Forward-Looking Statements

This presentation contains forward-looking statements, including, but not limited to, statements related to Horizon Pharma's expected peak annual sales of KRYSTEXXA in future periods, expected timing of clinical, regulatory and commercial events, including the KRYSTEXXA commercialization activities and resources, potential market opportunity for Horizon Pharma's medicines in approved and potential additional indications, potential growth of Horizon Pharma's medicines and markets, and business and other statements that are not historical facts. These forward-looking statements are based on Horizon Pharma's current expectations and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks that Horizon Pharma's actual future financial and operating results may differ from its expectations or goals; Horizon Pharma’s ability to grow net sales from existing products; the availability of coverage and adequate reimbursement and pricing from government and third-party payers and risks relating to Horizon Pharma’s ability to successfully implement its business strategies; risks related to acquisition integration and achieving projected benefits; risks associated with clinical development and regulatory approvals; risks in the ability to recruit, train and retain qualified personnel; competition, including potential generic competition; the ability to protect intellectual property and defend patents; regulatory obligations and oversight, including any changes in the legal and regulatory environment in which Horizon Pharma operates, potential events that could accelerate Horizon Pharma’s debt obligations and those risks detailed from time-to-time under the caption "Risk Factors" and elsewhere in Horizon Pharma's filings and reports with the SEC. Horizon Pharma undertakes no duty or obligation to update any forward-looking statements contained in this presentation as a result of new information.

The TRIPLE trial and the RECIPE trial are studies in collaboration with Horizon Pharma plc. Dr. Peter Lipsky and Dr. Kenneth Saag both serve as consultants to Horizon Pharma plc.
Horizon Pharma Today
Well Positioned for Sustainable High Growth

Improving patients’ lives by identifying, developing, acquiring and commercializing differentiated and accessible medicines that address unmet medical needs

• Diverse portfolio of high-growth rare disease medicines
• Building a pipeline to generate long-term value
• Proven acquisition capabilities, with expertise in identifying pipeline and on-market medicine opportunities
• Differentiated and successful strategy that optimizes our medicines’ growth trajectories through strong commercial execution and collaborative research
• Highly experienced management team
• Strong balance sheet that provides flexibility for strategic opportunities

KRYSSTEXXA® is one of our key growth drivers and well positioned for high growth
<table>
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<tr>
<th>Agenda</th>
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</table>
| **1** | Introduction | Tina Ventura  
SVP, Investor Relations, HZNP |
| **2** | Gout Overview | Jeffrey Kent, MD  
SVP, Medical Affairs, HZNP |
| **3** | KRYSTEXXA Overview | Jeffrey Kent, MD  
SVP, Medical Affairs, HZNP |
| **4** | KRYSTEXXA  
Commercial Overview and  
Clinical Trial Strategy | Vikram Karnani  
SVP, Rheumatology  
Business Unit, HZNP |
| **5** | TRIPLE Trial  
- Trial Overview  
- ACR Data Review  
- New Immunomodulation Arm | Peter Lipsky, MD  
Co-founder, CEO, and CMO, AMPEL  
BioSolutions; Former Director of  
Intramural Research Program and  
Autoimmunity Branch of NIAMS, NIH |
| **6** | RECIPE Trial  
- New Immunomodulation Study | Kenneth Saag, MD  
Professor and Vice Chair, Department of Medicine, UAB School of Medicine |
| **7** | Q&A |  |

Key Takeaways for Today’s Call

**KRYSFEXXA** is the first and only biologic for uncontrolled gout that rapidly reverses disease progression\(^1\)

- Can result in complete resolution in **months**, not years

**Horizon Pharma** revitalized **KRYSFEXXA** upon acquisition in January 2016; has resulted in significant **KRYSFEXXA** vial growth

- We expect 2018 **KRYSFEXXA** net sales growth of >50 percent

We have doubled the **KRYSFEXXA** organization, supporting our efforts to increase our presence in rheumatology and expand into nephrology

- Significant untapped potential; penetrated <2 percent of addressable market

We are complementing our commercial strategy with:

- Further data analysis to expand awareness among the medical community; and
- A clinical strategy to improve the response rate for **KRYSFEXXA**

Gout: The Most Common Inflammatory Arthritis

- Gout is the most common inflammatory arthritis\(^1\)

