Corporate Overview
September 2019

FIRST-IN-CLASS DRUG CANDIDATES
With dermatology, oncology, anti-inflammatory, and antibiotic applications
Safe Harbor; Forward-Looking Statements

This presentation contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 that involve risks, uncertainties and assumptions that could cause Innovation's actual results and experience to differ materially from anticipated results and expectations expressed in these forward-looking statements. Innovation Pharmaceuticals has in some cases identified forward-looking statements by using words such as “anticipates,” “believes,” “hopes,” “estimates,” “looks,” “expects,” “plans,” “intends,” “goal,” “potential,” “may,” “suggest,” and similar expressions. These forward-looking statements include, but are not limited to, statements concerning future drug development plans and projected timelines for the initiation and completion of preclinical and clinical trials; the potential for the results of ongoing preclinical or clinical trials and the efficacy of Innovation Pharmaceuticals’ drug candidates; the potential market opportunities and value of drug candidates; other statements regarding future product development and regulatory strategies, including with respect to specific indications; any statements regarding Innovation Pharmaceuticals’ future financial performance, results of operations or sufficiency of capital resources to fund its operating requirements; any statements relating to Innovation Pharmaceuticals planned uplisting or use of proceeds; and any other statements that are not statements of historical fact. Forward-looking statements involve risks and uncertainties, which may cause Innovation’s actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and uncertainties. Among other factors that could cause actual results to differ materially from those expressed in forward-looking statements are Innovation Pharmaceuticals’ need for, and the availability of, substantial capital in the future to fund its operations and research and development, including the amount and timing of the sale of shares of common stock to Aspire Capital; Innovation Pharmaceuticals’ ability to continue to fund and successfully progress internal research and development efforts and to create effective, commercially-viable drugs; and the fact that Innovation’s compounds may not successfully complete pre-clinical or clinical testing, or be granted regulatory approval to be sold and marketed in the United States or elsewhere. A more complete description of these risk factors is included in Innovation Pharmaceuticals’ filings with the Securities and Exchange Commission. You should not place undue reliance on any forward-looking statements. Forward-looking statements speak only as of the date on which they are made. Innovation Pharmaceuticals undertakes no obligation to release publicly the results of any revisions to any such forward-looking statements that may be made to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events, except as required by applicable law or regulation.
Innovation Pharmaceuticals Overview

Value Proposition

INNOVATIVE SCIENCE AT THE CORE OF THE COMPANY

AN EXCEPTIONALLY STRONG CLINICAL PIPELINE

ADDRESSING $BILLION MARKET OPPORTUNITIES

Novel Mechanisms of Action
e.g., Brilacidin

Multiple Mid-Late Stage Candidates

Multiple Therapeutic Areas

Dermatology
Cancer
Infectious Disease
Gastrointestinal

Design Approach
The biological activities of host defense proteins depend on an amphiphilic helix
Magainin

Preclinical | Phase 1 | Phase 2 | Phase 3
---|---|---|---

Synthetic mimic

Biomimetic Polymer
Capture structural and biological properties of HDPs using fully synthetic, nonpeptidomimetic and macrolides
Not peptidomimetics
Innovation Pharmaceuticals has **two drug candidates**, each with first-in-class potential, advancing in clinical trials under various special FDA designations.

**Brilacidin**

*Drug candidate in a new immunomodulatory class with anti-inflammatory and antibiotic properties advancing in multiple development programs under Fast Track designations*

**Kevetrin**

*p53-modulating drug candidate with three Orphan Drug designations completed a Phase 2a trial for ovarian cancer*
### Innovation Pharmaceuticals Pipeline

**Stages of Development and Special FDA Designations**

<table>
<thead>
<tr>
<th>Drug Candidate</th>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>Brilacidin</td>
<td>Oral Mucositis</td>
<td>--</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Inflammatory Bowel Disease (IBD*)</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>ABSSSI**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Atopic Dermatitis</td>
<td>--</td>
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<td></td>
</tr>
<tr>
<td>Kevetrin</td>
<td>Ovarian Cancer</td>
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</tr>
</tbody>
</table>

Excellently strong pipeline, novel mechanisms of action

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Leveraging designations to expedite development, improve likelihood of drug approval, and gain added market exclusivity

