WORLD PHARMACEUTICAL TECHNOLOGY, LLC

Steadfast Biomedical Research & Development

BIOMEDICAL RESEARCH

We are leading the biomedical industry with new promises for drug discovery. Having a strong track record in biomedical research for more than a decade, we have worked with many proven industry professionals to bring variety of ways to access drug discovery innovation in reaching desired proof of concept.

Given an incredible R&D environment privileged with access to a two-story 65,000 square ft. facility, diversified laboratories and state-of-the-art equipment, our best-in-class R&D team is advanced with the deepest insights from biomedical literature through molecular mechanism investigation to fuel development of new treatment solutions. We focus on pre-clinical studies and develop multi-disciplinary technology platforms applied in divergent aspects to fuel development of innovative products. We deploy a market-driven approach to identify the limitations of current

treatment options and work to develop products that may address these limitations in areas of efficacy, safety, and/or patient experience.

Research innovation always plays a crucial role in the development of new medicines and for the progress of evidence-based medicine. The Company strives for integrated innovation that delivers better healthcare for a better life. The team has created a process that leverages our unique competitive advantage – the integration of our in-house and collaborative R&D capabilities in the development of new treatments. Our pre-clinical research is primarily focused on:

- Understanding the molecular mechanisms underpinning disease
- Applying new technology in an innovative and thoughtful manner
- Generating diagnosis hypotheses early to incorporate into pre-clinical studies
- Leveraging collaboration to capitalize on cutting-edge science

CANCER EXPLORATION

We are committed to building a focused portfolio of safe drug products to a host of disease indications at various stages, in breast, colon and prostate cancer. Progress in cancer research over the past ten years has helped our scientists gain a greater understanding of cancer cell metabolism and how cancer cells interact – metabolically speaking – with neighboring cells in the tumor microenvironment in order to secure the nutrients they need to proliferate.

During pre-clinical studies of anti-cancer drugs, our team applies a holistic approach called New Therapeutic Entities (NTEs), which aims to create novel new treatments based on existing molecules and makes some medicines even better. We are focused on applying a library of compounds (derived from natural compounds or synthetic) to identify most effective compound for inhibiting tumor cell lines. As investigating the possible signaling pathway within the cells that can be inhibited by the candidate compound, we further adopt a secondary preclinical testing indicating direct interaction of our compound with the target protein(s). Our cancer research team is very capable of the following tasks:

- Zoom in on very specific relationships of drugs
- Decide which drug candidates to progress
- Compare the effectiveness and safety between drugs
- Determine how to design preclinical studies
- Rapidly retrieve relevant information from trusted sources
- Build searchable, comprehensive databases of all evidence
- Support the publication of original research

- *Tumor Targets and Pathways in Cancer*

Through scientific discovery, we are dedicated to advancing the fight against cancer and identifying the next generation of targeted strategies. Targeted strategies aim to recognize altered or overexpressed proteins and their associated pathways. How cancer cells exploit these signaling pathways is still unknown and remains a core topic in our cancer research as an important area of investigation.

Many intricate differences exist among tumor types and across patients, and some signaling pathways exhibit the ability to influence an immune response. With a focus on combination regimens, our cancer research team aims to advance a personalized approach, and a more comprehensive understanding of cancer and its complexities.

- *Cancer Immunity Targets*

The Company is actively exploring the potential of disrupting the immunosuppressive processes that promote tumor growth, and bolstering the immune system's power to fight cancer. The immune system plays a crucial role in protecting the body against cancer by recognizing and destroying cells it perceives as foreign. Cancer immunity strategies aim to restore the immune system's abilities to mobilize an antitumor immune response.

Some strategies aim to override the mechanisms that prevent T cells from mounting an immune response. Some aim to negate the mechanisms that prevent T cells from infiltrating the tumor microenvironment. Others seek to stimulate an immune response, thereby strengthening detection and destruction of newly transformed or developing tumors, and reducing the likelihood of further tumor growth and metastases.

