INVEST IN **TTC ONCOLOGY**

TTC Oncology developed TTC-352, a small molecule to fight breast cancer

PITCH VIDEO INVESTOR PANEL

ttconcology.com Minneapolis MN

Technology Female Founder Healthcare Bio Tech Therapy

Highlights

1. Novel mechanism of action therapy for hormone resistant of breast cancer.
2. Intellectual property protected until 2033.
3. Safe and well tolerated oral capsule therapy.
4. Biomarker that identifies breast cancer that will respond well to TTC-352.

3 Safe and well tolerated oral capsule therapy.

4 Biomarker that identifies breast cancer that will respond well to TTC-352.

5. Completed first in human clinical trial.
6. Synergistic activity with PI3K inhibitors

Our Team

Arkadiusz Dudek Chief Executive Officer

Fundraising that allowed completion of phase 1 clinical trial.

I am medical oncologist (cancer specialist), and I treat breast cancer. I have recognized that I need to have safer, better tolerated, and more effective therapies for breast cancer. In 2013 I have reached out to chemist, Dr Greg Thatcher, to see if he can help. That led to development of TTC-352 capsule.

Arkadiusz Dudek Chief Medical Officer

Completion of Phase 1 clinical trial with TTC352

Debra Tonetti Chief Scientific Officer

Discovery of biomarker of resistance to hormonal therapy.

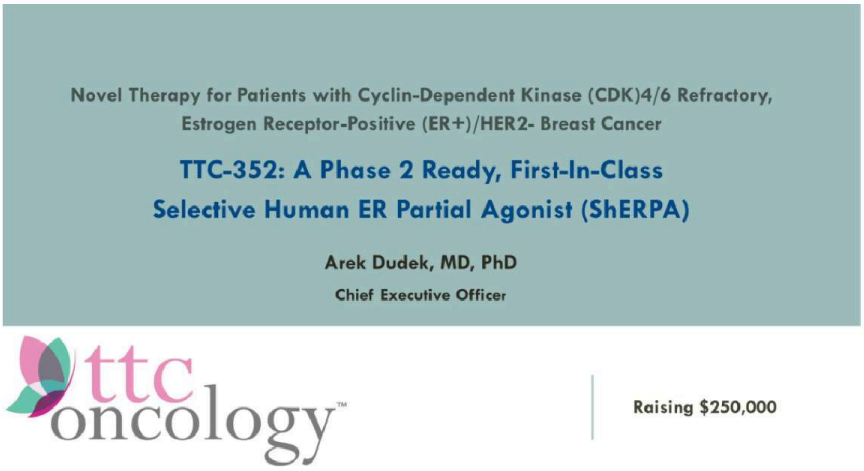
Gregory Thatcher Chief Technology Officer

Development of several compounds for therapy cancer.

Melody Pekarek General Manager

Managing TTC Oncology

Pitch



- Why TTC Oncology is a great opportunity

COMPANY AT A GLANCE

Our Focus: Development of TTC-352 for ER+/HER2- Breast Cancer

Novel mechanism of action: selective ER partial agonist	Completed Phase 1 clinical trial	Oral capsule formulation

LLC with **$6.35M** invested to date

- Worldwide exclusive rights licensed from University of Illinois
- 2 US patents issued protecting novel composition
- US and international patents pending
- Seeking Series A investment to complete Phase II studies to advance corporate development dialogues

MEET OUR TEAM

Over 45 Years of Oncology Research and Over 30 Years of Drug Development Experience

Arkadiusz Dudek, MD, PhD
CEO and CMO

- Medical oncologist
- Professor, University of Minnesota
- >20 years experience in development of cancer therapeutics
  - Prior CMO of Vanquish Oncology, Luminary Therapeutics, IGF Oncology, and Squarex
- Former CMO of Adhaere

Greg Thatcher, PhD
CTO

- Professor, University of Arizona
- Designer of TTC-352 and other therapeutics

Klara Czobor
Director of Development

Debra Tonetti, PhD
CSO

- Professor, University of Illinois at Chicago
- Experienced cancer biology researcher
- Instrumental in development of biomarker for hormone resistant breast cancer

Melody Pekarek
Manager

THE UNMET NEED: HIGH PREVALENCE OF ER+ BREAST CANCER

2.1 Million	**~10%** are metastatic at diagnosis[3]	**27%**
Total cases in the US, representing ~73% of all breast cancers[1,2]	**Up to 60%** of localized cancer relapse systemically[3]	**Survival Rate** For metastatic ER+ breast cancer[3]

Problem:

- Majority of patients with breast cancer are treated with hormonal therapy, and all metastatic tumors develop resistance, and the only remaining treatment is toxic chemotherapy[3]

Market size:

- Ibrance (CDK4/6 inhibitor): Worldwide sales of $4.96B in 2019
- Piqray [phosphatidylinositol-3 kinase (PI3K) inhibitor]: Worldwide sales of $153 M in Q1/2 2020 following launch in 2019

1. United States Census Bureau. 2. American Cancer Society® Breast Cancer Facts & Figures 2019-2020. 3. Rozeboom B, et al. Am J Cancer Res. 2009; 9(12):2821-2831.