<table>
<thead>
<tr>
<th>Drug Candidate</th>
<th>Designation Type</th>
<th>Date Granted</th>
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</thead>
<tbody>
<tr>
<td>Kevetrin</td>
<td>Orphan Drug Designation for Ovarian Cancer</td>
<td>July 2015</td>
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<tr>
<td></td>
<td>Rare Pediatric Disease Designation for Retinoblastoma</td>
<td>November 2015</td>
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<tr>
<td></td>
<td>Orphan Drug Designation for Pancreatic Cancer</td>
<td>January 2016</td>
</tr>
<tr>
<td>Brilacidin</td>
<td>QIDP*** Fast-Track Designation for ABSSSI**</td>
<td>December 2014</td>
</tr>
<tr>
<td></td>
<td>Fast-Track Designation for Oral Mucositis</td>
<td>November 2015</td>
</tr>
</tbody>
</table>

*IBD- first completed trial conducted in UP/UPS (Ulcerative Proctitis/Proctosigmoiditis; two types of Inflammatory Bowel Disease)

**ABSSSI - Acute Bacterial Skin and Skin Structure Infection  ***QIDP – Qualified Infectious Disease Product
Company Highlights

**Brilacidin**, a Novel Immunomodulatory Agent... and;

**Kevetrin**, a p53-Modulating Drug Candidate

Both Clinical Assets targeting Multi-Billion Markets in numerous therapeutic areas, across multiple clinical indications

### KEY MILESTONES

#### Brilacidin

**Inflammatory Bowel Disease (IBD)** - Positive Ph2a UP/UPS trial (clinical remission in > 50% of patients); in July 2019 licensed this indication to Alfasigma S.p.A.; currently expanding to oral dosage form for treating more extensive disease, e.g., Ulcerative Colitis

**Oral Mucositis** - Positive Ph2 trial (reduced incidence and delayed onset of Severe Oral Mucositis)

#### Kevetrin

**Ovarian Cancer** - Positive Ph2a trial (showed modulation of p53 directly in tumor)
Multi-Billion Market Opportunity
Innovative Products Will Merit Higher Premiums

**OM**

Brilacidin

**OM**

IBD

*ABSSSI*

Kevetrin

Ovarian Cancer

** Oral Mucositis

** ABSSSI = Acute Bacterial Skin and Skin Structure Infection

Table 10: Estimates of Total Market Size, by Indication (in $ Million)

<table>
<thead>
<tr>
<th></th>
<th>ABSSSI</th>
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<th>ABSSSI</th>
<th>ABSSSI</th>
<th>ABSSSI</th>
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<tr>
<td>1</td>
<td>$2,720</td>
<td>$3,070</td>
<td>$2,290</td>
<td>$2,530</td>
<td>$5,760</td>
<td>$1,780</td>
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<tr>
<td>2</td>
<td>$2,950</td>
<td>$6,590</td>
<td>$7,970</td>
<td>$4,660</td>
<td>$6,540</td>
<td>$3,470</td>
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<tr>
<td>3</td>
<td>$9,230</td>
<td>$9,230</td>
<td>$9,230</td>
<td>$9,230</td>
<td>$9,230</td>
<td>$9,230</td>
</tr>
</tbody>
</table>

Source: IMS Health, 2012

Nature Reviews | Drug Discovery

PDL1 inhibitors
PARP inhibitors
Angiogenesis inhibitors

Sales (US$ million)

2016 2021 2026
How We’re Different
Innovative Drug Candidates with Multi-Indication Potential

BRILACIDIN
- Oral Mucositis
- Ulcerative Colitis
- Crohn’s Disease
- Atopic Dermatitis
- *ABSSSI
- Acne

KEVETRIN
- Ovarian Cancer
- Renal Cancer
- Pancreatic Cancer
- Retinoblastoma

POTENTIAL FOR LIFE-CHANGING, LIFE-SAVING TREATMENTS

* ABSSSI - Acute Bacterial Skin and Skin Structure Infection
Pipeline Potential
Targeting Major Therapeutic Areas: Brilacidin

**ORAL MUCOSITIS**

~450,000 patients/year in U.S. alone

Less than 5% of patients currently prescribed any OM treatment

**INFLAMMATORY BOWEL DISEASE**

- 200,000 Canadians with IBD
- 1.4 million Americans with IBD
- 2.2 million Europeans with IBD

