ZENITH EPIGENETICS

Developing Epigenetic Combination Therapies: Making Great Drugs Work Better & Longer

Annual General Meeting

October 31, 2019

Forward Looking Statement

Safe Harbor Statement. This presentation contains forward-looking statements that involve risks and uncertainties, which may cause actual results to differ materially from the statements made. For this purpose, any statements that are contained herein that are not statements of historical fact may be deemed to be forward- looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Without limiting the foregoing, the words "believes," "anticipates," "plans," "intends," "will," "should," "expects," "projects," and similar expressions are intended to identify forward-looking statements. You are cautioned that such statements are subject to a multitude of risks and uncertainties that could cause actual results, future circumstances, or events to differ materially from those projected in the forward-looking statements. These risks include, but are not limited to, those associated with the success of research and development programs, the regulatory approval process, competition, securing and maintaining corporate alliances, market acceptance of the Company's products, the availability of government and insurance reimbursements for the Company's products, the strength of intellectual property, financing capability, the potential dilutive effects of any financing, reliance on subcontractors and key personnel. The forward-looking statements are made as of the date hereof, and the Company disclaims any intention and has no obligation or responsibility, except as required by law, to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

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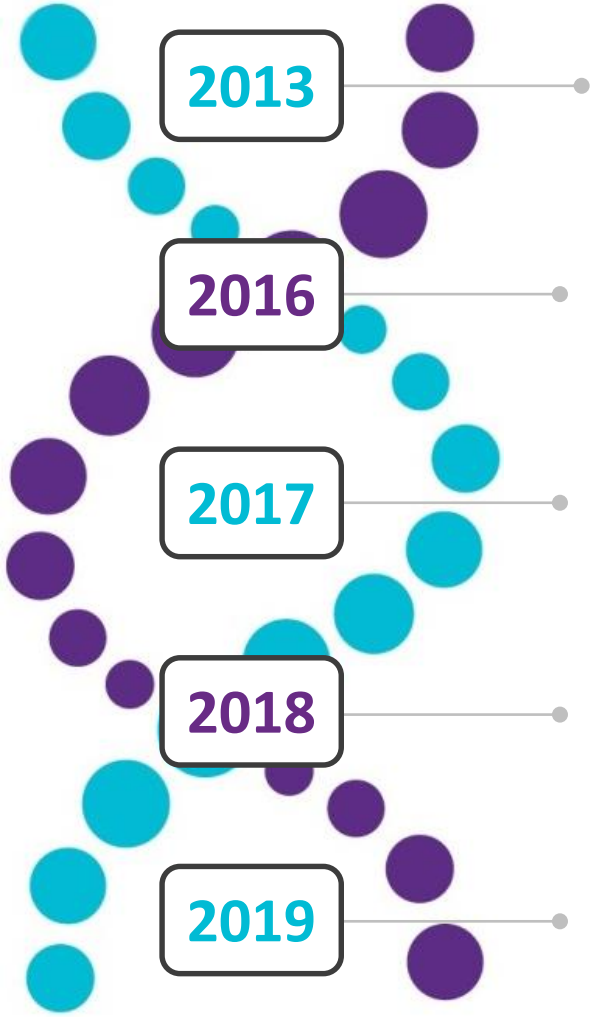
Corporate Profile and Milestones Leading to Major Collaborations

ZENITH EPIGENETICS

Company	Mid-clinical stage stage Epigenetics, oncology
Programs	Multiple Phase 2 POC combination clinical trials
Cash Raised	~USD$55M
Partnerships	Newsoara Pfizer



2013 — Spun out from Resverlogix Corp. (TSX:RVX)

2016 — Initiated combination study with Enzalutamide in mCRPC patients

2017 — Announced issuance of US patent for ZEN-3694

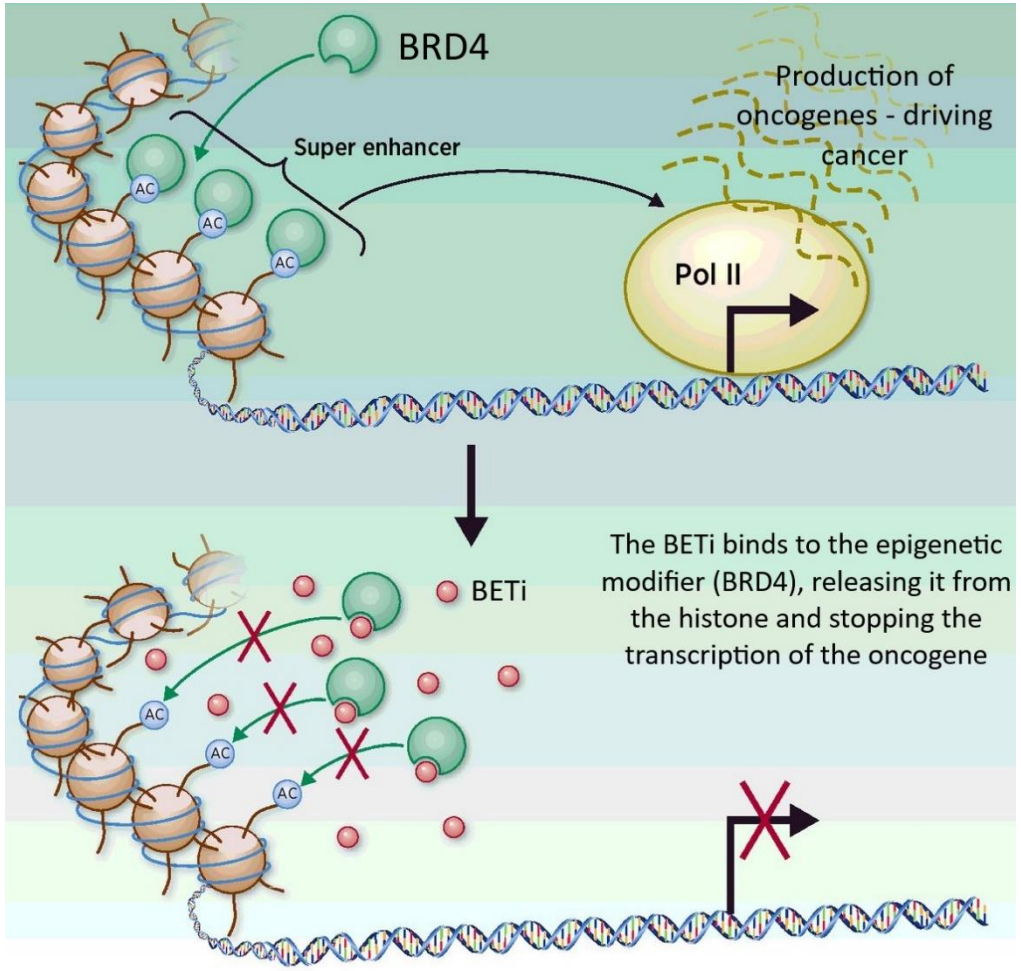
2018 — Pfizer clinical trial collaboration announced

