CPI-444, an oral adenosine A2A receptor (A2AR) antagonist, demonstrates clinical activity in patients with advanced solid tumors

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Forward Looking Statements

This presentation contains forward-looking statements, including statements related to the potential safety and efficacy of CPI-444, both as a single agent and in combination with anti-PD-1 and anti-PD-L1, the utility of biomarker data collected and the suitability of the dosing regimen selected for the Company’s Phase 1/1b clinical trial of CPI-444. All statements other than statements of historical fact contained in this press release are forward-looking statements. These statements often include words such as “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” “seek,” “will,” “may” or similar expressions. Forward-looking statements are subject to a number of risks and uncertainties, many of which involve factors or circumstances that are beyond the Company’s control. The Company’s actual results could differ materially from those stated or implied in forward-looking statements due to a number of factors, including but not limited to, risks detailed in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on March 10, 2017, as well as other documents that may be filed by the Company from time to time with the Securities and Exchange Commission. In particular, the following factors, among others, could cause results to differ materially from those expressed or implied by such forward-looking statements: the Company’s ability to utilize biomarker data, select a suitable dosing regimen and demonstrate evidence of efficacy and safety for CPI-444 during its Phase 1/1b clinical trial; the accuracy of the Company’s estimates relating to its ability to initiate and/or complete clinical trials; the results of early clinical trials may not be predictive of future results. Although the Company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee that the events and circumstances reflected in the forward-looking statements will be achieved or occur, and the timing of events and circumstances and actual results could differ materially from those projected in the forward-looking statements. Accordingly, you should not place undue reliance on these forward-looking statements. All such statements speak only as of the date made, and the Company undertakes no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise. Additional information may be available in press releases or other public announcements and public filings made after the date of this presentation.

This presentation concerns products that have not yet been approved for marketing by the U.S. Food and Drug Administration ("FDA"). No representation is made as to their safety or effectiveness for the purposes of which they are being investigated.
I have the following financial relationships to disclose:

Consultant for: Vaccinex, Celgene, Bristol Meyers Squibb, AstraZeneca, Amgen, Syndax, Molecuvax, eTHeRNA, Peregrine, Bayer

Grant/Research support from: Genentech/Roche, EMD Serono, Maxcyte, Merck, AstraZeneca, Aduro, Corvus

I will discuss the following off-label use and/or investigational use:

CPI-444 alone and combined with atezolizumab for advanced solid cancers.

Study funding provided by Corvus Pharmaceuticals.
Roche Genentech provided atezolizumab and support for biomarker analyses
Adenosine Signaling Suppresses Immunity in the Tumor Microenvironment

- PD-1/PD-L1 antibodies are effective immunotherapies with response rates ~20-30%
- Novel agents that enhance response or overcome resistance to immunotherapy are a high priority
- The adenosine pathway is a potential new immunotherapy target
CPI-444: A Novel Inhibitor of the A2AR Pathway

• **Pharmaceutical Properties**
  – Molecular weight = 407Da
  – A2AR Ki= 3.5 nM
  – >55-fold selective over A1R, >400-fold A2BR and A3R
  – Oral bioavailability >50%
  – Plasma half life: ~10-14 hours

• **Single agent activity in multiple preclinical models***
  – Synergy with anti-PD-(L)1 and anti-CTLA-4 antibodies and other checkpoint inhibitors

• **Well-tolerated in early trials with healthy volunteers and ADHD patients**

• **This is the first evaluation of safety and clinical activity of an A2AR antagonist in patients with cancer**

*See Abstract #5598
A Phase 1/1b, Open-Label, Multicenter, Repeat-Dose, Dose-Selection Study of CPI-444 as a Single Agent and in Combination with Atezolizumab (atezo) in Patients with Selected Incurable Cancers

Primary Objectives

– Evaluate the safety of CPI-444 alone and with atezo

– Identify a recommended dose and schedule for CPI-444 alone and with atezo
  • Safety, PK and PD data*

– Measure the clinical activity of CPI-444 alone and with atezo
  • ORR, CBR and DOR*

*PK = pharmacokinetics; PD = pharmacodynamics; ORR = overall response rate; CBR = clinical benefit rate; DOR = duration of response
Trial Design: Step 1 Dose Selection
(Accrual completed)