**INFECTIOUS DISEASE**

- Recent Deals / Market Potential
  - 2016 sales: $1.087bn

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### Product Table

<table>
<thead>
<tr>
<th>Product</th>
<th>Company</th>
<th>Phase</th>
<th>Indication</th>
<th>Comment / Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapitanze</td>
<td>Amgen</td>
<td>Approved (drug)</td>
<td>Prevent OM-HSCT</td>
<td>Incurrence TV dressing 3x pre = 3x post chems, over priced</td>
</tr>
<tr>
<td>Gelclair</td>
<td>DARA</td>
<td>Approved (device)</td>
<td>Palliation</td>
<td>Poor reimbursement, poor data</td>
</tr>
<tr>
<td>Mucolax</td>
<td>Edwards Pharmaceutical</td>
<td>Approved (device)</td>
<td>Palliation</td>
<td>Poor reimbursement, poor data</td>
</tr>
<tr>
<td>Caphorist</td>
<td>EUSA</td>
<td>Approved (device)</td>
<td>Palliation</td>
<td>Poor reimbursement, poor data</td>
</tr>
<tr>
<td>Epal</td>
<td>Camurus</td>
<td>Approved (device)</td>
<td>Palliation</td>
<td></td>
</tr>
<tr>
<td>Mugard</td>
<td>Access</td>
<td>Approved (device)</td>
<td>Palliation</td>
<td>Poor reimbursement; recent controlled study confirmed activity as a palliative agent</td>
</tr>
</tbody>
</table>

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**Recent Deals / Market Potential**

- $7.2bn
  - SGF modulation
  - Small inhibition

- $2.5bn
  - $1.087bn sales in 2016
  - CUBICIN (daptomycin for injection) 500 mg

- $2.075bn
  - JAK1 inhibition

- $2.6bn
  - Corticosteroids (Budesonide)
Pipeline Potential

Targeting Major Therapeutic Areas: **Kevetrin**

**OVARIAN CANCER**

**Worldwide Prevalence**

**Recent Deals / Market Potential**

Source: Bloomberg

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Corporate Overview Sep2019
Our Approach

Strategic Focus

- Maximize Value of Current Assets
- Capture ROI through Partnerships
- Select Key Programs for Continued Internal Development
Oral Mucositis in Head and Neck Cancer

Market Opportunity and Clinical Overview

**Highest Rates of Oral Mucositis (OM) Occur in HNC Cases**

Head and Neck Cancer (HNC) patients -- comprising an estimated 65,000 newly diagnosed cases in the U.S. alone in 2017, and an estimated 700,000 worldwide (source: GLOBOCAN) -- are at greatest risk of developing OM (an 80 to 100 percent rate of occurrence).

By 2030, the global incidence of HNC cases is expected to exceed 1 million per year. Moreover, between 25 and 60 percent of cancer patients, regardless of cancer type, also will experience OM during the course of their chemo/radiotherapy.

Estimates vary as to the market size (in dollars) of an effective OM treatment, for HNC-only patients, across major markets (U.S., Europe and Japan), ranging between $500 million and $1.5 billion on an annual basis (sources: GlobalData; Redington Inc., pdf).

One company in the OM space projects the worldwide OM market opportunity to be as high as $2.6 billion annually.

Sources: http://www.ipharminc.com/new-blog/2017/10/17/the-market-opportunity-in-oral-mucositis"Head and Neck Cancer in India: Global and Regional Trends", DOI: http://dx.doi.org/10.7314/APJCP.2014.15.2.537 (pdf); Dr. Stephen Sonis data

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**Clinical Overview**

- Frequent complication of chemoradiation for **Head and Neck Cancer**
- Painful and debilitating inflammation & ulceration; increases susceptibility to bacterial infections
- Patients unable to speak or eat (often requires insertion of feeding tube)
- Can be dose-limiting leading to reduction/cessation of radiation and chemotherapy for cancer
- Severe cases require hospitalization
- **No currently approved medications for prevention of OM in this population**
CTIX-BRI-205: Oral Mucositis Phase 2 Study

Primary Efficacy Endpoint met

**Brilacidin** oral rinse met primary endpoint of **reduced incidence of severe OM (WHO Grade ≥ 3)** experienced by subjects during chemoradiation therapy.