2019 — Newsoara China Partnership

UCSF initiated clinical study using Keytruda, Enzalutamide and ZEN-3694 for mCRPC

BET Inhibitors Target Resistance Mechanisms

Re-Sensitizing Tumors to Existing Therapy



- BET (bromodomain and extra-terminal domain) proteins are key regulators of oncogenic transcription factors
- Many of the resistance mechanisms to standard of care treatments involve epigenetic modulation by BET proteins
- BET inhibitors (BETi) inhibition expression of tumor oncogenes by disruption of super-enhancers

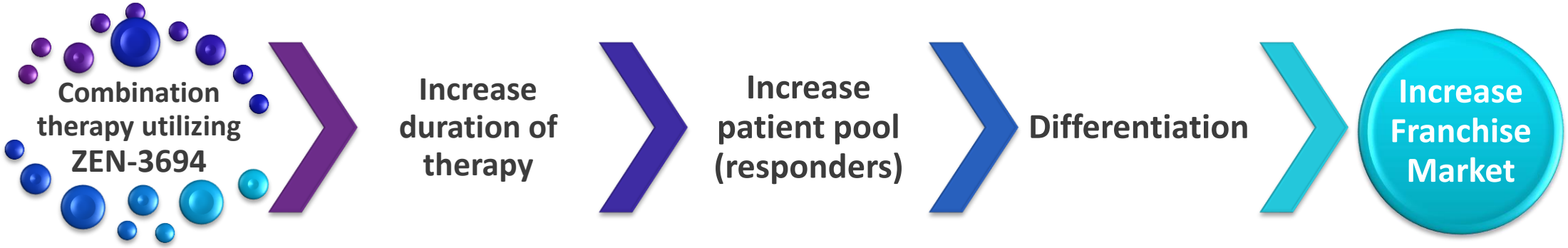
Adopted from Clinical Cancer Research 2017, 23(7), 1647-55.

Our Approach: Making Great Drugs Work Better & Longer

Combination therapies with ZEN-3694 represent multi-billion dollar addressable markets

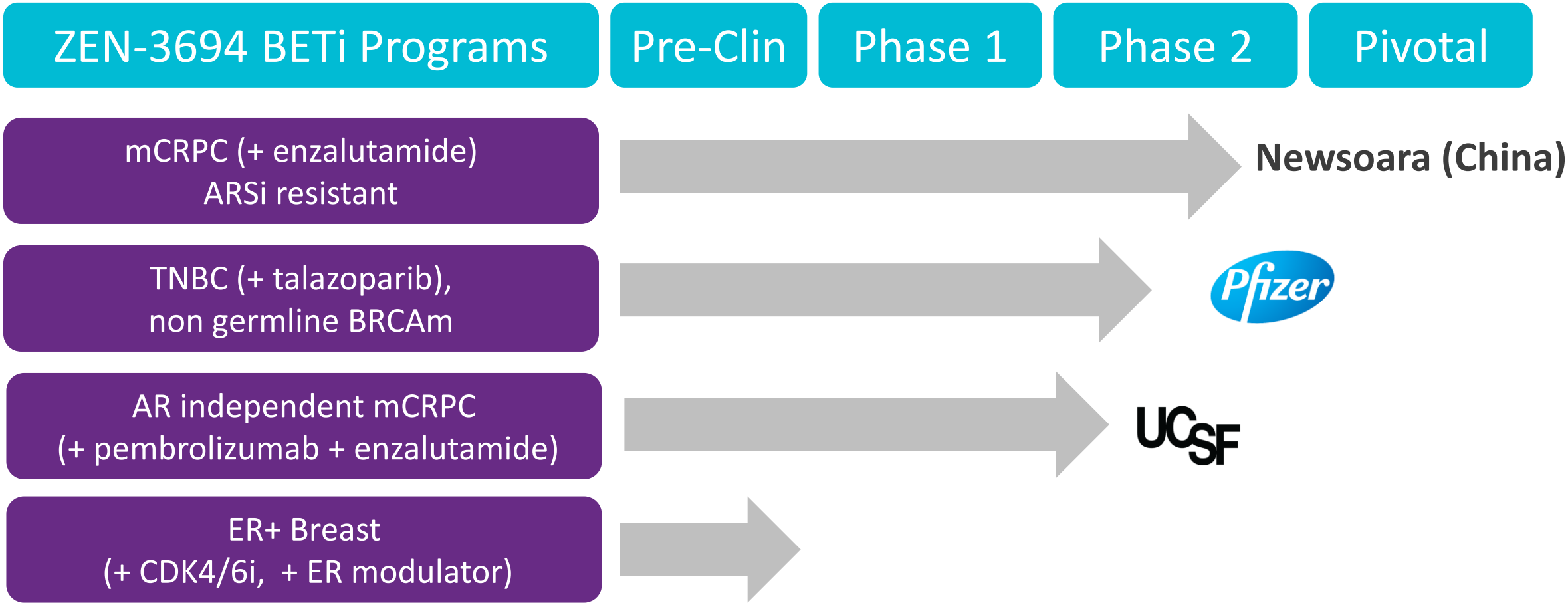
Current markets include:

- AR antagonists
- PD-1/PD-L1 monoclonal antibodies
- CDK 4/6 inhibitors
- PARP inhibitors



Clinical Pipeline

Developing multiple epigenetic combination cancer therapies that significantly expand the value of existing standard of care therapeutics



Prostate Cancer (mCRPC) Program Review

Phase 2a completing; Phase 2b/3 Planned

Indication	2019	2020
Metastatic Castration-Resistant Prostate Cancer (mCRPC)	Combination expansion ZEN -3694 + enzalutamide; Patients progressed on ***abiraterone*** or ***enzalutamide***	Planned Phase 2b/3 mCRPC: Patients that progress on ARSi to ZEN-3694 + Enzalutamide vs Enzalutamide single agent

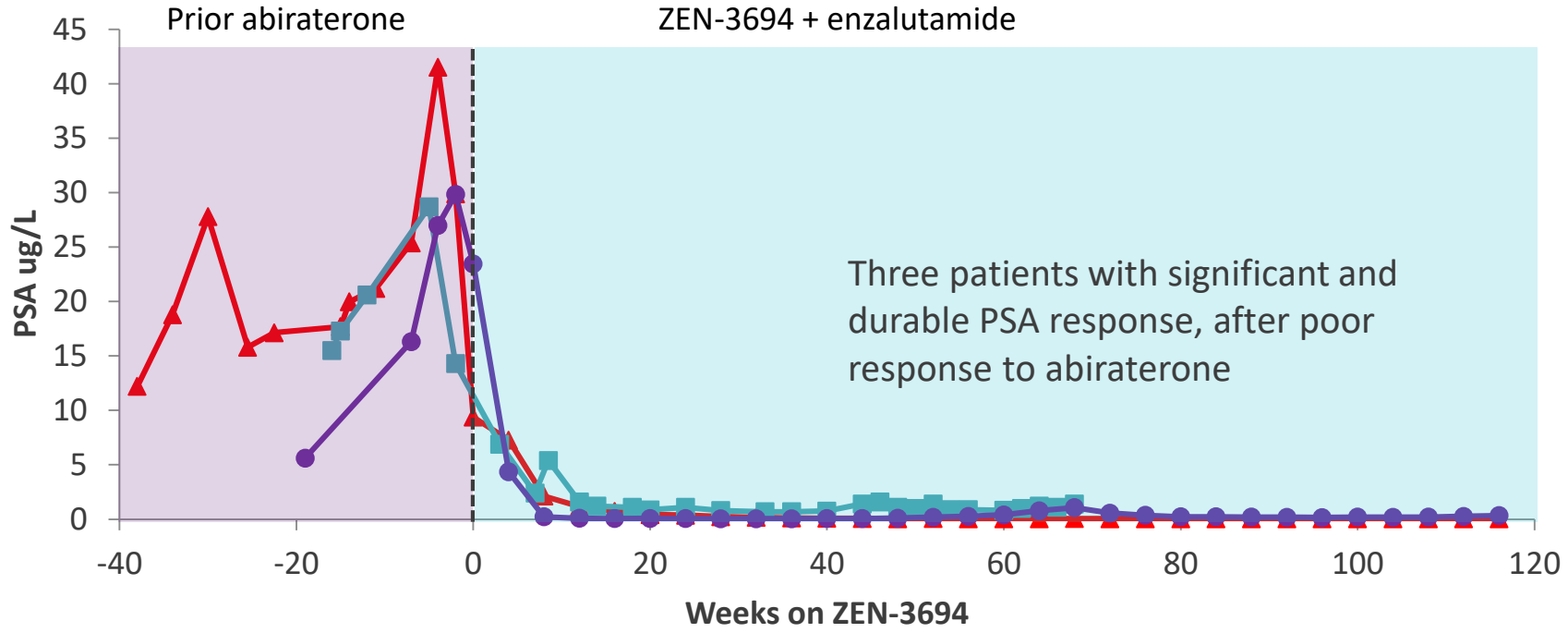
- **Prolonged rPFS of 44.6 wks with ZEN-3694 + enzalutamide compared to expected rPFS of 20-24 wks with single agent enzalutamide**
- **75/75 patients dosed to date, LPLV 11/19**
- **Well tolerated, chronic daily dosing**
- **Very positive FDA feedback for design of registration enabling study**

