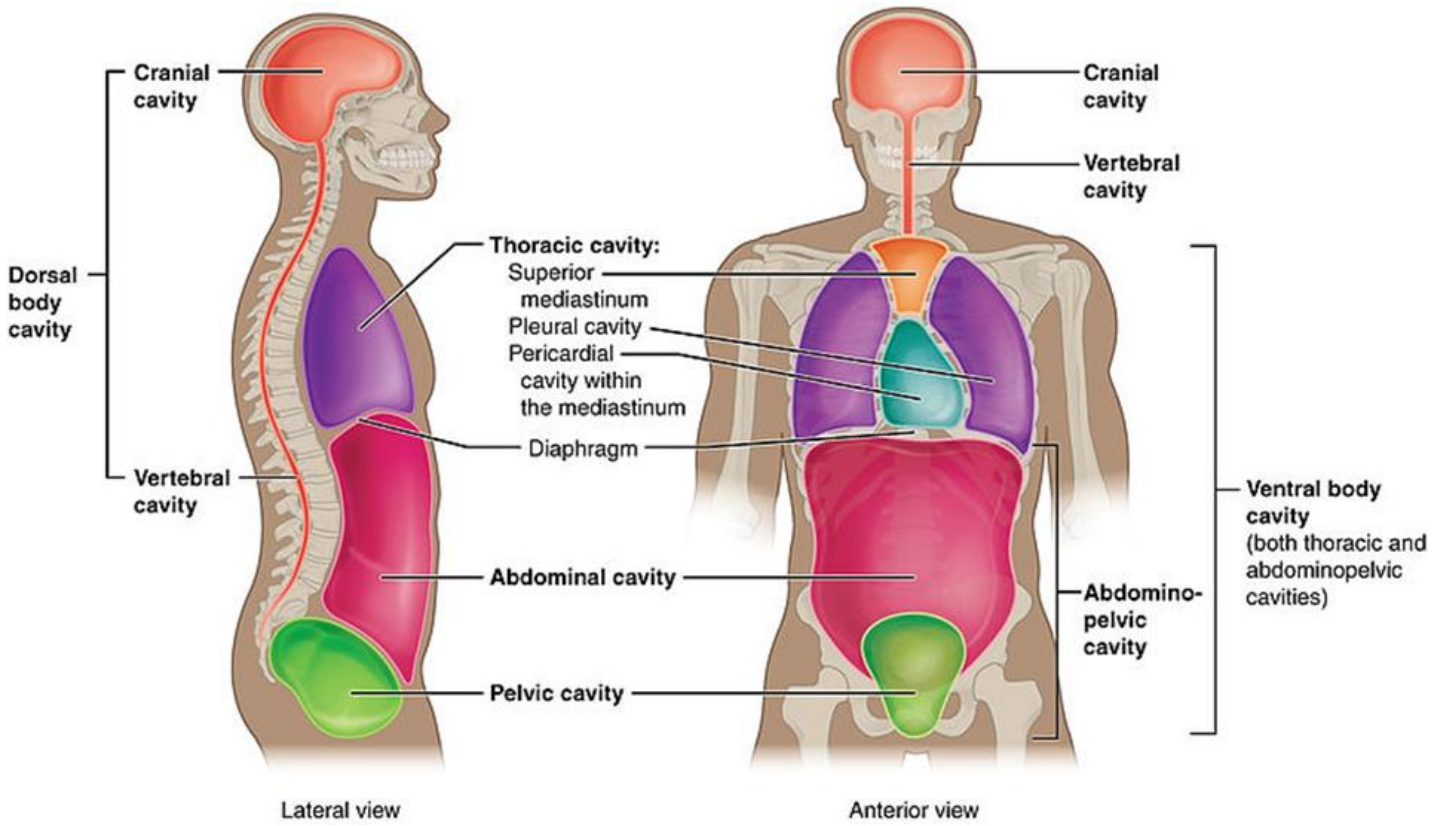
- Carriers for the alpha-emitting isotope
- Degradable and non-toxic
- Good regional retention
- Low systemic exposure

