PHOENIX MOLECULAR DESIGNS

• Phoenix Molecular Designs (PhoenixMD) is precisely designing drugs to target RSK (p90 ribosomal S6 kinase). They discovered RSK to be the most tractable drug target for Triple-Negative Breast Cancer (TNBC), the most aggressive form of breast cancer for which there are no targeted therapies available. TNBC constitutes 15-25% of all breast cancer cases and is diagnosed in 400,000 women each year worldwide. Scientists at PhoenixMD determined that the RSK pathway promotes the development of TNBC and as such is expressed in >80% of tumors. Furthermore, blocking RSK kills TNBC cells and eliminates the cancer stem cells, presenting a novel opportunity for improved treatment.

• They have developed proprietary small molecule inhibitors against RSK. Some of the striking features of their lead molecule PMD-026 are its 1) high potency, 2) excellent safety, 3) good pharmacokinetics, and 4) impressive efficacy against the growth of tumors in mice. PMD-026 is unique in that it does not cause neutropenia or cardiotoxicity like other kinase inhibitors.

• Their intellectual property position is strong in that a freedom to operate analysis has been completed and a composition of matter patent was filed. In addition, PhoenixMD holds a method of use patent for RSK inhibitors in breast cancer.

• The estimated sales for PMD-026 in TNBC is ~$2B/year. This is based on comparisons made to other kinase inhibitors in the breast cancer market such as Herceptin and Ibrance. Beyond breast cancer, RSK is a proven drug target for 14 other types of cancer (prostate, lung, colon, etc,), and inhibitors overcome drug resistance.

• PhoenixMD is positioned to be the first company to develop RSK inhibitors for cancer patients. At present, PMD-026 has better pharmacological activity compared to the competition.

To learn more about the exciting opportunities at Phoenix visit www.PhoenixMD.ca