### Incidence of SOM (WHO Grade ≥ 3)

- **All Subjects**
  - Placebo (N=25): 60.0%
  - BRI 3 mg/mL (N=21): 42.9%
- **Cisplatin q3wk Subgroup**
  - Placebo (N=14): 71.4%
  - BRI 3 mg/mL (N=19): 25.0%

### Relative Difference (Reduction) in Incidence of SOM, Brilacidin vs placebo

- **All Subjects**
  - Placebo (N=25)
  - BRI 3 mg/mL
  - Relative Difference = (incidence [placebo] – incidence [Brilacidin]) / incidence [placebo]
  - 60.0% vs 42.9%
- **Cisplatin q3wk Subgroup**
  - Placebo (N=14)
  - BRI 3 mg/mL (N=19)
  - Relative Difference = (incidence [placebo] – incidence [Brilacidin]) / incidence [placebo]
  - 71.4% vs 25.0%

* All mITT Population = All randomized subjects who received at least one dose of study drug and a cumulative radiation dose of at least 55 Gy (and no more than 72 Gy).

* All PP Population = Subjects who received at least one dose of study drug and a cumulative radiation dose of at least 55 Gy (and no more than 72 Gy).

* p < 0.05

- **Greatest efficacy demonstrated in cisplatin q3wk subgroup**
- **Incidence of SOM on placebo was 60% (in this study)**
  - ~70+% historically
Brilacidin: Phase 2 Oral Mucositis Trial

Positive Results: Delayed Time to Onset of Severe Oral Mucositis marked in 21-day Cisplatin subgroup

Kaplan-Meier Curves for Time to Onset, in Days, of Severe OM, 21-day Cisplatin Schedule (PP Population)

Note the period from approximately 19-49 days during which SOM incidence rises strikingly in Placebo while not in the Brilacidin group.
Inflammatory Bowel Disease (IBD)
A Hard-to-Treat Chronic Condition That Affects Over a Million People in the U.S.

- **Group of Inflammatory Conditions of Colon & Small Intestine**
  Principle types: *Crohn’s disease (CD)* and *Ulcerative colitis (UC)*  
  [(Ulcerative Proctitis (UP) and Ulcerative Proctosigmoiditis (UPS) are subcategories of UC)]

- **Autoimmune Etiology**

- **Main GI Symptoms:** abdominal pain, vomiting, diarrhea, rectal bleeding, severe internal abdominal/pelvic cramps/muscle spasms and weight loss

- **Recurrences Frequent:** disease also associated with increased risk of co-morbidities

- **Medications for Treatment Include:** aminosalicylates, corticosteroids, immunomodulators, antibiotics and **biologics**, including anti-TNF agents, anti-integrin agents and IL12/23 inhibitors which have **high initial treatment failure rates and loss-of-response rates** (up to 1/3rd of patients for each); treatment non-adherence occurs in up to 50 percent of IBD patients

- **Common, Costly:** in the U.S., 70,000 newly diagnosed IBD cases each year; total annual financial burden of IBD estimated to be $14.6 to $31.6 billion

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Sources:
- [http://tmedweb.tulane.edu/pharmwiki/doku.php/inflammatory_bowel_disease_ibd](http://tmedweb.tulane.edu/pharmwiki/doku.php/inflammatory_bowel_disease_ibd)
- [http://online.ccfa.org/site/DocServer/CCFA_Ingle_5_2016__What_s_New_IBD.pdf](http://online.ccfa.org/site/DocServer/CCFA_Ingle_5_2016__What_s_New_IBD.pdf)
- Innovation Pharmaceuticals research
Brilacidin: Phase 2a IBD Trial (Ulcerative Proctitis/Proctosigmoiditis)

Positive Results: Primary Efficacy Endpoint Met, Supported by Endoscopic Improvement

Clinical Remission in > 50% patients (Day 42)

Similar across cohorts

- 60% Cohort A (3 of 5)
- 67% Cohort B (4 of 6)
- 75% Cohort C (3 of 4)

Analysis population: Includes subjects with Endoscopy, Rectal Bleeding and Stool Frequency subscores at baseline and Day 42; one patient in Cohort A and one patient in Cohort C are not included due to no Day 42 endoscopy (patients declined)

Examples Clinical Remission
Treated with Brilacidin 100mg (Cohort B) per retention enema

Clinical Remission is defined as:

- Endoscopy subscore ≤ 1
- Rectal Bleeding subscore of 0
- Stool Frequency subscore improvement or no change from baseline
Brilacidin: Phase 2b *ABSSSI Trial

Positive Results: As an Antibacterial Performed Favorably to a Current Market Leader (Daptomycin)

