Safe Harbor Statement

In addition to historical facts, this presentation contains forward-looking statements that involve a number of risks and uncertainties. These statements include, but are not limited to, statements regarding the clinical results from, and our future development plans with respect to, crinecerfont, as well as the therapeutic potential and clinical benefits or safety profile of crinecerfont. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements include: top-line data that we report may change following a more comprehensive review of the data related to the clinical studies and such data may not accurately reflect the complete results of the clinical study; risks that regulatory submissions for our products and/or product candidates may not occur or be submitted in a timely manner; our products and/or product candidates may not obtain regulatory approvals; or that the U.S. Food and Drug Administration or regulatory authorities outside the U.S. may make adverse decisions regarding our products and/or product candidates; our products and/or product candidates will not be found to be safe and/or effective or may not prove to be beneficial to patients; that development activities for our products and/or product candidates may not be completed on time or at all; that clinical development activities may be delayed for regulatory or other reasons, may not be successful or replicate previous and/or interim clinical trial results, or may not be predictive of real-world results or of results in subsequent clinical trials; competitive products and technological changes that may limit demand for our products; uncertainties relating to patent protection and intellectual property rights of third parties; our dependence on third parties for development and manufacturing activities related to our products and our product candidates, and our ability to manage these third parties; our future financial and operating performance; risks and uncertainties associated with the commercialization of our products; and other risks described in the Company’s periodic reports filed with the Securities and Exchange Commission, including without limitation the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2023. Neurocrine Biosciences disclaims any obligation to update the statements contained in this presentation after the date hereof.
Classic Congenital Adrenal Hyperplasia Due to 21-Hydroxylase Deficiency (21OHD CAH)

• 21OHD CAH Results in:
  ✓ Impaired Synthesis of Cortisol and (Often) Aldosterone
  ✓ Excess Adrenal Androgen Production

• Treatment Must Balance Consequences of:
  ✓ Supraphysiologic Glucocorticoid (GC) Doses
  ✓ High ACTH and Androgen Excess


ACTH, adrenocorticotropic hormone; GC, glucocorticoids; TARTs, testicular adrenal rest tumors.

CAHtalyst™ Pediatric Study Design

**Objective**
Evaluate the efficacy, safety and tolerability of crinecerfont in children and adolescents with classic CAH

**Primary Endpoint**
Change from baseline in serum androstenedione at Week 4

**Key Secondary Endpoint**
Percent change in glucocorticoid daily dose from baseline at Week 28 while maintaining androgen control

*The duration of participation in the study is approximately 14 months for the core study and will be a variable amount of time per participant for the open-label extension. Crinecerfont is investigational and not approved in any country.*
Objective
Evaluate the efficacy, safety and tolerability of crinecerfont in adults with classic CAH

Primary Endpoint
Percent change from baseline in glucocorticoid daily dose at Week 24 while maintaining androgen control

*The duration of participation in the study is approximately 20 months for the core study and will be a variable amount of time per participant for the open-label extension

Crinecerfont is investigational and not approved in any country.
# CAHtalyst™ Adult and Pediatric Study Baseline Characteristics

<table>
<thead>
<tr>
<th>Study Characteristic</th>
<th>Adult Study (N = 182)</th>
<th>Pediatric Study (N = 103)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male / Female (Proportion of Total Subjects)</td>
<td>51% Male 49% Female</td>
<td>52% Male 48% Female</td>
</tr>
<tr>
<td>Average Age (Age Ranges)</td>
<td>31 Years Old (18 – 58 Years Old)</td>
<td>12 Years Old (4 – 17 Years Old)</td>
</tr>
<tr>
<td>Average Baseline Glucocorticoid Dose*</td>
<td>32 mg/day (18 mg/m²/day)</td>
<td>16 mg/m²/day</td>
</tr>
<tr>
<td>Average Baseline Androstenedione Level**</td>
<td>620 ng/dL</td>
<td>431 ng/dL</td>
</tr>
<tr>
<td>Percent of Subjects Completing Study 24-Week (Adult) or 28-Week (Pediatric) Placebo-Controlled Treatment Period</td>
<td>&gt;95%</td>
<td>&gt;95%</td>
</tr>
</tbody>
</table>

* In Hydrocortisone Equivalents  
** Pre-Glucocorticoid Dose
## CAHtalyst™ Adult and Pediatric Study Common Endpoints

<table>
<thead>
<tr>
<th>Common Endpoints</th>
<th>Adult Study (p-values)</th>
<th>Pediatric Study (p-values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum Androstenedione – Change from Baseline @ Week 4</td>
<td>&lt;0.0001</td>
<td>0.0002</td>
</tr>
<tr>
<td>Glucocorticoid Daily Dose – Percent Change from Baseline at Week 24 (Adult) / Week 28 (Pediatric) While Maintaining Androgen Control</td>
<td>&lt;0.0001</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Achieving Reduction to Physiologic Glucocorticoid Dose – At Week 24 (Adult) / Week 28 (Pediatric) While Maintaining Androgen Control</td>
<td>&lt;0.0001</td>
<td>0.0009*</td>
</tr>
</tbody>
</table>

* p-value not adjusted for multiplicity
### CAHtalyst™ Adult and Pediatric Study Percent of Subjects Achieving Reduction to Physiologic GC Dose While Maintaining Androgen Control

<table>
<thead>
<tr>
<th>CAHtalyst™ Trial Participants</th>
<th>Adult Study @ Week 24</th>
<th>Pediatric Study @ Week 28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients Receiving Crinecerfont</td>
<td>63%</td>
<td>30%</td>
</tr>
<tr>
<td>Patients Receiving Placebo</td>
<td>18%</td>
<td>0%</td>
</tr>
<tr>
<td>Placebo-Adjusted Difference (Patients Receiving Crinecerfont – Patients Receiving Placebo)</td>
<td>45%</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Percent of Subjects Achieving a Glucocorticoid Daily Dose ≤ 11 mg/m²/day While Maintaining Androgen Control**
• Crinecerfont Treatment was Overall Well-Tolerated with Few Serious Adverse Events (SAEs), None Were Assessed as Related to Crinecerfont

• Most Common Adverse Events During the Double-Blind, Placebo-Controlled Period of the Adult Study were Fatigue, Headache, and Coronavirus Infection

• Most Common Adverse Events During the Double-Blind, Placebo-Controlled Period of the Pediatric Study were Headache, Fever, Vomiting, Upper Respiratory Tract Infection, and Nasopharyngitis

• No Safety Concerns Related to Adrenal Crisis
Crinecerfont Program Next Steps

- The Open-Label Treatment Periods for the CAHtalyst™ Pediatric and Adult Studies are Ongoing.

- Data from the CAHtalyst™ Pediatric and Adult Studies, Including Data from the Ongoing Open-Label Treatment Periods, Will Support Regulatory Submissions to the FDA in 2024 and Later to the European Medicines Agency.

- Additional Information Regarding Results from the CAHtalyst™ Pediatric and Adult Studies Will Be Provided at the Company’s December 2023 Analyst Day and in a Peer-Reviewed Medical Journal.