- Caused by high serum uric acid (sUA) levels

- 8.3 million patients in the U.S. with gout\(^1\)
  - 2.6 million treated patients\(^1\)

- sUA levels >6.8 mg/dL can result in urate crystal deposition in joints, organs or tissues\(^2\)

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Gout Hospitalizations Exceed Rheumatoid Arthritis Hospitalizations

Gout Represents a Growing Burden on the U.S. Healthcare System

Annual Rate of Hospitalization for Patients with a Principal Diagnosis of Gout and Rheumatoid Arthritis

410% increase in U.S. gout hospitalizations 1993-2014

>$42 Billion

2014 costs for U.S. gout-related hospitalizations

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Uncontrolled Gout
A Rare Disease that Afflicts ~100,000 U.S. Patients

- Uncontrolled Gout is defined as not responsive (refractory) to conventional therapies
- Principal Characteristics:
  - Elevated sUA levels despite urate-lowering therapy
  - Acute gout flares; possible tophi (hard uric acid deposits)
  - Bone erosions; loss of joint and limb functions; potential for chronic pain; renal and cardiovascular risk

8.3 MILLION
U.S. Patients With Gout

2.6 MILLION
Treated Patients

~100,000
UNCONTROLLED Gout Patients

Urate Deposits are Associated with Joint and Bone Damage

- Urate deposits start as nonvisible tophi (clusters of uric acid crystals) that can deposit almost anywhere \(^{(1)}\)
- In uncontrolled gout, urate deposition continues even between flares \(^{(2)}\)
- Causes bone damage, but at the same time can be clinically silent


Gout can be Associated with Multiple Negative Consequences

Patients with high uric acid levels have multiple comorbidities; gout patients have an average of four co-morbidities

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Mellitus</td>
<td>28.9</td>
</tr>
<tr>
<td>Coronary Artery Disease</td>
<td>37.4</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>47.1</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>62.6</td>
</tr>
<tr>
<td>Hypertension</td>
<td>88.7</td>
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Uric acid deposits can occur almost anywhere in the body – bones and joints, as well as organs, such as the heart and kidney.


Management of Gout is Dependent on Kidney Function

- Kidneys are the primary organ responsible for removing uric acid
- Damaged kidneys are less efficient at removing uric acid
  - Even more challenging for patients with chronic kidney disease (CKD)
- Conventional gout therapies place further burden on the kidneys to remove uric acid

KRYSTEXXA: Differentiating Mechanism of Action

Results in Rapid Urate Elimination

KRYSTEXXA has a unique mechanism of action

Unlike other gout medicines, KRYSTEXXA converts urate, the source of uric acid crystals, into a water-soluble substance, allantoin

The body can rapidly and easily eliminate allantoin through the urine

Current oral urate-lowering therapies target patients’ sUA levels by addressing the over production or under excretion of uric acid

Only ~10% of uric acid filtered through the kidney is excreted\(^{(2)}\)

Nearly all of allantoin filtered through the kidney is excreted\(^{(1)(2)}\)

Renal excretion of allantoin is up to 10x more efficient than excretion of uric acid\(^{(1)}\)


\(^{(2)}\) Terkeltaub R, Bushinsky DA, Becker MA. Arthritis Res Ther. 2006;8(suppl 1):S4
# KRYPTEXXA Pivotal Clinical Trials: Overview

## Trial Design
- Two replicate, randomized, double-blind, placebo controlled trials
- 6 months duration
- Every-other-week dosing

## Patient Demographics
- 85 patients
- Mean baseline sUA was 10 mg/dL
- With either visible or non-visible tophi

## Primary Endpoint
- Achieving complete response defined as maintaining sUA <6 mg/dL for ≥80% of the time at 3 and 6 months
- 42% of KRYPTEXXA patients vs. 0% for placebo (p<0.001)(1)

## Secondary Endpoint
- Complete tophi resolution of at least 1 target tophus, with no new or progressive tophi, in 6 months
- 45% of KRYPTEXXA patients vs. 8% for placebo (p=0.002)(1)

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42 Percent of KRYSTEXXA Patients Achieved Complete Response; All Patients Had a Rapid Drop in sUA

- Reduction of the body’s uric acid burden began with the first infusion\(^{(1)}\)
- All patients had a rapid drop in sUA levels
- Within 24 hours following the first dose, mean uric acid levels for patients treated with pegloticase were 0.7 mg/dL (vs 8.2 mg/dL with placebo)\(^{(2)}\)
- Complete responders maintained sUA levels <6 mg/dL >80% of the time at months 3 and 6 versus 0% for placebo (p <0.001)

Pooled results of the Investigator-Initiated Trial (ITT) population receiving pegloticase 8 mg by IV infusion q2 wk.