Eligibility
- Selected incurable cancers: NSCLC, Melanoma, RCC, TNBC, Others (UBC, CRPC, CRC-MSI+, SCCHN)
- 1 to 5 lines of prior therapy
- Stable, treated brain metastases allowed
- Resistant/refractory (R/R) to prior anti PD-1/PDL-1 allowed
- PD-L1, CD73, A2aR expression not required for enrollment

*1 cycle=28 days

**See Abstract #5593
Trial Design: Step 2 Cohort Expansion by Disease (Accrual ongoing)

Randomize

Single Agent Arm Expansion
- NSCLC N=14
- MEL N=14
- RCC N=14
- TNBC N=14
- Others* N=14

Combination Arm Expansion
- NSCLC N=14
- MEL N=14
- RCC N=14
- TNBC N=14
- Others* N=14

Potential expansion to 26 and 48 patients

*Others: CRPC, CRC-MSI, UBC, SCCHN
### Patient Demographics/Disease Characteristics*

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>Median age, years (range)</strong></td>
<td>64</td>
<td>(36 – 85)</td>
</tr>
<tr>
<td><strong>Gender, n (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>58</td>
<td>(51%)</td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
<td>(49%)</td>
</tr>
<tr>
<td><strong>ECOG performance status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>47</td>
<td>(42%)</td>
</tr>
<tr>
<td>1</td>
<td>66</td>
<td>(58%)</td>
</tr>
<tr>
<td><strong>TNBC</strong></td>
<td>32</td>
<td>(28%)</td>
</tr>
<tr>
<td><strong>NSCLC</strong></td>
<td>28</td>
<td>(25%)</td>
</tr>
<tr>
<td><strong>MEL</strong></td>
<td>14</td>
<td>(12%)</td>
</tr>
<tr>
<td><strong>RCC</strong></td>
<td>14</td>
<td>(12%)</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>25</td>
<td>(23%)</td>
</tr>
<tr>
<td><strong>Median # of prior regimens</strong></td>
<td>2</td>
<td>(1–5)</td>
</tr>
</tbody>
</table>

| Prior Chemotherapy            | 90    | (80%)         |
| Prior anti-PD1/PD-L1 exposure |       |               |
| Naïve                         | 50    | (44%)         |
| Resistant/Refractory          | 63    | (56%)         |
| **Visceral metastases**       | 102   | (90%)         |
| Liver                         | 42    | (37%)         |
| Brain                         | 10    | (9%)          |

- Enrollment (n=113)
  - Step 1: n = 47 (33 single agent)
  - Step 2: n = 66 (26 single agent)
- Heavily pre-treated with extensive disease
- Over half with disease resistant/refractory to PD-1/PD-L1 antibodies

*Data cutoff: Mar 2017*
### Treatment-Related Adverse Events (AE)

- Median duration of treatment: 9 weeks (range: up to 40+)
- 56% of patients experienced a treatment-related AE (any grade)
- No grade 3/4 AEs with single agent CPI-444
- Immune-related AEs seen only with combination of CPI-444 and atezo (n=1 for each):
  - Pancreatitis (Gr 2)
  - Autoimmune hemolytic anemia (Gr 3)
  - Meningoencephalitis/thrombocytopenia (Gr 4)

#### Adverse Events > 5% Frequency (Gr 1/2)

<table>
<thead>
<tr>
<th>Adverse Events</th>
<th>Single Agent</th>
<th>Combo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Pruritus</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>5%</td>
<td>---</td>
</tr>
<tr>
<td>Rash</td>
<td>5%</td>
<td>---</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>5%</td>
<td>---</td>
</tr>
<tr>
<td>Pyrexia</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Decreased Appetite</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Chills</td>
<td>5%</td>
<td>---</td>
</tr>
</tbody>
</table>