Novel alpha-emitting radioisotope Ra-224

- Safely deliver precise radiation to cancer cells, minimizing off-target effects and the killing of healthy tissue
- High energetic radiation for efficient tumor cell killing
- Therapeutic relevant temporal and spatial window
- Proven clinical and commercial success



Radspherin® Product Concept



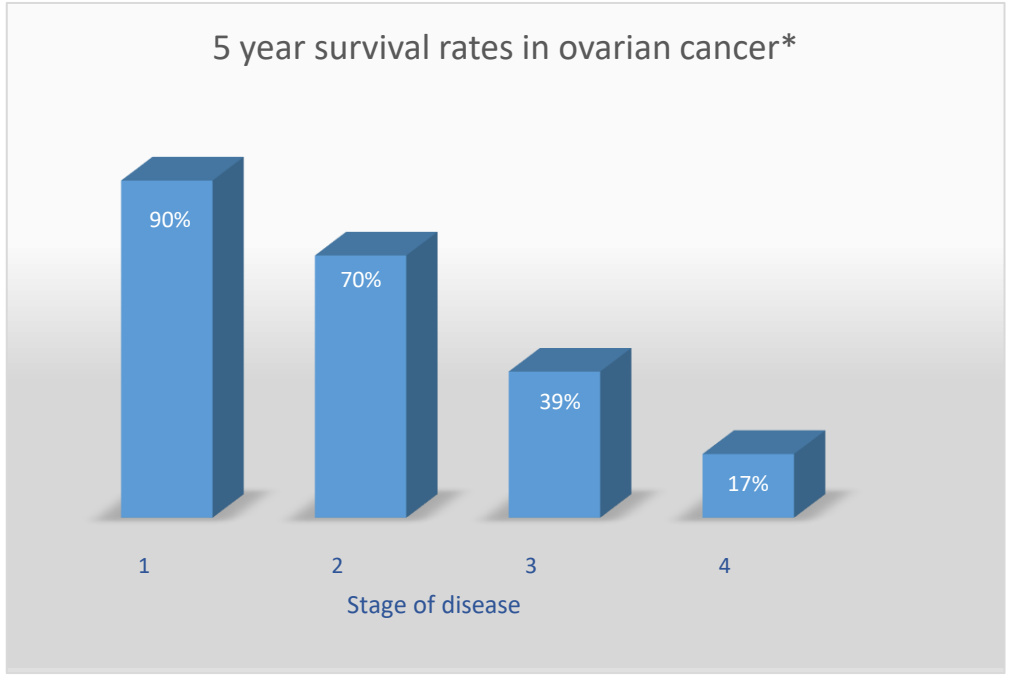
Localized treatment of micro-metastatic disease in body cavities after cytoreductive surgery

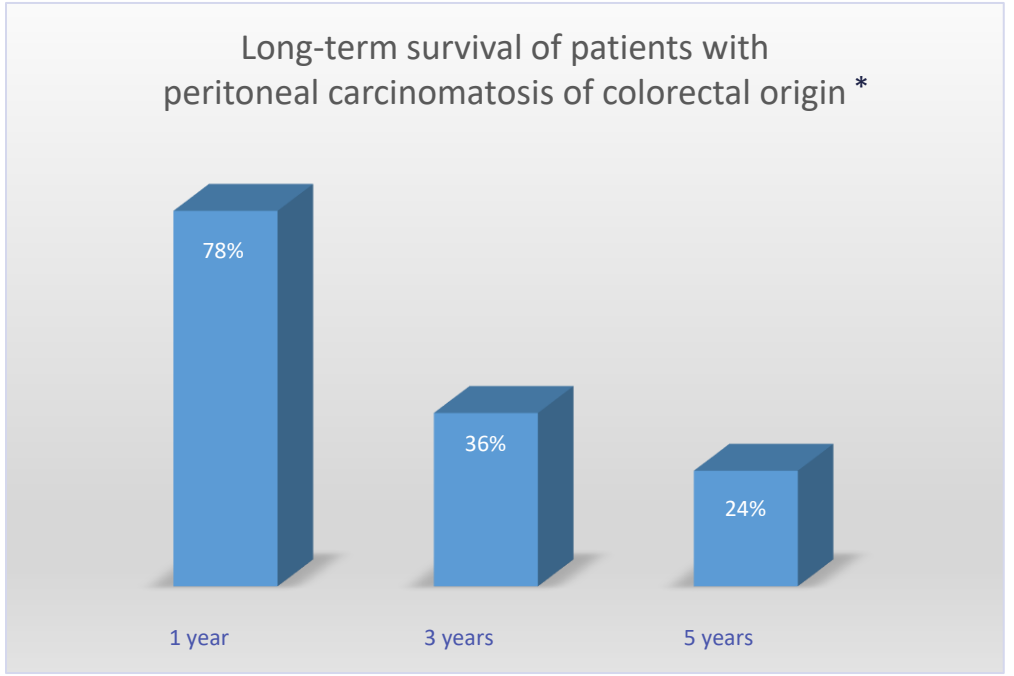
1st Indication:
Peritoneal Carcinomatosis