- Single Dose Brilacidin Efficacy comparable to 7-day regimen of robust comparator (Daptomycin x 7 days)

<table>
<thead>
<tr>
<th></th>
<th>Brilacidin 0.6 mg/kg IV x 1 day (N=53)</th>
<th>Brilacidin 0.8 mg/kg IV x 1 day (N=53)</th>
<th>Brilacidin x 3 days (N=53)</th>
<th>Daptomycin x 7 days (N=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Assessed</td>
<td>51</td>
<td>48</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Clinical Response (%)</td>
<td>47 (92.2)</td>
<td>46 (95.8)</td>
<td>51 (98.1)</td>
<td>45 (93.8)</td>
</tr>
<tr>
<td>95% C.I.</td>
<td>(84.8, 99.5)</td>
<td>(90.2, 100)</td>
<td>(94.3, 100)</td>
<td>(86.9, 100)</td>
</tr>
</tbody>
</table>

*Acute Bacterial Skin and Skin Structure Infection
**Kevetrin Ph2a Trial for Ovarian Cancer**

*Positive Results: p53 Modulation Demonstrated*


**Kevetrin Treatment Regimen**

250mg/m² iv 3x/week for 3 weeks

**Next Steps in Development**

- Transition to Oral Delivery to maximize benefits of drug characteristics
- Complete bridging toxicology work
## Proven Team With Deep Experience

### Senior Management, Key Advisors

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Expertise</th>
</tr>
</thead>
</table>
| **LEO EHRlich**              | Co-Founder, CEO, CFO, Board Chairman                                | • >25 years of executive leadership experience in building and managing emerging growth companies  
• Multiple C-suite roles at private and public companies                                                   |
| **Arthur P Bertolino, MD, PHD, MBA** | President and CMO                                                 | • >15 years of domestic and global drug development and management experience  
• Extensive senior leadership (VP of Dermatology at Novartis)                                                   |
| **Jane Harness, MS, MP**    | Sr Vice-President, Clinical Sciences and Portfolio Management        | • >20 years in domestic and international clinical drug development  
• Extensive pharma leadership positions across entire career                                                   |
| **Francis A Farraye, MD, MSC** | Scientific Advisor                                             | • Physician in the Inflammatory Bowel Disease Center and Division of Gastroenterology and Hepatology at Mayo Clinic hospital in Jacksonville, Florida. 
His area of expertise is in the management of patients with Ulcerative Colitis and Crohn’s Disease. Previously Professor of Medicine, Clinical Director, Section of Gastroenterology and Co-Director, Center for Digestive Disorders, at Boston University School of Medicine |
| **Stephen T Sonis, DMD, DMSC** | Scientific Advisor                                             | • Recognized expert in cancer-related oral mucosal toxicities  
• Professor of Oral Medicine at Harvard School of Dental Medicine, Senior Surgeon at the Dana-Farber Cancer Institute and Brigham and Women’s Hospital |
### Commercial Expanse and Intellectual Property

**Wholly-Owned Global Commercialization Rights**

<table>
<thead>
<tr>
<th>Intellectual Property Estate</th>
<th>Brilacidin</th>
<th>Kevetrin</th>
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</thead>
<tbody>
<tr>
<td># US Patents granted</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Countries Granted</td>
<td>Various EU</td>
<td>Japan</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>Others</td>
</tr>
</tbody>
</table>

- # US Patents granted
- Countries Granted
  - Various EU
  - Japan
  - Others
Innovation Pharmaceuticals Strategic Direction

• Leverage Recent Milestones to Support Partnering Opportunities
  • Out-licensed UP/UPS indication to Alfasigma S.p.A. in July 2019 with ROFR for UC/CD and ROFN for other GI diseases
  • Ongoing Interactions with Big Pharma and other Global Rx Companies

• Advance Formulation Work with Oral Delivery Emphasis
  • Focus of current internal IBD program advancing to treat Ulcerative Colitis/Crohn’s Disease (UC/CD) with oral dosage form
  • Drug Product in collaborative development using patented selective oral delivery technology, OraLogik™, developed by BDD Pharma

• Continue to Build Value by Addressing Areas of Unmet Medical Need for the Benefit of Patients and Shareholders
  • Phase 3 Program in Oral Mucositis a development emphasis given alignment with FDA

• Anchor Each Drug Candidate in Additional Trials to Further Provide Favorable Return-On-Investment