THE UNMET MEDICAL NEED: TOXICITY ASSOCIATED WITH STANDARD OF CARE

Potent ER agonists

- Estradiol
- High-dose estrogen (HDE)

Anti-Estrogen Drugs

- Selective ER modulators (SERMs) (eg, tamoxifen)
- Aromatase inhibitors (AIs) (eg, anastrazole)
- Selective ER degraders (SERDs) (eg, fulvestrant)
- CDK4/6 inhibitors (eg, palbociclib)

"Treatment of advanced breast cancer with HDE is as effective as tamoxifen and AIs and is also effective after the development of resistance to TAM and AIs. However, HDEs have the negative reputation of having side effects."[1]

One third of patients on hormonal therapy discontinue treatment because of toxicity.[2]

1. Benninck,et al. The use of high-dose estrogens for the treatment of breast cancer, *Maturitas* 95, (2017) 11-23. 2. Berkowitz MJ, et al. How patients experience endocrine therapy for breast cancer: an online survey of side effects, adherence, and medical team support. *J Cancer Surviv*. Published online August 17, 2020. doi:10.1007/s11764-020-00909-5

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PHASE 1 STUDY OF TTC-352 IN PATIENTS WITH METASTATIC BREAST CANCER PROGRESSING ON ENDOCRINE THERAPY

Open-label, accelerated dose escalation study in patients who failed 2 or more lines of hormone therapy, including a CDK4/6 inhibitor

Eligibility criteria:
- Metastatic
- Histologically confirmed ER+ and/or PR+ breast cancer
- Disease progression on ≥2 lines of endocrine therapy including a CDK4/6 inhibitor

TTC-352 BID for 28-day cycles (N=15)

Patients received sequential 28-day cycles of treatment until disease progression, unacceptable toxicity, or other reason to discontinue treatment.

Outcomes:
- Established safety and dose for phase II testing
- Plasma levels of TTC-352 in patients exceed active levels in animal models
- **Observed activity in patients with heavily pretreated breast cancer, a patient population with few effective treatment options**

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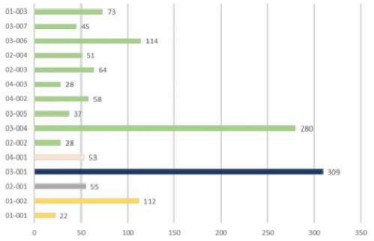
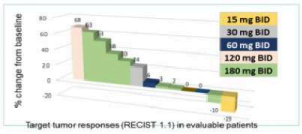
ACTIVITY IN HEAVILY PRETREATED BREAST CANCER PATIENTS

Breast cancer patients failed a median of 9 different hormonal and chemotherapy treatments before starting TTC-352

Duration of Treatment (Days)



Tumor Shrinkage



- **7 out of 15 patients obtained stable disease**
- **Mean PFS for all patients was 89 days (range: 22-309 days)**
  - Analysis of clinical outcomes after failure of palbociclib and endocrine therapy shows time to treatment failure of only 3.8 months (95% CI 3.5-4.8)[1]

1. Rossi L, et al. *Breast Cancer Res.* 2019; 21(1):71. doi: 10.1186/s13058-019-1149-5.

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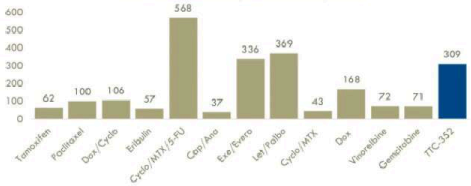
BEST RESPONDERS IN PHASE I STUDY

49-Year-Old Woman with ER+, PR+, HER2- breast cancer with visceral metastases

- After trying multiple prior lines of hormonal and chemotherapies, patient was given TTC-352 at 60 mg BID

Prior Treatment Regimens in Sequence



TTC-352 induced 6% tumor shrinkage and controlled disease for 309 days with negligible toxicity.

- Patient's husband thanked the treating oncologist for giving his wife her life back

5-FU=5-fluorouracil; Ana=anastrozole; Cap=capecitabine; Cyclo=cyclophosphamide; Dox=doxorubicin; Evero=everolimus; Exe=exemestane; Let=letrozole; MTX=methotrexate; Palbo=palbociclib.

