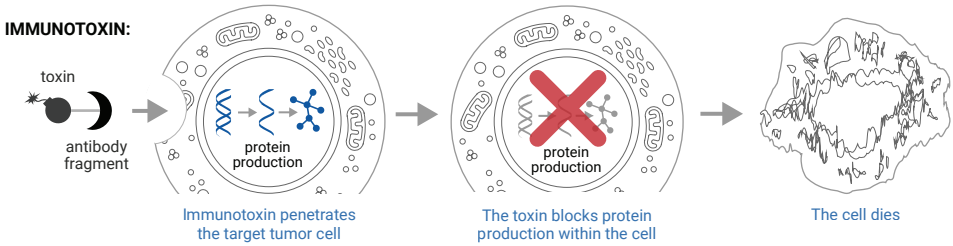
Immunotoxins are a potentially powerful drug class…

Immunotoxins can be designed to block the synthesis of proteins inside cancer cells—a mechanism that is differentiated and potentially synergistic with other treatments, such as chemotherapy and checkpoint inhibitors.[1] The toxin is fused to an antibody fragment that is designed to target tumor cells while minimizing off-target side effects.

IMMUNOTOXINS CAUSE TUMOR CELL DEATH



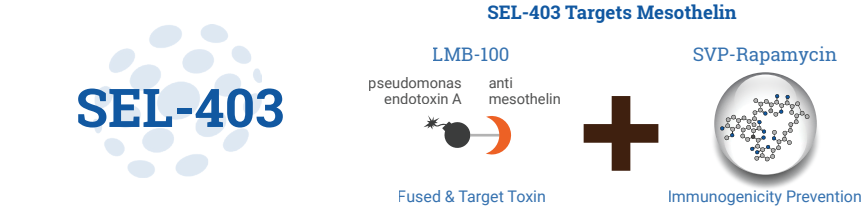
…but immunotoxins are highly immunogenic, which has negated their efficacy.

Because the toxin moiety is derived from foreign organisms, immunotoxins provoke a strong immune response in humans resulting in loss of efficacy. Consequently, the use of immunotoxins in fighting cancer has been severely restricted.

SEL-403

SEL-403: A New Therapeutic Modality

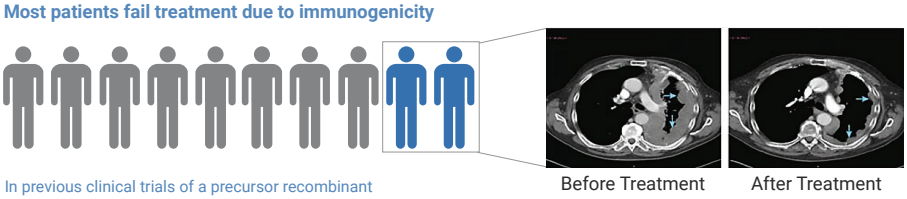
Selecta's SEL-403 is designed to avoid immunogenicity, which could enable prolonged immunotoxin dosing and enhanced anti-tumor activity.



Clinical Program

LMB-100 and SVP-Rapamycin (the components of SEL-403) have been studied separately in clinical trials. Selecta intends to evaluate SEL-403 combination therapy in patients with mesothelioma and pancreatic cancer.

Most patients fail treatment due to immunogenicity



In previous clinical trials of a precursor recombinant immunotoxin in mesothelioma, the vast majority of patients failed treatment due to immunogenicity despite the use of potent immunosuppressants.

Before Treatment | After Treatment

However, for the limited number of patients who were able to receive more than two treatment cycles, marked tumor regression was observed. The goal of SEL-403 is to increase the number of treatments that patients can receive by preventing immunogenicity.[2]

BROAD POTENTIAL APPLICABILITY

Mesothelin is overexpressed in many types of solid tumors:

Initial Selecta Focus:

- Mesothelioma **~90%**
- Pancreatic cancer **~90%**
- Ovarian cancer **~70%**
- Lung cancer **~50%**
- Breast cancer **~34%**

12-18 mos. average life expectancy for mesothelioma patients[3]

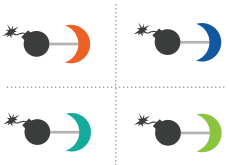
5% Pancreatic cancer patients surviving five or more years following diagnosis[3]

SEL-403 may be synergistic with other cancer treatments[1], such as:

- Chemotherapy
- Checkpoint Inhibitors

Potential areas of expansion:

SEL-403 utilizes pseudomonas exotoxin A (peA) as its cancer-killing payload. This same payload could be attached to a variety of other proteins.



1 Leshem, O'Brien, Liu, et. al. Combining Local Immunotoxins Targeting Mesothelin with CTLA-4 Blockade Synergistically Eradicates Murine Cancer by Promoting Anti-CancerImmunity, *Cancer Immunology Research*, 2017, 10.1158/2326-6066.

2 Hassan, Sharon, Thomas, et. al. Phase 1 Study of the Antimesothelin Immunotoxin SS1P in Combination With Pemetrexed and Cisplatin for Front-Line Therapy of Pleural Mesothelioma and Correlation of Tumor Response With Serum Mesothelin, Megakaryocyte Potentiating Factor, and Cancer Antigen 125, *Cancer*, 2014, 10.1002/cncr.28875.

3 National Cancer Institute.