**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.

**CONTACT:** Donald J. McCaffrey  
Chairman, President & CEO

Suite 300, 4820 Richard Road S.W. Calgary, AB, Canada T3E 6L1  
Tel: (403) 254-9252, Fax:(403) 256-8495, http://www.zenithepigenetics.com
Corporate Profile and Milestones Leading to Pfizer Collaboration

<table>
<thead>
<tr>
<th>Cash Raised 2014-2018</th>
<th>~US$50MM @ US$1.00 &amp; US$2.00 per unit based on pre-clinical results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Value est.</td>
<td>US$325MM (US$2.50/Share) est.</td>
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<tr>
<td>Shares Outstanding</td>
<td>129.6MM</td>
</tr>
<tr>
<td></td>
<td>142.0MM fully diluted</td>
</tr>
<tr>
<td>Cash Burn Current</td>
<td>US$2MM per quarter</td>
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</table>

Founded June 2013
Spin out from Resverlogix Corp. (TSX: RVX)

June 2016 - Dosing first mCRPC patient with ZEN-3694

Dec 2016 - Initiated combination study with Enzalutamide in mCRPC patients

June 2017 - Announced issuance of US patent for ZEN-3694

Oct 2017 - Successful completion of single agent study with ZEN-3694

Nov 2018 - Successful publications and 80 patients dosed with ZEN-3694

Nov. 20/’18 - Pfizer clinical trial collaboration announced
Advancing Development Pipeline

- Significant development progress with our lead product, ZEN-3694, a bromodomain and extra terminal domain inhibitor (BETi), *currently in clinical development* for combination treatment of solid tumors, including prostate and breast cancer

<table>
<thead>
<tr>
<th>Indication</th>
<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>Metastatic Castration-resistant Prostate Cancer (mCRPC); (Fully Accrued)</td>
<td>Combination expansion ZEN - 3694 + enzalutamide; Patients progressed on <em>abiraterone</em> (N<del>15) or <em>enzalutamide</em> (N</del>25)</td>
<td></td>
</tr>
<tr>
<td>Pfizer Collaboration: Triple Negative Breast Cancer (TNBC)</td>
<td>Phase 1b/2: Combination with PARPi in TNBC (N~50)</td>
<td></td>
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</tbody>
</table>
Epigenetics - The Mechanism Behind Our Approach

- The epigenetic code refers to modifications to chromatin components that regulate its activity
- Turning genes on or off is regulated by these modifications
- BET (Bromodomain and Extraterminal Domain) proteins recognize these modifications and turn genes on/off
BET Inhibitors Target Resistance Mechanisms
Sensitizing the Tumor to Existing Therapy

• Many of the escape resistance mechanisms to standard of care treatments involve BRD4

• BETi blocks BRD4 binding, resulting in inhibition of tumor oncogenes by disruption of super-enhancers

• Resistance to several standard of care treatments does not impede sensitivity to BETi, allowing for valuable combination therapy

Adopted from Clinical Cancer Research 2017, 23(7), 1647-55.
Combination Therapy: The Potential of BET Inhibition and ZEN-3694

- BET inhibitors have the ability to work synergistically with other therapies overcoming resistance and enhancing the response to the combination, resulting in broader and extended use of existing therapies.

The use of BETi is applicable to a number of cancers and therapies:

- **Hormone-Modulation**
  - Androgen (CRPC)
  - Estrogen (breast cancer)

- **DNA Repair**
  - PARPi (Breast, Ovarian, CRPC)

- **Kinase-Signaling**
  - PI3K (breast, CRPC)
  - RAF (melanoma)

- **Immuno-Oncology**
  - Checkpoint Inhibitors (melanoma, NSCLC, bladder, H&N etc.)

ZEN-3694 synergizes with several standard of care cancer drugs.
Zenith’s BETi program is Clinically Differentiated

**Other Clinical BETi**

- Conservative, suboptimal clinical strategy
- Poor PK/PD characterization
- Off target tox, CYP liabilities
- Thrombocytopenia DLT, require 1-2 weeks off

**Zenith’s BETi (ZEN-3694)**

- Focused clinical strategy, leader in combination approach
- Good clinical exposure with target modulation, no CYP liabilities
- Safety profile allows continuous dosing, no thrombocytopenia
- On target tox profile
Our Synergistic Approach – Making Great Drugs Work Better & Longer

- Combination Therapy with ZEN-3694 represents a multi-$Bln addressable market

Current markets include: AR antagonists, PD-1/Pd-L1Mabs, CDK 4/6 inh., PARP inhibitors
Recent Zenith Publication Covers
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 Lakhota, Michael H. Silverman, Colleen Mathis, Alexandra Drakaki, Arie S. Beldegrun, Chih-Ming Ho,§ and Dean Ho‡