Since multiple immune inhibitory mechanisms are often present concurrently, Genentech aims to evaluate and develop diverse combination strategies to optimize the antitumor immune response.

- *Small Molecules for Targeted Inhibition Of Intracellular Tumor Mechanisms*

Small molecules are low-weight, chemical-based compounds and are referred to by their size in contrast to larger, biological molecules, such as monoclonal antibodies and other proteins. Unlike monoclonal antibodies, which primarily target extracellular tumor components, such as ligands and receptors, small molecules are able to pass through cellular membranes to engage intracellular targets. Inside the tumor cell, small molecules bind to proteins or nucleic acids and are designed to regulate the activity of

the target by inhibiting its function or by disrupting specific protein-protein interactions.

Over the last decade, we have pioneered foundational research behind targeted antitumor strategies with small molecules - a cornerstone of modern precision medicine. Through intensive research in both Cancer Metabolism and Tumor Targets, our team strives to further advance the potentially complementary role of small molecules in combined regimens for patients who are currently underserved. Our dedicated science team continues to define the molecular basis of cancer from target identification to pre-clinical candidate through our integrated drug discovery platform that provide a comprehensive, personalized approach in the fight against cancer.

The Company is also exploring selective targeting with small molecules to exploit vulnerabilities in cancer cells.

- *Micro-Nanotechnology*

The Micro-Nanotechnology and molecular engineering researches are concerned with the design and testing of micro-devices, which can affect the behavior of individual molecules or systems of molecules to perform specific functions. The nature of molecular interactions allows for an innumerable amount of potential applications. The recurrence of cancer disease is often very difficult to detect until the cancer becomes established in another organ. A detailed understanding of why cancer cells are attracted to certain areas in the body opens up all sorts of therapeutic and diagnostic possibilities. There's something we can do to interrupt that attraction and prevent cancer from colonizing an organ in the first place.

- *Cardio-Metabolic*

The goal of cardio-metabolic research is to foster collaborative solutions for improving minority health and reducing ethnic and geographic disparities in cardiovascular and related diseases. The cluster aims to accelerate research advances by employing innovative, multi-disciplinary and inter-institutional team-science approaches aimed at improving minority health and reducing ethnic and geographic disparities in the incidence and outcomes of cardio-metabolic diseases.

Triple Negative Breast Cancer (TNBC)

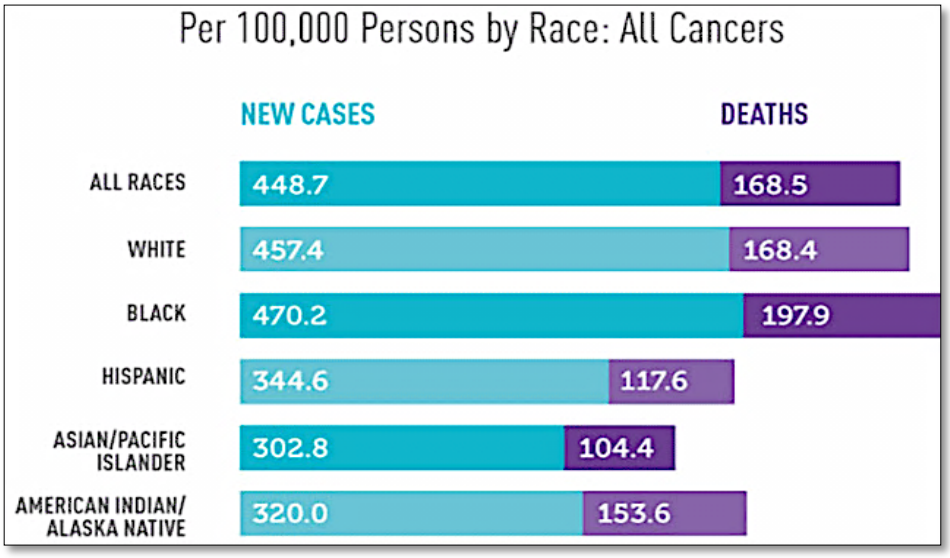
A tough-to-treat Form of Breast Cancer

Breast cancer is being studied in many medical centers throughout the world. Researchers around the world are working to find better ways to prevent, detect, and to improve the quality of life of patients and survivors. Cancer patients who currently have important unmet treatment needs may have the most to gain from the targeted drugs for TNBC treatment.