- Single Agent
- Combo
# Overall Patient Outcomes

## Disease Control Rate (CR, PR, SD) in Evaluable Patients

<table>
<thead>
<tr>
<th></th>
<th>CPI-444</th>
<th>CPI-444/ Atezolizumab</th>
<th>All Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=52)</td>
<td></td>
<td>(n=44)</td>
<td>(n=96)</td>
</tr>
<tr>
<td>All subjects</td>
<td>20 (38%)</td>
<td>17 (39%)</td>
<td>37 (38%)</td>
</tr>
<tr>
<td>Prior PD-1/PD-L1 Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naïve</td>
<td>13/29 (45%)</td>
<td>5/18 (28%)</td>
<td>18/47 (38%)</td>
</tr>
<tr>
<td>Resistant/Refractory</td>
<td>7/23 (30%)</td>
<td>12/26 (46%)</td>
<td>19/49 (39%)</td>
</tr>
<tr>
<td>Disease Histology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- NSCLC</td>
<td>4/14 (29%)</td>
<td>5/10 (50%)</td>
<td>9/24 (38%)</td>
</tr>
<tr>
<td>- MEL</td>
<td>2/5 (40%)</td>
<td>2/6 (33%)</td>
<td>4/11 (36%)</td>
</tr>
<tr>
<td>- RCC</td>
<td>3/5 (60%)</td>
<td>5/5 (100%)</td>
<td>8/10 (80%)</td>
</tr>
<tr>
<td>- TNBC</td>
<td>7/17 (41%)</td>
<td>3/14 (21%)</td>
<td>10/31 (32%)</td>
</tr>
<tr>
<td>- Others</td>
<td>4/11 (36%)</td>
<td>2/9 (22%)</td>
<td>6/20 (30%)</td>
</tr>
</tbody>
</table>

- Median follow up time for DCR: 16 weeks (range, 4-44 weeks)
- 23/37 of PR and SD patients remain on study
Clinical Activity: Overall Patient Population*

- SDs and PRs observed with CPI-444 alone and in combination with atezo.

*Patients with disease evaluable by CT, n=70
Clinical Activity: By Disease Type

- Tumor regression observed in RCC, NSCLC, TNBC, SCCHN and CRC
Clinical Activity by Prior PD-(L)1 Experience

- CPI-444 has activity in patients resistant/refractory to PD-1 blockade
- 2 PRs and 7 minor regressions in PD-1 resistant/refractory patients
- 1 PR and 4 minor regressions in PD-1 naïve patients
Duration of Treatment

Single Agent CPI-444

CPI-444 Combined with Atezo

[Graph showing duration of treatment for different patient groups with CPI-444 and CPI-444 combined with Atezo.]

Legend:
- OTHER
- TNBC
- MEL
- NSCLC
- RCC
Tumor Regression in Nivolumab Refractory Lung Cancer

*Single Agent CPI-444*

- 2 prior chemotherapy regimens
- Refractory to nivolumab
- Started single agent CPI-444

![Pre-treatment](image1)

![2 months of treatment](image2)
Regression in Nivolumab Resistant Lung Cancer
Combination CPI-444/Atezolizumab

• 1 prior chemotherapy
• Responded to nivolumab, then progressed
• Started CPI-444 + atezo

Pre-treatment

2 months on treatment
Tumor Regression in Nivolumab Refractory Renal Cancer

*Single Agent CPI-444*

- Five prior regimens including TKIs and mTOR inhibitor
- Tumor progression on nivolumab
- Started CPI-444

**Pre-treatment**

**3 months of treatment**
Serial Biopsies of Liver Metastasis from PD-1 Refractory RCC Patient Treated with Single Agent CPI-444

Pre-treatment

- Inflammatory Infiltrate in Tumor = 1%
- CD8\(^+\) in tumor = 14%

Post treatment (2 months)

- Inflamamatory Infiltrate in Tissue = 20%
- CD8\(^+\) in tissue >70%; no tumor cells detectable

Inflammation and CD8\(^+\) T Cell Infiltration After Progression on PD-1 Therapy Increased with Single Agent CPI-444 Therapy

See Abstract #5593
Conclusions

• CPI-444 is well tolerated as a single agent and in combination with atezo
  – Most common Grade 1/2 toxicities: nausea, fatigue, pruritus
  – irAEs of hemolytic anemia (Gr3), meningoencephalitis (Gr4), and pancreatitis (Gr2) seen with combination therapy

• Selected dose of CPI-444 is 100 mg bid continuous

• Observed clinical activity:
  – As single agent and in combination with atezo in multiple tumor types in advanced cancer patients
  – In patients refractory/resistant to PD-1/PD-L1 blockade
  – 23/37 patients with PR/SD remain on study median 16 weeks

• Increased inflammation and CD8+ T cells in biopsy observed in an anti PD(L)-1-experienced patients responding to single agent CPI-444
Acknowledgements

• The patients and their families

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• Colleagues at Corvus

• Colleagues at Roche Genentech