- >$3B* opportunity for ZEN-3694 in mCRPC
  - Will also increase overall market of ARSi to $5B* in mCRPC

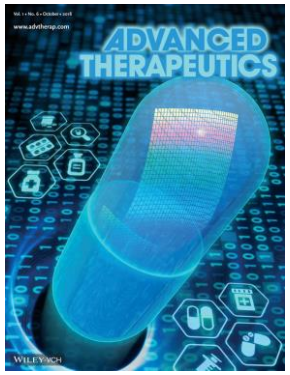
* Zenith revenue model

Durable PSA90 responses

In patients with primary resistance to abiraterone



Clinical data and AI platform show that both ZEN-3694 and enzalutamide required for durable PSA response



FULL PAPER

Artificial Intelligence

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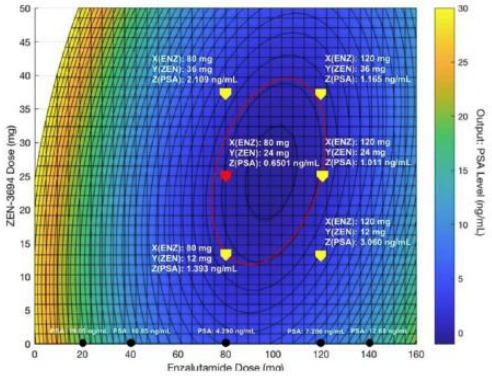
Modulating BET Bromodomain Inhibitor ZEN-3694 and Enzalutamide Combination Dosing in a Metastatic Prostate Cancer Patient Using CURATE.AI, an Artificial Intelligence Platform

Allan J. Pantuck, Dong-Keun Lee, Theodore Kee, Peter Wang, Sanjay Lakhotia, Michael H. Silverman, Colleen Mathis, Alexandra Drakaki, Arie S. Belldegrun, Chih-Ming Ho,* and Dean Ho**



Leading principal investigators and institutions for CRPC trial

Name	Institution	Comments
Rahul Aggarwal, MD Developmental Therapeutics Specialist, Genitourinary Oncologist Eric Small, MD Chief, Dept. of Medicine	University of California, San Francisco (UCSF)	National PI for Zenith's Phase 1b/2a study Lead PI of Apalutamide registration study (JNJ), Apalutamide , multiple $B forecast
Wassim Abida, MD, PhD Medical Oncologist	Memorial Sloan Kettering Cancer Center (MSKCC)	Experience with BETi and PARPi Experience with ARSi trials
Joshi Alumkal, MD Leader of the Prostate/Genitourinary Medical Oncology Section and Associate Division Chief for Basic Research in the Hematology-Oncology Division	University of Michigan	Expert in epigenetics and prostate cancer research
Tom Beer, MD	Oregon Health Sciences University	Developed enzalutamide - #1 CRPC drug, now owned by Pfizer
Michael Schweizer, MD Oncologist	University of Washington Fred Hutchinson Cancer Center	Experience with ARSi
David M. Nanus, MD Chief, Division of Hematology and Medical Oncology	Weill Cornell Medicine	Genitourinary oncology specialist

Pfizer / Zenith TNBC Clinical Trial Collaboration

Zenith Epigenetics Announces Clinical Trial Collaboration with Pfizer

November 20, 2018

Collaboration to evaluate ZEN-3694 in combination with Talazoparib in TNBC patients; Phase 1b/2 trial expected to initiate 1Q 2019

CALGARY, Alberta, Nov. 20, 2018 (GLOBE NEWSWIRE) -- Zenith Epigenetics Ltd. ("Zenith" or the "Company"), a wholly-owned subsidiary of Zenith Capital Corp., announced today that it has entered into a clinical trial collaboration with Pfizer Inc. ("Pfizer"; NYSE: PFE) to evaluate the safety and efficacy of a novel anti-cancer combination of Zenith's investigational bromodomain and extra-terminal domain inhibitor ("BETi"), ZEN-3694, and Pfizer's poly ADP ribose polymerase inhibitor ("PARPi"), talazoparib, in patients with locally advanced or metastatic triple negative breast cancer ("TNBC").

"Zenith is excited to announce this partnership with Pfizer, a leader in oncology," said Don McCaffrey, Chief Executive Officer of

herited BRCA gene mutations may

itial focus on triple negative breast

test in patients that are proficient in

pair genes and can thus potentially

Under the terms of the agreement, Zenith Epigenetics and Pfizer will collaborate on a Phase 1b/2 TNBC clinical study. Pfizer will provide talazoparib, Zenith will provide ZEN-3694, and both parties will fund the study. Zenith Epigenetics retains all rights to ZEN-3694.