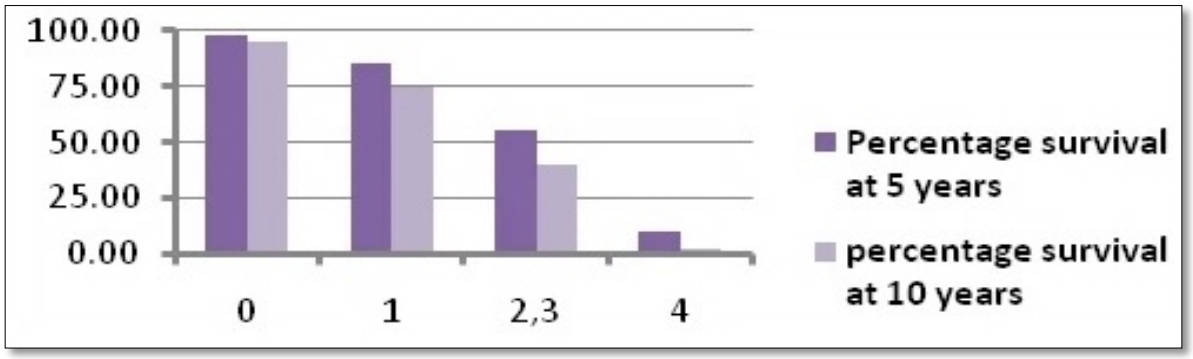
➢ *Background*

The world has a pressing need for a new chemical entity and a novel strategy for drug combinations to combat Triple-negative breast cancer (TNBC), a deadly relapse-prone type cancer that accounts for one-fourth of all BCs, and has the worst prognosis with no approved targeted therapies. TNBC tends to affect younger, African American women, particularly those with higher body mass index. This invasive cancer does not rely on the hormones estrogen and progesterone for growth, nor on human epidermal growth factor receptor 2 (HER2). Since they do not depend on these three targets, they are invulnerable to modern hormonal therapies or to the HER2-targeted drug Herceptin. Oncologists treat TNBCs with older chemotherapies that target all dividing cells. If TNBC spreads beyond so-called metastasis, there are few treatment options.