\(^{(2)}\) KRYSTEXXA® (pegloticase) Full Prescribing Information. Horizon Pharma; September 2016.
45 Percent of KRYSTEXXA Patients Had Complete Resolution of Tophi Over Time\(^{(1)}\)

\[\text{With KRYSTEXXA, Complete Tophi Resolution is Possible in MONTHS, Not Years}\]

Baseline

Patient receiving KRYSTEXXA 8 mg by IV infusion, q2wks who achieved target tophus resolution with no new or progressive tophi\(^{(2)}\)

- 71% of patients had 1 or more tophi at the baseline of the study\(^{(3)}\)

\(^{(2)}\) Data on file, Horizon Pharma Rheumatology LLC.
\(^{(3)}\) KRYSTEXXA® (pegloticase) Full Prescribing Information. Horizon Pharma; September 2016.
KRYSTEXXA is Safe and Effective for Uncontrolled Gout Patients with Chronic Kidney Disease (CKD)

49% of KRYSTEXXA Clinical Trial Patients Had Chronic Kidney Disease Stage 3 and 4

- Patients with CKD can be effectively treated with KRYSTEXXA without dose adjustment
- CKD patients experienced similar reductions in sUA levels compared with patients without CKD
- There was no difference in efficacy of KRYSTEXXA across CKD stages 1, 2, 3 and 4

We Have Supported Extensive Analysis of Existing Clinical Data on KRYSTEXXA and Uncontrolled Gout

Since acquiring KRYSTEXXA, we have supported extensive data analysis

✓ To better understand the Phase 3 clinical trial
✓ To elucidate important new clinical findings from the existing clinical trials that help educate physicians who treat uncontrolled gout patients
✓ To expand awareness of KRYSTEXXA as a safe and effective treatment of uncontrolled gout
✓ To raise awareness of uncontrolled gout and increase the urgency to treat as progressive condition

This approach is aligned with Horizon Pharma’s overall Medical Affairs strategy to:
• Engage
• Educate
• Communicate
Highlights from KRYSTEXXA Data Analysis Presented at Key Medical Meetings Over the Last Two Years

25 Percent of Incomplete Responders on KRYSTEXXA had Complete Tophus Resolution at Six Months

“Pegloticase Provides Clinical Benefit in Patients with Chronic Refractory Gout Who Did Not Meet the Clinical Trial Biochemical Definition of Response” - ACR 2016(1)

Responders to KRYSTEXXA Experienced Rapid Resolution of Tophi

“Rapid Tophus Resolution in Chronic Refractory Gout Patients Treated with Pegloticase” - ACR 2017(2)

Responders to KRYSTEXXA Experienced Significant Reductions in Blood Pressure Independent of Changes in Renal Function

“Treatment with Pegloticase Significantly Decreases Mean Arterial Blood Pressure in Patients with Chronic Gout” - ACR 2017(3)

Many patients on long-term KRYSTEXXA treatment meet criteria for gout remission

“Evidence Based Development of Criteria for Complete Response in Patients with Chronic Refractory Gout” - EULAR 2017(4)

ACR 2017 – KRYSTEXXA Data

• Treatment with Pegloticase Significantly Decreases Mean Arterial Blood Pressure in Patients with Chronic Gout
  – Shows that KRYSTEXXA responders experienced significant reductions in blood pressure, independent of renal function
  – Blood pressure reduction is an important finding and relevant to both rheumatologists and nephrologists
  – Important as we evolve our commercial efforts into nephrology and CKD patients

• Rapid Tophus Resolution in Chronic Refractory Gout Patients Treated with Pegloticase
  – Shows that KRYSTEXXA causes rapid resolution of tophi in KRYSTEXXA responders

• Evidence-Based Development of Criteria for Complete Response in Patients with Chronic Refractory Gout
  – Criteria that can help rheumatologists “treat to goal”
  – CR criteria relatively common in RA, but opportunity for improvement in gout
  – Defines complete response as patients who persistently lower sUA, reach criteria for CR, and do so within one year from the initiation of therapy
The KRYSTEXXA Story Exemplifies Horizon Pharma’s Strategy in Action

We improve patients’ lives by identifying, developing, acquiring and commercializing differentiated and accessible medicines that address unmet medical needs – And we drive shareholder value by generating high growth and profitability.