1. Introduction

Conventional chemotherapy simultaneously addresses multiple aberrant disease pathways to potentially improve treatment outcomes. Drug doses are typically determined using dose escalation to reach a maximum tolerated dose (MTD) or via dose expansion to identify suitable regimen administration guidelines. These combinations are subsequently administered at fixed doses. While the administration of combination therapy using these approaches has served as a clinical standard for clinical care, the patient’s response to therapy evolves during the course of treatment due to the time-dependent, dose-dependent, and patient-specific nature of drug synergy and resulting efficacy and...
Prostate Cancer Program Review

ZEN-3694 Potential in Patients Developing mCRPC Resistance to Enzalutamide

ZEN-3694 works down stream of current therapies

ZEN-3694 works where resistance to existing lead drugs, like Enzalutamide, has evolved

The combination of ZEN-3694 and enzalutamide shows strong synergy and is expected to reduce the development of resistance

Cell Viability in VCAP P3 + 0.1 nM R1881 Treated with various concentrations of ZEN003694 with Enzalutamide (3 Day)
### Prostate Cancer Program Review

#### Principal Investigators

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eric Small, MD</strong></td>
<td>University of California, San Francisco (UCSF)</td>
<td>Developed abiraterone - #2 CRPC drug, owned by J&amp;J.</td>
</tr>
<tr>
<td>Chief, Dept. of Medicine</td>
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<tr>
<td><strong>Rahul Aggarwal, MD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental Therapeutics Specialist, Genitourinary Oncologist</td>
<td></td>
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<tr>
<td><strong>Howard Scher, MD</strong></td>
<td>Memorial Sloan Kettering Cancer Center (MSKCC)</td>
<td>Developed enzalutamide - #1 CRPC drug, now owned by Pfizer. Developing ARN-509 for J&amp;J</td>
</tr>
<tr>
<td>Chief, Genitourinary Oncology</td>
<td></td>
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<tr>
<td><strong>Wassim Abida, MD, PhD</strong></td>
<td></td>
<td></td>
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<tr>
<td>Medical Oncologist</td>
<td></td>
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<tr>
<td><strong>Joshi Alumkal, MD</strong></td>
<td>Oregon Health Sciences University (OHSU)</td>
<td>Expert in epigenetics in prostate cancer research</td>
</tr>
<tr>
<td>Associate Professor</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allan Pantuck, MD</strong></td>
<td>University of California Los Angeles (UCLA)</td>
<td>Involved in enzalutamide and provenge development</td>
</tr>
<tr>
<td>Professor, Dept. of Urology</td>
<td></td>
<td></td>
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<tr>
<td><strong>Elizabeth Heath, MD</strong></td>
<td>Karmanos (Wayne State)</td>
<td>Genitourinary oncology specialist</td>
</tr>
<tr>
<td>Professor, Dept. Hematology/Oncology</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Michael Schweizer, MD</strong></td>
<td>University of Washington Fred Hutchinson Cancer Center</td>
<td>Experience with AR antagonists</td>
</tr>
<tr>
<td>Oncologist</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>David M. Nanus, MD</strong></td>
<td>Weill Cornell Medicine</td>
<td>Genitourinary oncology specialist</td>
</tr>
<tr>
<td>Chief, Division of Hematology and Medical Oncology</td>
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</tbody>
</table>
### Prostate Cancer Program Review
**Phase 2 Ongoing; Phase 1b Completed**

#### Study Summary
- Dose escalation completed, expansion cohorts enrolling
- Robust target modulation at well tolerated doses, prolonged dosing without dose interruption/reduction is tolerated
- Clinical activity in patients progressing on abiraterone (N~15) or enzalutamide (N~25)
- 100 patients dosed to date, fully accrued

#### Indication
- Metastatic Castration-resistant Prostate Cancer (mCRPC);
  (Fully Accrued)

#### 2019
- Combination expansion ZEN - 3694 + enzalutamide; Patients progressed on abiraterone (N~15) or enzalutamide (N~25)

#### 2020

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**Clinical data to be presented at American Association for Cancer Research 2019**
- Zenith will be the first to release clinical combination data with a BETi at a major scientific meeting
Prostate Cancer Program Review: Combination Study Update

Abiraterone Progressors

Current SOC       ZENITH’s Target

PR = partial response
- ZEN-3694 + Enza Ongoing
- ZEN-3694 + Enza Off Study
- ZEN-3694 + Enza Beyond SOC Line Off Study

Extending time on therapy well beyond SOC

Efficacy at well tolerated doses below MTD

Weeks on Drug
Prostate Cancer Program Review: Promising Data
Duration on ZEN-3694 + Enzalutamide by Patients that Progressed on Enzalutamide

- Expected time to radiographic progression (3-6 mo.) Attard et al. 2017
- Target for ZEN-3694 + enzalutamide, 32 weeks

Median time to radiographic progression = 10.2 mo., similar for prior abiraterone or enzalutamide therapy
Prostate Cancer Program: Extensive Translational Medicine Plan
Understand Responders/Non-Responders to Design Future Trials

