At Deciphera Pharmaceuticals, we are developing novel drug candidates to improve the lives of cancer patients by addressing key mechanisms of drug resistance that limit the effectiveness of many cancer therapies.

Our pipeline of drug candidates has been designed using our proprietary kinase switch control inhibitor platform. Kinases are an important family of enzymes, that when mutated or over expressed are known to be directly involved in the growth and spread of many cancers.

We have built a diverse pipeline of wholly-owned, orally administered drug candidates that includes three clinical-stage and two research-stage programs. We have designed our lead drug candidate, DCC-2618, to inhibit the full spectrum of mutant or amplified KIT and PDGFRα kinases that drive cancers such as gastrointestinal stromal tumors (GIST), advanced systemic mastocytosis (ASM), gliomas, and other solid tumors.

We are also developing two other clinical-stage drug candidates, DCC-3014 and rebastinib, as immuno-oncology kinase, or immunokinase, inhibitors targeting the kinases CSF1R, and TIE2 kinase, respectively.

### AT A GLANCE:
- **IPO:** September 2017
- **NASDAQ:** DCPH

### ANALYST COVERAGE:
- JMP Securities  
  Michael G. King, Jr.
- JP Morgan  
  Jessica Fye
- Nomura/Instinet  
  Christopher Marai, Ph.D.
- Piper Jaffrey  
  Charles C. Duncan, Ph.D.

### LEADERSHIP TEAM:
- Michael D. Taylor, Ph.D.  
  President and CEO
- Daniel L. Flynn, Ph.D.  
  Chief Scientific Officer and Founder
- Tucker Kelly, J.D.  
  Chief Financial Officer
- Christopher J. Morl, M.B.A.  
  Chief Business Officer
- Oliver Rosen, M.D.  
  Chief Medical Officer

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**Addressing Key Mechanisms of Tumor Drug Resistance**

**Kinase switch control inhibitors for tumor-targeted and immune-targeted cancer therapies**

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**Deciphera Highlights**

- **Kinase Inhibitors: 34 FDA-Approved Drugs but Significant Opportunities Remain**
  - Drug resistance mutations limit rate and duration of response
  - Low potency and selectivity cause poor tolerability
  - Approved drugs target less than 10% of the 500+ known human kinases

- **Proprietary Kinase Switch Control Inhibitor Platform**
  - Broad activity against drug-resistant mutant kinases
  - Kinase-selective and spectrum-selective profiles
  - Drug discovery engine that fuels long-term growth

- **Strong Pipeline of Tumor-Targeted and Immunokinase Programs**
  - DCC-2618: pan-KIT and PDGFRα inhibitor set to enter a pivotal Phase 3 trial
  - Rebastinib: Highly potent and selective TIE2 inhibitor
  - DCC-3014: Highly potent and selective CSF1R inhibitor
**Addressing Key Mechanisms of Tumor Drug Resistance**

**Strong, Wholly-Owned Clinical-Stage Small Molecule Pipeline**

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<tr>
<th>Tumor-Targeted Programs and Indications</th>
<th>Pre-Clinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<td>DCC-2618 KIT &amp; PDGFRα GIST</td>
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<td>PDGFRα GBM &amp; Glioma</td>
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<td>KIT (D816V) Advanced Systemic Mastocytosis</td>
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<td>KIT &amp; PDGFRα Other Cancers</td>
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<td>Undisclosed Cancer Metabolism</td>
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<th>Immunokinase Programs and Indications</th>
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<td>TIE2 Checkpoint Inhibitor Combination</td>
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<td>DCC-3014 CSF1R Solid Tumors &amp; Hematological Malignancies</td>
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<td>Undisclosed Immunokinase</td>
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*Pivotal Phase 3 initiation in 4th line GIST planned for 1H2018.

**Our Proprietary Kinase Switch Control Platform**

**Switch Control inhibitor embeds deeply into switch pocket**

**Inhibits switch activation**

**Advantages of Switch Control Inhibitors**

- **Tumor-Targeted Programs**
  - Broader Activity: Inhibit wild-type and many or all mutant forms of targeted kinases
  - Enhanced Durability: Resilient to gain-of-function mutations and drug resistance

- **Immunokinase Programs (Macrophage Checkpoints)**
  - Engineered Profiles: Highly selective or target multiple kinases at desired potency
  - Superior Binding: More potent and more durable; resilient to ATP concentration

**Forward Looking Statements:** This fact sheet may contain forward-looking statements that are based on our current expectations, estimates and projections about our industry as well as management’s beliefs and assumptions. Words such as “anticipates,” “expects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “may,” “will,” and variations of these words or similar expressions are intended to identify forward-looking statements. These statements include statements regarding our business strategy, prospective products, clinical trial results, product approvals and regulatory pathways, timing and likelihood of success, plans and objectives of management for future operations, future results of anticipated products, and the market opportunity for our drug candidates, and speak only as of the date hereof. Such statements are based upon the information available to us now and are subject to change. We will not necessarily inform you of such changes. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors. Factors which could cause actual results to differ materially from those in the forward-looking statements include, among others, our history of significant losses since inception, our ability to obtain necessary capital when needed on acceptable terms, the results from ongoing or future clinical and nonclinical trials, our ability to obtain regulatory approval or clearance of our drug candidates, competition from other products or procedures, our reliance on third-parties to conduct our clinical and non-clinical trials, our reliance on single-source third-party suppliers to manufacture clinical, non-clinical and any future commercial supplies of our drug candidates and our ability to obtain, maintain and enforce our intellectual property rights for our drug candidates.