We use our uniquely strong in-house M&A capability with a proven track record of execution.

Next, we MAXIMIZE the value of our medicines through collaborative research.

We then OPTIMIZE the growth trajectory of our acquired medicines through focused commercial execution.
When We Acquired KRYSLEXXA in January 2016, It Was a No-Growth Product

Under prior ownership:

Vials per day jumped around, while overall remaining flat over time
We Turned KRYSTEXXA Around With the Right Commercial Strategy and Laser-Focused Execution ...

<table>
<thead>
<tr>
<th>Jan. 2016: What We Saw</th>
<th>What We Have Done Since Then...</th>
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<tbody>
<tr>
<td>Lack of disease awareness resulted in lack of urgency to treat</td>
<td>• Initiated education campaign to build awareness and identify patients</td>
</tr>
<tr>
<td></td>
<td>• “All gout is tophaceous” message launched at 2016 ACR</td>
</tr>
<tr>
<td>Poor working knowledge of KRYSTEXXA</td>
<td>• Re-analyzed clinical trial data with a focus on safety and publicize “the stopping rules”</td>
</tr>
<tr>
<td></td>
<td>• Improving safety perception, positively impacting patients considered appropriate for KRYSTEXXA</td>
</tr>
<tr>
<td>Misdirected and under-resourced marketing and sales created perception of “difficult to use” drug</td>
<td>• Built out a highly experienced sales, marketing and medical affairs team to appropriately support patient community and physicians</td>
</tr>
</tbody>
</table>

ACR: American College of Rheumatology.
... Supported by a Strong Team We Put in Place with Significant Expertise in Rheumatology

We Have Depth and Breadth of Experience in Rheumatology, Nephrology and Functional Expertise in Access and Patient Services and Support

- **5X increase in Sales Organization** since acquisition with prior success in biologics and rheumatology
- Added Patient Access Managers to provide patients and office staff with personalized support
- Built a Marketing organization with experience in rheumatology, biologics, gout, consumer and account management
- Built a Regional Medical Director team of clinical personal where leadership each has 15+ years of rheumatology experience
- Hired a rheumatologist to strengthen in-house medical affairs
We Relaunched KRYSTEXXA in Less Than 12 Months
In Less Than a Year We Broke Four Years of Flat Volume and Put KRYSTEXXA on a Rapid Growth Trajectory

Under Horizon Pharma ownership:

Vials per day increased steadily throughout 2016 and has accelerated in 2017

We expect the accelerated growth to continue going forward
We are Now Tapping New Areas of Opportunity Through our Nephrology Expansion

Nephrologists:

• See their patients through the lens of the kidney with an objective to protect the kidney
  – Gout is one of the multiple CKD co-morbidities
  – 25-50% of their CKD patients have gout
  – Gout is more prevalent as CKD advances

• They treat chronic kidney disease (CKD) patients with gout

• A gout attack in a CKD patient gets full attention of the nephrologist
  – Results in much hard work for the kidneys

Joint damage and resulting impact on quality of life is important to nephrologists

• Evidence-based documentation of the impact of uncontrolled gout

• Conventional therapies have significant dosing limitations in patient with CKD

Nephrologists are Very Positive about KRYSTEXXA

“YOU’VE GIVEN ME SOMETHING IN A SEA OF NOTHING”
– Nephrologist comment, 2017 blinded market research

Many nephrologists are unaware of KRYSTEXXA as an option to treat uncontrolled gout

- Conventional urate-lowering therapies can burden the kidney
- In the pilots we conducted, we observed a heightened sense of urgency when nephrologists discovered there was another option to treat uncontrolled gout

KRYSTEXXA mechanism of action is a significant area of differentiation

- Tested and proven effective and safe in the nephrologist patient population

Rapidly Accelerating KRYSTEXXA Vial Growth Gives us Confidence in Our >$400M Peak Sales Expectation\(^{(1)}\)