Zenith Epigenetics Announces U.S. FDA Clearance of Investigational New Drug Application for ZEN-3694 in TNBC Program

March 18, 2019

Pfizer / Zenith TNBC program collaboration on target to dose first patient in April 2019

Pfizer / Zenith Clinical Trial Collaboration

Strong Rational for BETi/PARPi Combination Therapy

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Supportive Scientific Literature

SCIENCE TRANSLATIONAL MEDICINE | RESEARCH ARTICLE

CANCER

Repression of BET activity sensitizes homologous recombination–proficient cancers to PARP inhibition

Article

Cancer Cell

BRD4 Inhibition Is Synthetic Lethal with PARP Inhibitors through the Induction of Homologous Recombination Deficiency

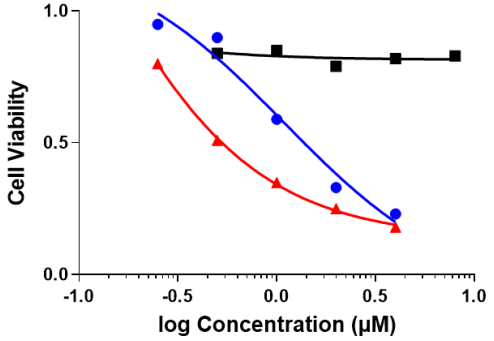
Report

Cell Reports

BET Bromodomain Inhibition Synergizes with PARP Inhibitor in Epithelial Ovarian Cancer

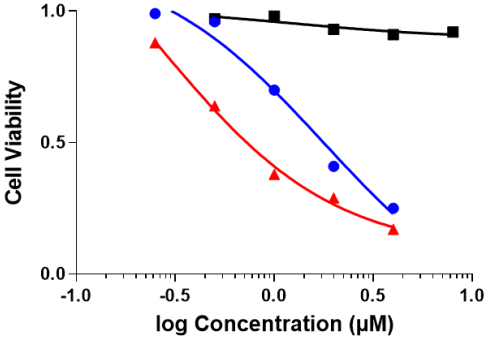
ZEN-3694 and talazoparib synergy in PDX spheres

Anti-tumor efficacy of ZEN-3694 in combination with talazoparib in MAXFTN *401 PDX (mBRCA)



* adenocarcinoma; M1; lung met; XRT

Anti-tumor efficacy of ZEN-3694 in combination with talazoparib in MAXFTN *1384 PDX



* adenocarcinoma; M1; brain met; XRT

Pfizer / Zenith Clinical Trial Collaboration Summary

Indication	2019	2020
Pfizer Collaboration: Triple Negative Breast Cancer (TNBC, non-BRCA 1/2m)	Phase 1b/2: Combination with PARPi (N~50)	

- **Objective**: Show safety and activity of ZEN-3694 + talazoparib in TNBC patients, non germline BRCA1/2m
- **Design**: Part 1: Dose escalation, Part 2: Simon 2-stage
- **Patient population**: TNBC: non-germline BRCA1/2 mutations, locally advanced or metastatic
- **Endpoints**: Part 1: Safety, PK/PD, MTD, RP2D; Part 2: Objective response rate (ORR), Duration of response (DOR), rPFS

- ~$400M* peak revenue for ZEN-3694 with significant upside
  - Movement to neo-adjuvant and 1st line TNBC
  - Expansion to other indications combining ZEN-3694 + PARPi in homologous proficient tumors (Ovarian, CRPC, ER+ breast)

