



DESTINATION STARTUP

PhotonPharma

One-Sentence Summary of What You Do: PhotonPharma is an immune oncology company that has developed a break-through technology to stimulate a patient's own immune system to seek out and destroy their cancer cells.

Affiliated Institution: Colorado State University

Have you formed a company yet? Yes

Funding/Financing: Grant Funding, Direct/Indirect University Support, Angel Funding (including Self or Friends/Family)

Please describe your company and the problem you are trying to solve: Cancer is difficult to treat. The biggest therapy improvement has come from immune therapies that either increase immune sensitivity or genetically engineer a patient's immune cells outside the body to attack tumors. Certain patients see 90% cure rates but most show low to no response. These are complex and expensive processes, taking 3- 6 weeks to prepare and costing up to \$500,000. Further, the therapy targets only a single antigen.

What is/was your go-to-market strategy? Global spending cancer therapy exceeds \$133 billion and is projected to reach \$200 billion in 5 years. Our first targeted cancer (Triple Negative Breast Cancer, TNBC) has a total addressable market potential of \$5.1 Billion. FDA has determined TNBC qualifies for Orphan Drug fast tracking. Because Innocell uses the patient's own tumor cells, the therapy can be applied to any cancer. The company is initially focusing on the cancers with the most mutations which provide the most antigen targets for the immune system. These include melanoma, breast and colon.

Similar to FDA approved CAR- T therapies, Innocell is positioned as a biologic cancer therapy that relies on labbased processing of cells extracted from the individual patient. A predicate application of the technology was successfully developed and installed in blood banks around the world for inactivation of pathogens in donated blood. With minor mechanical and software modifications, Innocell dedicated devices can be manufactured and installed in hospital labs or adjacent blood centers to process cells on site. Reimbursement will follow the existing CAR- T coding. Due to the lower complexity and cost of the process, pricing discretion allows for as little as \$50,000 per therapy compared to the \$450,000 price of CAR- T.

How will/do you generate revenue? PhotonPharma will seek FDA approval for our Innocell autologous therapy with similar coding to CAR T therapies. Devices will be placed in hospital labs of oncology centers. The devices are small and automated. Similar devices have already been placed



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in blood centers around the world for another application. More than a million procedures have been run on them.

Our exit is likely to be an acquisition event before going to market. We are already in collaborative discussions with large pharma companies for clinical trials. Over 1,000 clinical trials are in effect right now for combination therapies to treat cancer. Innocell is an ideal cotherapy for many treatment regimens.

How will this showcase benefit your company or technology? We are seeking angel capital to complete our preclinical program. We are also looking longer term for venture or corporate funding to execute human clinical trials.

Who are the members of your team and why is this the right team to get the job done?

- Jon Weston, MBA, President & CEO
 - 30 years in biopharmaceuticals (Searle - Celebrex) and medical devices (Terumo BCT, Medtronic-PillCam and ICD communication chips).
- Ray Goodrich, PhD, Co- Founder
 - 29 years in transfusion medicine & hematology (Terumo BCT, Cryopharm).
- Amanda Guth, DVM, PhD, Chief Science Officer
 - 20 years immuno- oncology research (multiple patents /patents pending for vaccines and adjuvants).