Translational program designed for molecular profiling ARi resistant patients and effect of ZEN-3694 on resistant markers, potential correlation of response to molecular signature

- Circulating tumor cells
  - Enumeration, markers, and signatures

- Whole blood
  - PD marker assay for target modulation
  - Cancer immune panel
  - Target engagement

- PBMCs
  - Peripheral blood mononuclear cells
  - Immuno Oncology markers, Tolerance Markers, T cell receptor sequencing

- Plasma
  - Exploratory markers and cytokine panel

- Immunohistochemistry
  - Oncology markers
  - Histology

- RNA-sequencing
  - Expressed mutations and profiles
  - Pathway analysis
  - Immuno-oncology markers
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 Zenith. “We believe the combination of BETi and PARPi offers the potential to better treat TNBC patients, a subset of patients who have inherited BRCA gene mutations may have robust DNA repair genes and can thus potentially...”

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

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.
Pfizer / Zenith Clinical Trial Collaboration Summary

Objective
• Show safety and activity of the combination in TNBC patients

Study design
• Phase 1b dose escalation
• Phase 2 Simon two step, open label non randomized

Patient Population
• TNBC: non germline BRCA1/2m, advanced metastatic, ≤3 prior chemo therapy regimen, ER<10%, PR<10% and HER2-negative by IHC and/or FISH

Number of patients (N)
• N~ 9-12 for Dose escalation
• Simon 2-stage design
  • H₀: TNBC = 20% ORR, Target ORR = 40%, N= 17 1st stage, N= 17 for 1st stage, progress to second stage if number of responders > 4, N=20 for second stage, 10% alpha, 90% power

Dose
• ZEN-3694 starting dose: 72mg once daily

Duration
• 6 months for dose escalation; 12 months for expansion cohorts (assuming 10 clinical sites)

Endpoints
• Phase 1b: Safety, PK/PD, MTD, RP2D
• Phase 2 TNBC: ORR, DOR, PFS
• Exploratory: Explore biomarkers of activity and resistance
Repression of BET activity sensitizes homologous recombination–proficient cancers to PARP inhibition

**Cancer Cell**

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

**Cell Reports**

BET Bromodomain Inhibition Synergizes with PARP Inhibitor in Epithelial Ovarian Cancer
## Pfizer / Zenith Clinical Trial Collaboration
### Prominent Clinical Sites and Investigators

<table>
<thead>
<tr>
<th>Institution</th>
<th>Investigator</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSKCC</td>
<td>Mark Robson – Study Lead PI Ayca Gucalp - PI</td>
<td>Led OlympiAD trial</td>
</tr>
<tr>
<td>MD Anderson</td>
<td>Jennifer Litton</td>
<td>Led EMBRACA trial</td>
</tr>
<tr>
<td>Banner Health</td>
<td>Lida Mina</td>
<td>Investigator on Phase 1, 2 and 3 Talazoparib trials</td>
</tr>
<tr>
<td>University of Kansas</td>
<td>Priyanka Sharma</td>
<td>TNBC specialist</td>
</tr>
<tr>
<td>University of Penn</td>
<td>Payal Shah - PI (Susan Domchek)</td>
<td>Talazoparib investigator, breast cancer specialist</td>
</tr>
<tr>
<td>Sarah Cannon</td>
<td>Erika Hamilton</td>
<td>Breast cancer specialist</td>
</tr>
<tr>
<td>Jules Bordet, Belgium</td>
<td>Philippe Aftimos</td>
<td>Led Merck and BI BETi trials</td>
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<tr>
<td>UZ Leuven, Belgium</td>
<td>Kevin Punie</td>
<td>Breast cancer specialist</td>
</tr>
<tr>
<td>VHIO, Spain</td>
<td>Mafalda Oliveira</td>
<td>Investigator on Gilead and GSK ER+ BETi trials</td>
</tr>
<tr>
<td>StartMadrid, Spain</td>
<td>Valentina Boni</td>
<td>Breast cancer specialist</td>
</tr>
</tbody>
</table>
Opportunity in Immuno Oncology: Strong Rationale for Checkpoint Combinations

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 Hirano1,2

Summary

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

- ZEN-3694 can be administered safely at doses that modulate BET targets

- **Prostate/XTANDI** combination: Promising clinical activity of ZEN-3694 + Enzalutamide in ARi resistant mCRPC patients

- **Pfizer and Zenith collaboration (TNBC/PARPi):** Ph. 1b/2 of ZEN-3694 + PARPi in TNBC (non germline-BRCA1/2m) initiated

- **PD-1/PD-L1** combination with ZEN-3694 has compelling pre-clinical and clinical rationale

- **ER+ Breast Cancer:** Preclinical rationale to address resistance to CDK4/6 inhibitors; significant market
Leading epigenetic company translating bromodomain biology into impactful therapies