Treatment of **peritoneal carcinomatosis** (PC) originating from **ovarian cancer** (including fallopian tube cancer), **colorectal cancer** or other malignancies where PC (including primary PC) is present.

Malignant ascites is a serious condition commonly related to PC

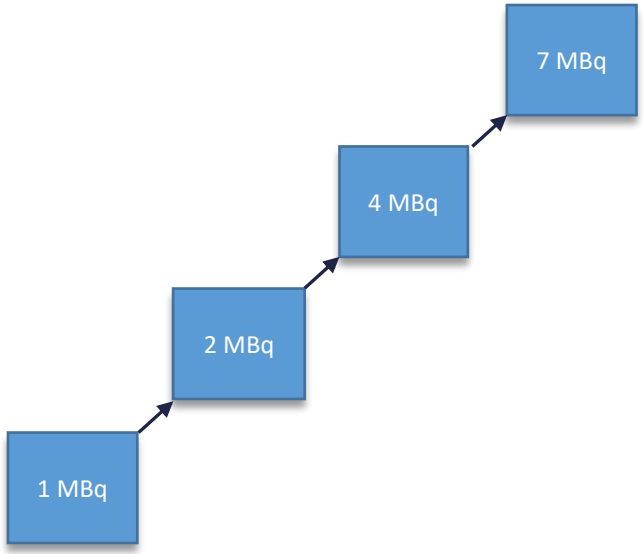
Addressing a Great Unmet Medical Need





* source: http://www.cancer.org/cancer/ovariancancer/detailedguide/ovarian-cancer-survival-rates

Radspherin® First-In-Man Study Design
RAD-18-001 and RAD-18-002 clinical studies



Repeated injection cohort of 3 subjects:

- To be started once recommended clinical dose is determined
- Split dose to be 2 injections of 50% of recommended dose

Expansion cohort of 6 subjects:

- To be treated using selected clinical dose either single or repeated dose

Dose escalation phase → Repeated injection phase → Expansion cohort phase

Radspherin® Clinical Development

- RAD-18-001 – Study of Radspherin® in recurrent ovarian cancer subjects with peritoneal carcinomatosis
  - *Recently advanced to 3rd dose-level (4MBq) in dose range finding study*
  - *Dose-ranging data expected in E2Q, and complete safety results in 4Q21*
  - *Clinical sites in Oslo and Leuven, Belgium*

- RAD-18-002 - Study of Radspherin® in colorectal carcinoma subjects with peritoneal carcinomatosis treated with HIPEC
  - *Dose range finding completed – 7 MBq selected as recommended clinical dose*
  - *Results from expansion cohort of 6 patients at the recommended clinical dose (including dosimetry, additional safety data) expected in 2Q21, and complete safety results in early Q321*
  - *Clinical sites in Oslo and Uppsala, Sweden*