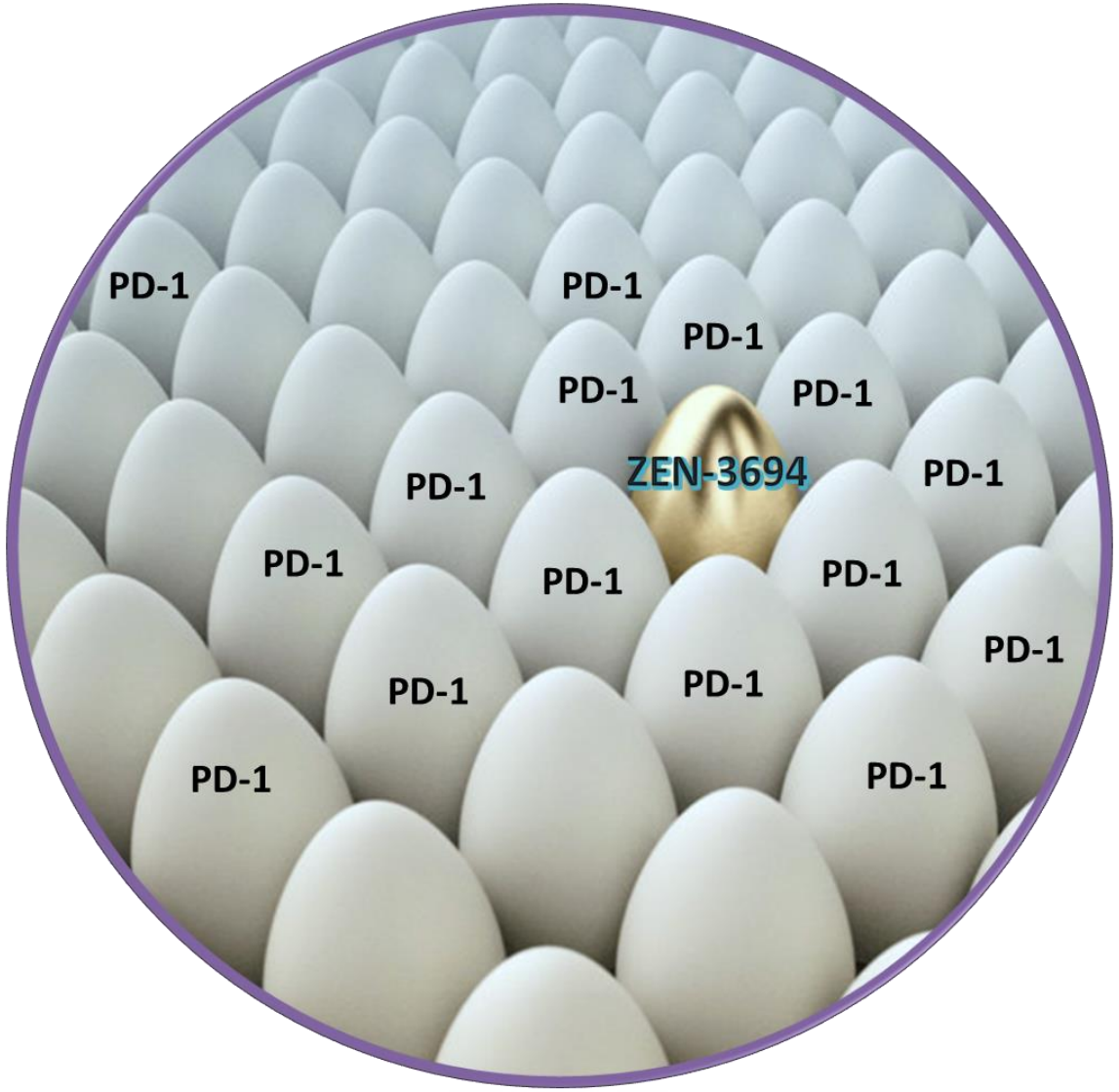
* Zenith revenue model

Pfizer / Zenith Clinical Trial Collaboration

Prominent Clinical Sites and Investigators; PARPi and breast cancer experts

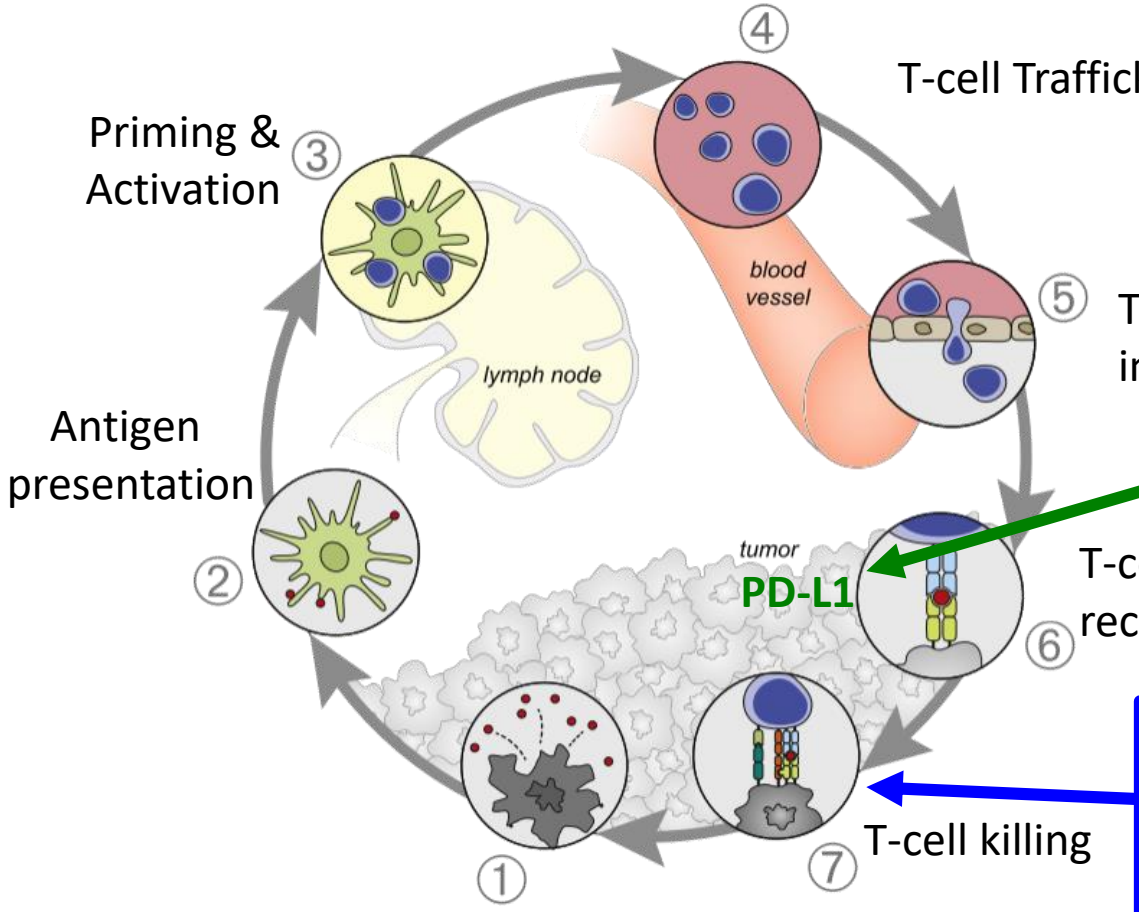
Institution	Investigator	Background
MSKCC	Mark Robson – Study Lead PI Ayca Gucalp - PI	Led OlympiAD breast cancer registration trial
MD Anderson	Jennifer Litton	Led EMBRACA breast cancer registration trial
Jules Bordet, Belgium	Philippe Aftimos	Led Merck and BI BETi trials
Banner Health	Lida Mina	Investigator on Phase 1, 2 and 3 Talazoparib trials
University of Kansas	Priyanka Sharma	TNBC specialist
University of Penn	Payal Shah - PI (Susan Domchek)	Talazoparib investigator, breast cancer specialist
Sarah Cannon	Erika Hamilton	Breast cancer specialist
UZ Leuven, Belgium	Kevin Punie	Breast cancer specialist
VHIO, Spain	Mafalda Oliveira	Investigator on Gilead and GSK ER+ BETi trials
StartMadrid, Spain	Valentina Boni	Breast cancer specialist