➢ *New Cases & Survival Rates*



Average number of new cancer cases & deaths yearly



Breast Cancer survival rates by various BC stages

➢ *Pain Points for TNBC*

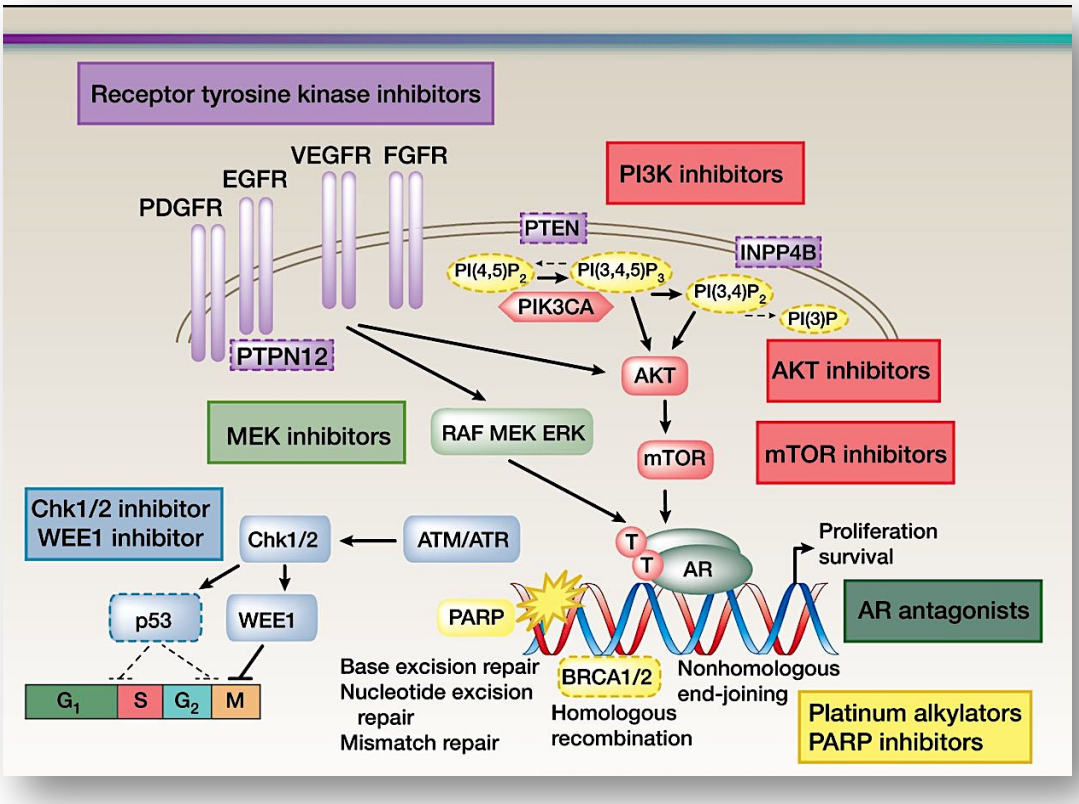
- About15-20 percent of people with breast cancer have TNBC
- TNBC is often more aggressive than other types of cancers. That can make treatment more difficult
- Hormone Therapy isn't usually an effective treatment for TNBC. Instead, treatment often involves chemotherapy, radiation, and surgery
- Potential downside of earlier access to drugs is that less information would be available about long-term efficacy and safety

➢ *TNBC Target Found*

Advancement of cancer drug research owing to targeted therapies hold promising opportunities for the Company. Breast cancer patients who currently have important unmet treatment needs may have the most to gain from the targeted drugs for treatment. In a recent pre-clinical study, our scientists have successfully revealed a promising target that drives cancer metabolism in TNBC. In the study, the team identified an Achilles' heel within TNBC, and then used humanized animal molecule to successfully target this vulnerability, killing cancer cells in the lab and shrinking tumors in mice.

➢ *Novel Agents & Targets for TNBC*

Breast cancer patients who currently have important unmet treatment needs may have the most to gain from the targeted drugs for TNBC treatment.



➢ *Inhibiting Cancer Metabolism*

Tumor cells develop abnormal metabolism, which they rely on to get the energy boost they need to fuel their rapid growth. TNBC cells rely on vigorous activity by an Enzyme that regulates a type of metabolism called glycolysis. Our study shows that inhabitation of such Enzyme impairs glycolytic metabolism in TNBC, starving them of energy, nutrients and signaling capability. Normal cells do not rely as much on this particular metabolic pathway to obtain usable chemical energy, but cells within many tumors heavily favor glycolysis. Significant achievements related to the new treatments for TNBC have been made and further work is needed in order to optimize the drug-like candidate and serve as the basis for precise medicine with few or no side effects. It is confirmed that our distinct approach would only prevent the proliferation of cancer cells; it would NOT damage the healthy cells or cause other serious side effects. This innovation would have the potential to present additional options for the treatment of advanced, resistant and metastatic breast cancer patients. Findings from the study have been documented and filed with the US Patent Office.