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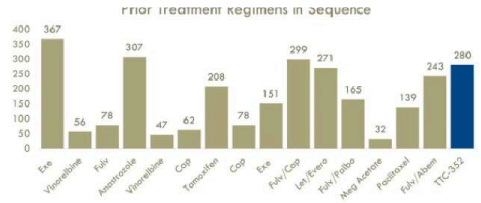
BEST RESPONDERS IN PHASE I STUDY

77-Year-Old Woman with ER+, PR+, HER2- breast cancer with bone metastases and ESR1 (D538G) mutation

- After trying multiple prior lines of hormonal and chemotherapies, patient was given TTC-352 at 180 mg BID



TTC-352 treatment resulted in stable disease, controlled for 280 days with negligible toxicity.

Abem=abemaciclib; Cap=capecitabine; Evero=everolimus; Exe=exemestane; Ful=fulvestrant; Let=letrozole; Meg=megestrol; Palbo=palbociclib.

COMPETITIVE LANDSCAPE

The current competition includes:

- PI3K inhibitors; examples:
  - Alpelisib
  - Taselisib
  - Pictlisib
- AKT inhibitors

However, PI3K and AKT inhibitors are effective in a small fraction of ER+ breast cancer patients **and** in combination with other agents.

TTC-352 has a key competitive advantage of being non-toxic compared with products currently in the marketplace.

KEY OPINION LEADERS

The Platform Technology is Already Recognized by Leading KOLs

V. Craig Jordan, CMG, OBE, PhD, DSc, FmedSci
Dallas/Fort Worth Living Legend Chair of Cancer Research
Prof. of Breast Medical Oncology and Molecular and Cellular Oncology
MD Anderson Cancer Center

Ruth O'Regan, MD
Chief of Hematology, Medical Oncology and Palliative Care
Prof. of Medicine
Chair, Department of Medicine
University of Rochester

"TTC-352 provides a novel, non-toxic option for patients with hormone-refractory metastatic breast cancer."

Douglas Yee , MD, PhD
Director of the Masonic Cancer Center
Prof. of Medicine and Pharmacology
University of Minnesota

Gini F. Fleming, MD
Prof. of Medicine
Director, Gynecologic Oncology
University of Chicago

"Degree of disease stabilization on TTC-352 in patients with prior CDK4/6 inhibitor therapy makes this treatment worth pursuing. It is certainly less toxic option than chemotherapy."

DEVELOPMENT STRATEGY

Lead drug, TTC-352, is a first-in-class ShERPA effective in tamoxifen-resistant, ER+ breast cancer

Completed Phase 1 Study

- Patient population was heavily pre-treated with at least 2 lines of hormonal/chemotherapy including a CDK4/6 inhibitor
- Results:
  - TTC-352 was very well tolerated across all tested dose levels
  - TTC-352 induced remarkable disease stability in 4 patients (range, 112 -309 days)
  - Clinical evidence of biomarker predicting benefit from TTC-352

Planned Phase 2 Studies Leading to Partnerships

- TTC-352 vs physician's choice second line therapy of ER+ breast cancer after failure of hormonal therapy and CDK4/6 inhibitors
- Single agent therapy of ESR1-mutated breast cancer
- Combination of TTC-352 with CDK4/6 inhibitor (study in partnership with pharma)
- Combination of TTC-352 with PI3K inhibitor (study in partnership with pharma)

Planned Phase 3 Study Leading to Series B Approval

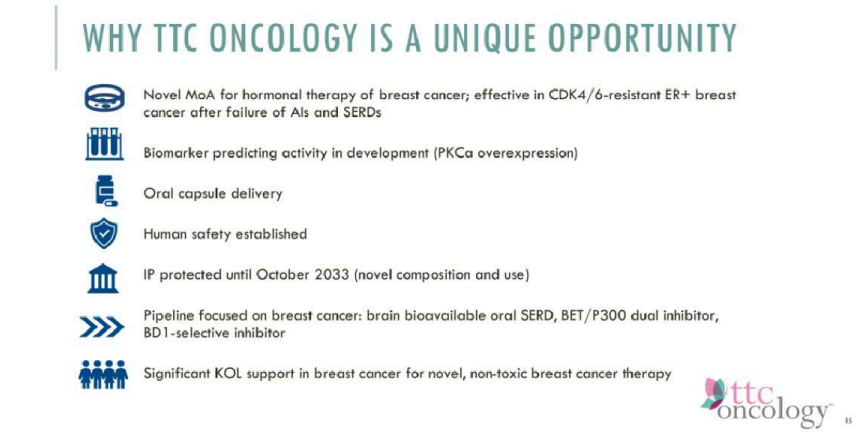
- Biomarker driven randomized study of TTC-352 versus physician's choice standard of care

FINANCING

Seeking $250,000 Bridging Funding to Prepare Pathway in Discussion with FDA for Studies Needed for Drug Approval

Planned Studies Supported with Series A

- Randomized Phase 2 Study with Biomarker Validation
- Phase 1B/2 of TTC-352 with PI3K Inhibitor



Downloads

Dudek2020 TTC-352.pdf