Significant Opportunity in Immuno-Oncology:



- ZEN-3694 works by blocking tumor immune evasion
- Combination potential with checkpoint mAbs
- Triple combination (ZEN-3694 + Keytruda + Enzalutamide) mCRPC

ZEN-3694 BET inhibition Disrupts Tumor Immune Evasion



Immune checkpoints/suppressive factors control TIL function and tumor recognition

BETi ignites CD8 TIL function by modulating PD-L1, other immune checkpoints, suppressive factors & regulatory cells

Trigger full potential of native CD8 TIL cascade & tumor killing
by combining BETi + immune checkpoint drug therapy

Chen & Mellman (2013) Immunity

Immuno-Oncology Opportunity:
Strong Rationale for Checkpoint Combinations

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Supportive Scientific Literature

Article

Cell Reports

BET-Bromodomain Inhibitors Engage the Host Immune System and Regulate Expression of the Immune Checkpoint Ligand PD-L1

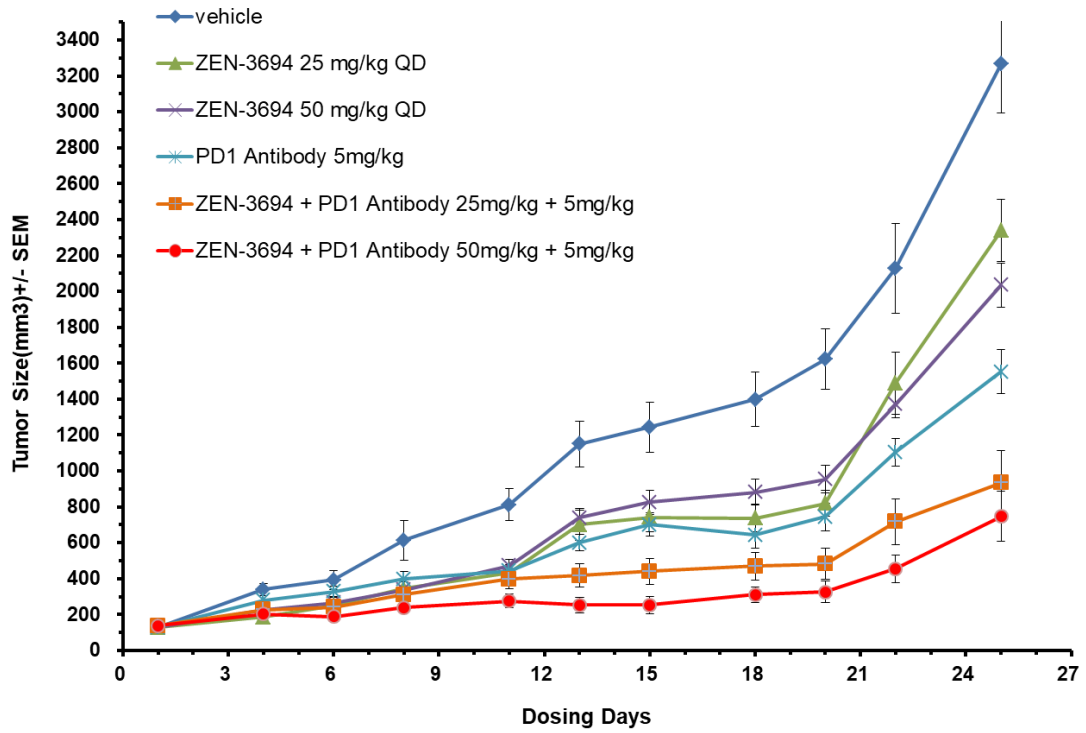
BET bromodomain inhibition enhances T cell persistence and function in adoptive immunotherapy models

Yuki Kagoya,[1] Munehide Nakatsugawa,[1] Yuki Yamashita,[1] Toshiki Ochi,[1] Tingxi Guo,[1,2] Mark Anczurowski,[1,2] Kayoko Saso,[1] Marcus O. Butler,[1,2,3] Cheryl H. Arrowsmith,[4,5] and Naoto Hirano[1,2]

[1]Tumor Immunotherapy Program, Campbell Family Institute for Breast Cancer Research, Campbell Family Cancer Research Institute, Princess Margaret Cancer Centre, University Health Network, Toronto, Ontario, Canada. [2]Department of Immunology, University of Toronto, Toronto, Ontario, Canada. [3]Department of Medicine and [4]Structural Genomics Consortium and Department of Medical Biophysics, University of Toronto, Toronto, Ontario, Canada. [5]Princess Margaret Cancer Centre, University Health Network, Toronto, Ontario, Canada.