Robust Safety Profile Seen to Date

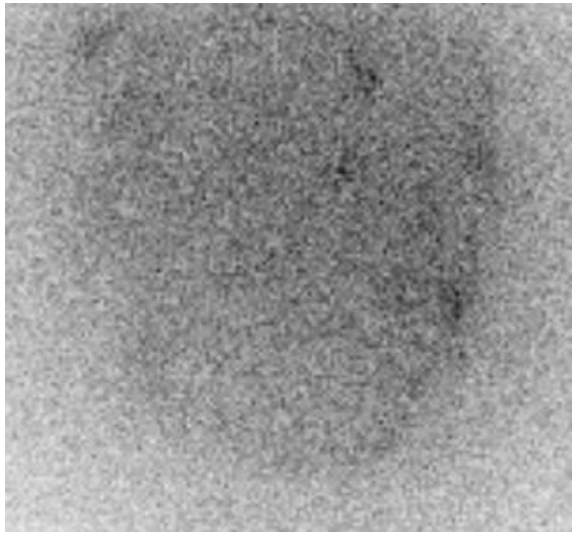
- No dose limiting toxicities observed
- Both studies have progressed to the second and fourth dose levels for ovarian and colorectal cancer, respectively
- 22 patients treated at 1, 2,4 & 7 MBq
    - Drinking/eating…ok bowel-function at Days 2-3
    - Patient 3 in RAD-18-002 study had fever/infection anastomosis- leakage related to surgery –was re-operated…recovered nicely
    - An extra patient (No.4 to be enrolled at 1 MBq dose level in RAD-18-002 study)
- Patient 4 in RAD-18-002 study experienced mild nausea at day 3
- Drains/catheters - uncomplicated removal

No radiation safety issues experienced by patients or hospital staff; product easy to handle

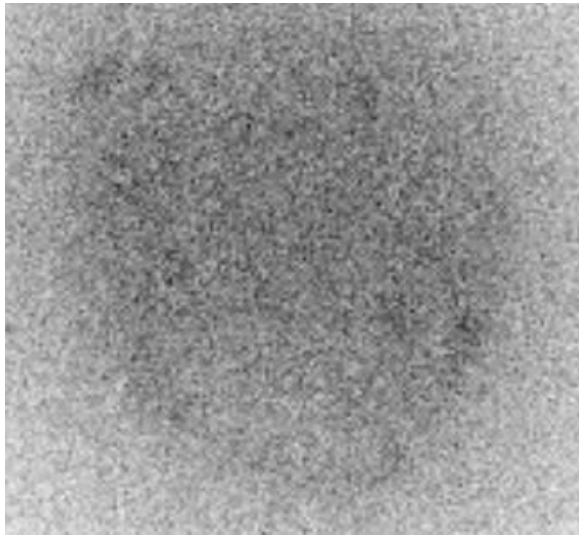
Preliminary Phase 1 results:

Even Distribution of Radspherin® in Body Cavity Observed

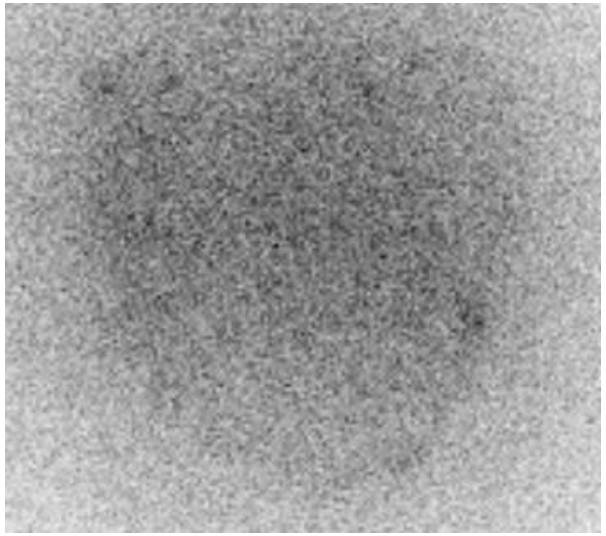
Planar scintigraphy - anteriorly:
20 minutes aquisition time



