PHOENIX MOLECULAR DESIGNS

EXECUTIVE SUMMARY

phoenixmd.ca

Quick Facts
Incorporation: British Columbia, Canada. Clinical operations California, USA.

Industry: Precision Medicine/Oncology

Leadership
Sandra Dunn Ph.D., Founder & CEO, +28 yrs. breast cancer R&D and drug development exp. Forbes 50>50 winner 2021.

Gerrit Los Ph.D., CSO, developed Ibrance and Xalkori while at Pfizer. 25+ yrs. drug development exp.

Andrew Dorr, MD., CMO, developed Talazoparib for breast cancer while at BioMarin. Multiple FDA approvals in cancer, +40 yrs. clinical development exp.

Will Clodfelter, MBA, CBO, 25+ yrs in business development/ licensing at Eli Lilly.

Financial Information
Investments to Date: $20M USD

Upcoming offering: $80M USD

Development status: We completed a Phase 1 first-in-human clinical trial with our lead asset, PMD-026, treating women with metastatic breast cancer. The trial was conducted at 9 leading medical centers across the United States. Our results:

- PMD-026 is well-tolerated
- It does not cause hair loss or peripheral neuropathy
- Clinical benefit in >67% of select patients with high RSK2 activation.
- Validated precision oncology approach to treating breast cancer

Use of funds: Currently, we are raising $80M USD to complete three drug combination clinical trials, as well as the development of commercial formulation(s) and CDx.

Contact
Sandra Dunn, CEO
sedunn@phoenixmd.ca
Will Clodfelter, CBO
wclodfelter@phoenixmd.ca

Company Profile
Phoenix Molecular Designs (PhoenixMD) is developing precise oral cancer therapeutics. Our platform technology focuses on developing first-in-class kinase inhibitors designed to uniquely target p90 ribosomal S6 kinase (RSK).

The Problem that PhoenixMD Solves
RSK fuels resistance to a wide range of cancer therapies and has been a prime cancer target for two decades. We are making hope a reality as we have developed the first uniquely-built kinase inhibitor for Triple Negative Breast Cancer (TNBC) that will end the devastating battle for patients and their families. PhoenixMD overcame the challenge by integrating advanced medicinal chemistry guided by computational modeling. This success enabled the first clinical trials of PMD-026, a first-in-class RSK inhibitor, to be evaluated in humans. Our team is focused on TNBC given that RSK2 is activated in 87% of cases and the lack of effective therapies that are currently available.

Market Opportunity
The estimated global market for TNBC is $8B annually. TNBC is our leading tumor target closely followed by hormone-driven cancers. RSK inhibitors are broadly applicable in solid tumors and hematological malignancies. The M&A space for TNBC broke records in 2020 with the sale of Immunomedics to Gilead for $21B, largely driven by their lead asset Trodelvy, which was fully FDA approved in 2021.

Our Technology
Our product is a pill that delivers a novel way of targeting cancer by taking aim at RSK. Oral delivery is a radical departure from the expensive and cumbersome IV delivery of most therapies available to patients, making it easier for them and ultimately delivering a higher quality of life. Together with Roche, we have also developed a companion diagnostic (CDx) that measures activated RSK2 in human tumors.

Our Solutions and Pipeline
PMD-026 has demonstrated activity in pre-clinical models of breast, prostate, skin, lung, ovarian, and colon cancers. PMD-026 is well-tolerated in breast cancer patients and can stop tumor growth for up to 6 months based on Phase 1 data. Progression-free survival (PFS) in women with TNBC is 3x longer for patients that express high levels of RSK2 activation as compared to those with low RSK2 activation.

Business Model
We are a build to buy precision oncology company developing first-in-class RSK inhibitors together with a CDx enabling technology. These products are being developed in parallel to simultaneously seek FDA approval.

The Competition
PMD-026 is not chemotherapy, rather it is a targeted therapy. Chemotherapy is presently the mainstay treatment for refractory, metastatic TNBC with PFS rates of ~1.7 months. The common side-effects of chemotherapy include hair loss, neuropathies and high-grade diarrhea which are not commonly found with PMD-026. Trodelvy was recently approved for the treatment of metastatic TNBC, which delivers a chemotherapy payload via an antibody-drug conjugate (ADC). Trodelvy has an objective response rate of ~31% in the patients that take it and of those that show clinical benefit, the PFS is ~4.8 months, at which time patients are left with little or no options. Its side effect profile is consistent with chemotherapy, and like chemo it is given intravenously. As an ADC, Trodelvy is complex to manufacture leading to a high cost of goods (COG). By comparison, PMD-026 is a small molecule with a predictably lower COG and is suitable for large scale manufacturing to solve an urgent global need using our unique precision medicine approach.

PMD-026 has proven activity in Trodelvy refractory cancer models suggesting RSK could be a promising new angle to fighting TNBC which is currently a formidable disease.