BET bromodomain inhibition cooperates with PD-1 blockade to facilitate antitumor response in Kras-mutant non-small cell lung cancer. Adeegbe DO, et al. Cancer Immunol Res. 2018

ZEN-3694 enhances anti-PD1 activity in the syngeneic CRC model MC-38



Immuno-Oncology Combination Therapy with a BETi

Prostate Cancer – a cancer where immuno-oncology therapies have been unsuccessful

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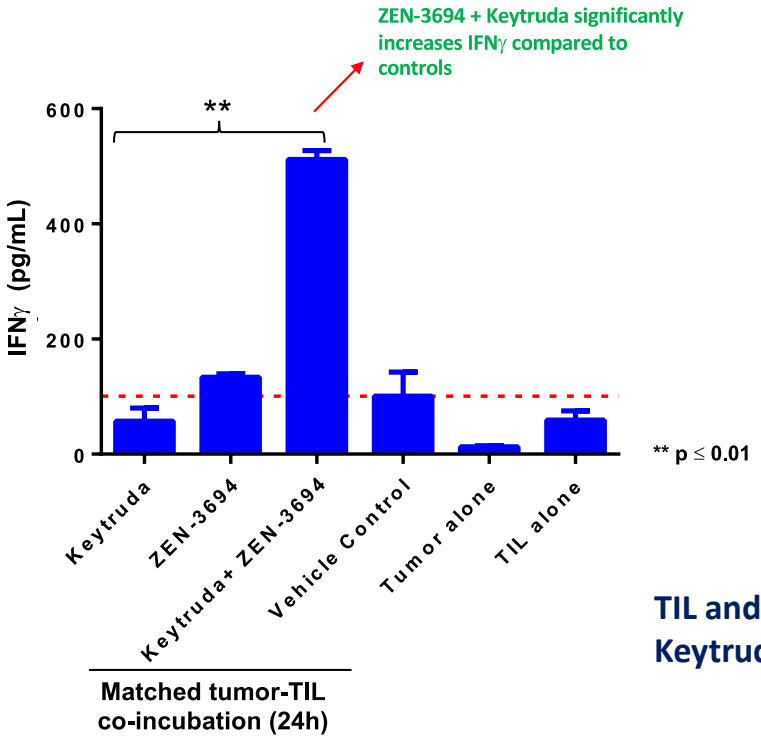
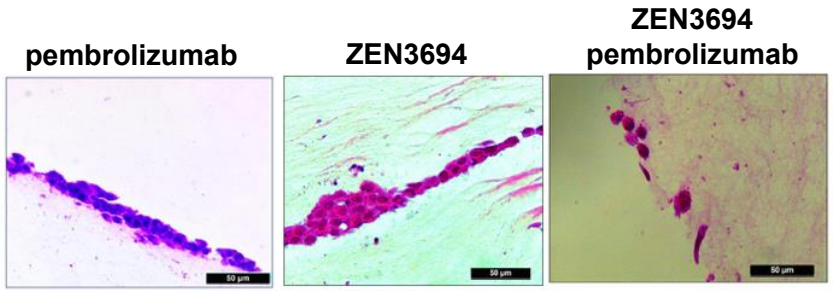
Functional effects of ZEN-3694 + Keytruda in Keytruda resistant model

#1. ZEN-3694 increases anti-PD1-induced IFN-g expression



** p ≤ 0.01

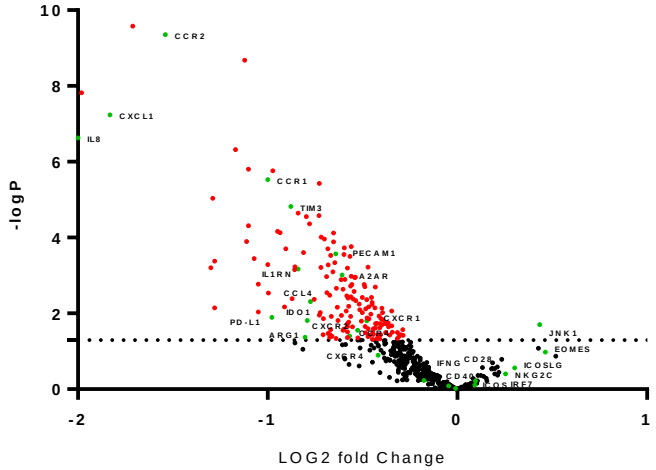
#2. ZEN-3694 + Keytruda demonstrates lysis of tumor cells



TIL and Melanoma Tumor 004
Keytruda-resistant (ImmunAccel)

Clinical Blood Data

#3. Blood gene expression changes at 4h, mCRPC clinical trial



Proof of Concept Trial Design: ZEN-3694 + PD-1 mAb Proof of Concept

Objective:
Revert primary/secondary resistance to anti PD-1 or PD-L1 inhibitors

Phase 1B/2: Renal/Melanoma/HNSCC/NSCLC/Bladder
ZEN-3694 + Checkpoint mAb combination

Rationale:
- BETi modulate PD-L1, suppressive and regulatory cells, other checkpoints

Study design:
- Dose escalation: ZEN-3694 + checkpoint mAb
- Dose Expansion : ZEN-3694 + checkpoint mAb, n~9 per tumor type (expand to additional 14 patients for tumor type with 1 or more responders)

Patient Population:
- Patients who become resistant to checkpoint inh. therapy (primary or secondary) - potentially select short duration responders

Endpoints:
- ORR, Safety

Summary

Zenith is focused on ZEN-3694 combinations with SOC extending and expanding the value of existing therapeutics

Multiple Phase 2 POC clinical trials

- **Prostate Cancer Program**: Promising clinical activity of ZEN-3694 + Enzalutamide in ARi resistant mCRPC patients, Very favorable FDA feedback for registration enabling study
- **Pfizer and Zenith collaboration (TNBC/PARPi):** Ph. 1b/2 of ZEN-3694 + PARPi in TNBC (non germline-BRCA1/2m) initiated
- **Immuno-oncology Program: ZEN-3694 + Pembrolizumab + Enzalutamide** in AR independent CRPC, Significant potential in other resistant tumors