3h post-injection
Patient bed-ridden



26h post-injection
Moderate time sitting up



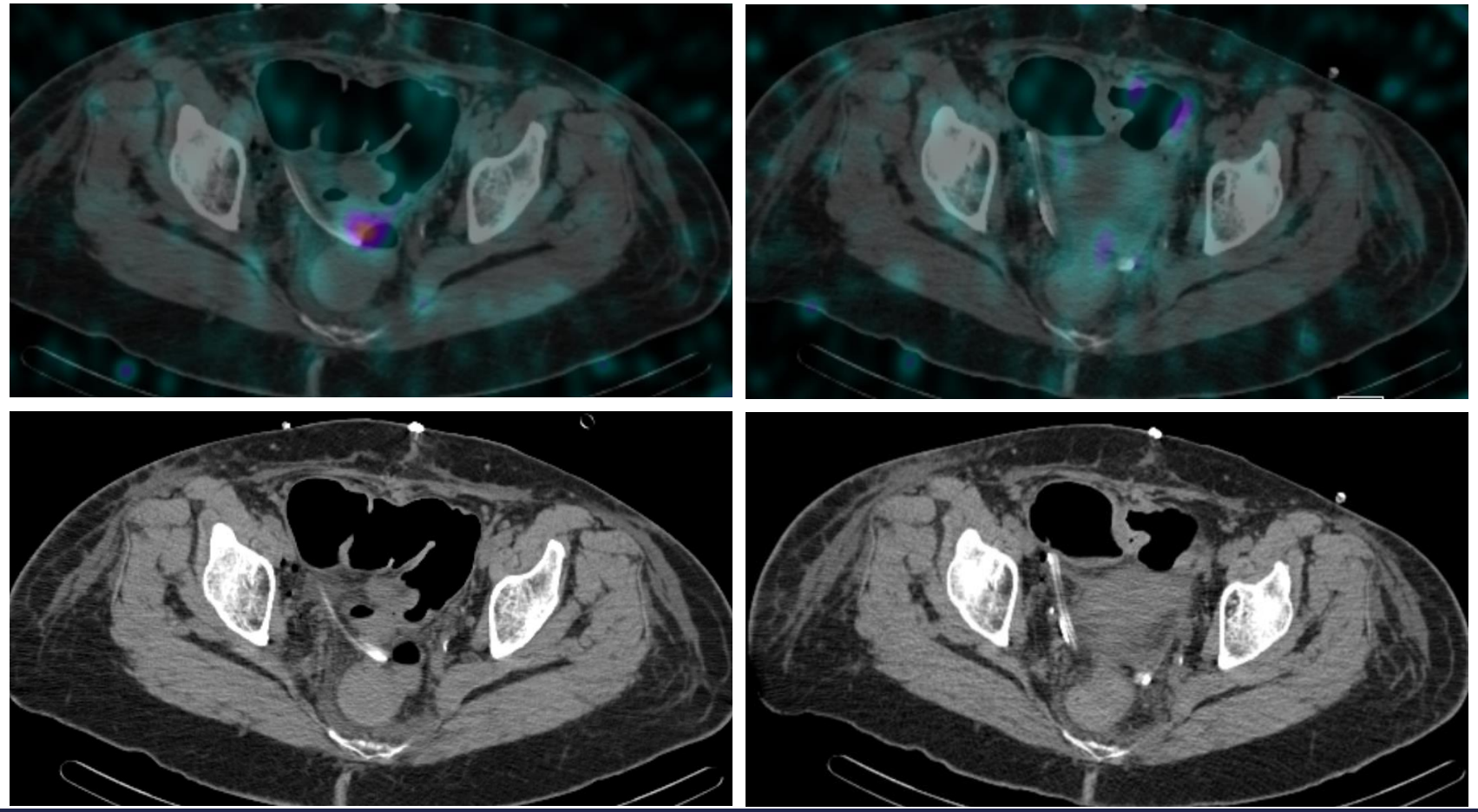
50h post-injection
Patient had been up & walking for some time

An even distribution of Radspherin® in the peritoneal cavity already visible at 1 MBq dose level

Preliminary Phase 1 results:

Radspherin® Day 1-2 Post-Injection

Day 1



Day 2

Particulate aggregates and small amounts of radiation are visible at low doses, which allows for simple analysis of the biodistribution of Radspherin in the peritoneal cavity

No aggregate corr. to «hot spot»

Patient 5 002-study (2 MBq)

Upcoming Milestones