Expect >50 percent year-over-year net sales growth in 2018\(^{(1)}\)

1) Horizon estimate. Assumes July 1, 2018, implementation of U.S. Government’s Health Resources and Services Administration final rule on 340B drug ceiling price.
KRYSTEXXA Clinical Trial Strategy
Evaluating Ways to Enhance the Response Rate

• Our goal is to increase the number of patients with uncontrolled gout who respond to KRYSTEXXA and demonstrate fewer infusion reactions

• Investing in two investigator-initiated trials:
  – **TRIPLE**: Tolerization Reduces Intolerance to Pegloticase and Prolongs the Urate Lowering Effect: to investigate impact of tolerization and immunomodulation
  – **RECIPE**: “**REduCing Immunogenicity to PegloticasE**”: to investigate immunomodulation

• The two KRYSTEXXA immunomodulation studies use different immunomodulators
  – In line with current practice among rheumatologists
  – Using the immunomodulators rheumatologists widely use and prefer
### TRIPLE Phase 2 Trial Overview

| Initial Objective | Investigator-initiated adaptive study  
|                   | Exploratory, open-label, multi-center  
|                   | Evaluating multiple patient cohorts  
|                    | 66 currently enrolled to date  
|                    | Adult patients with uncontrolled gout aged 18 or older  
|                    | Screening visit sUA of >6 mg/dL  
|                    | On gout flare prophylactic regimen for 7 days prior to first dose  

- Determine whether the response rate for KRYSTEXXA can be improved by a tolerizing regimen of adding an extra dose of KRYSTEXXA one week after the initial dose and one week before the subsequent dose
- Subsequent to the initial objective, TRIPLE became an adaptive design study
- Have added additional cohorts to evaluate other approaches to improve response rate and identify earlier diagnosis
TRIPLE Phase 2 Trial Endpoints for Initial Patient Cohort: Tolerizing Regimen and IRs

Primary Endpoint

- Responders to treatment defined as:
  - a subject with >7 KRYSTEXXA infusions;
  - completed all study procedures through week 11
  - had the last 3 sUA levels <6 mg/dL

Secondary Endpoints

- Incidence of infusion reactions – first trial to prospectively assess
- Adverse events (AEs), serious AEs and early terminations due to AEs
Initial Data from TRIPLE Data Presented at ACR 2017

• Key finding: TRIPLE is the first prospective study to show that when stopping rules are used infusion reactions (IR) occurred in less than 1 percent of infusions
  • Use of stopping rules is a frequent “real-world” practice
  • Only one mild IR occurred (0.3 percent) with one patient, out of 315 doses administered in 50 uncontrolled gout patients
  • 26 percent IR rate in the Phase 3 trial results

• Lower frequency of subjects experienced gout flares (52 percent) versus the pegloticase clinical trials (74 percent)

• Overall response rate of 44 percent when adding one additional tolerizing dose of pegloticase

• Further research through TRIPLE and continued evaluation will help to clarify factors that influence responses such as tolerization dose, schedule, demographic factors and the utilization of concomitant immunomodulation
TRIPLE: An Evolving Study to Enhance the Response Rate for KRYSTEXXA and Improve Infusion Reaction Rate

Initial design: Add a tolerizing dose (n=40)
For patients <120kg, administer a single 8 mg tolerizing dose of pegloticase between the first two doses followed by q2wk dosing

Evaluate weight effects (n=27)
For patients weighing >120kg, evaluate different initial doses of pegloticase at week 1
(n=3 @ 8mg, n=12 @ 12mg, n=12 @ 16mg)

Evaluate pharmacokinetics (n=20)
Additional subjects will participate in PK sub-study assessments
(stratify patients by weight +/- 120kg and initial dose 12mg vs 16mg)

Additional patient cohorts to follow these initial patients
TRIPLE: Additional Cohorts to be Studied

Immunomodulation
Evaluate impact on response rate (sUA) and infusion reactions of adding azathioprine as an immunomodulator

Dual-Energy Computed Tomography (DECT) Imaging
Evaluate use of DECT imaging to facilitate earlier uncontrolled gout diagnosis, including renal and vascular deposition of urate
Rationale for Evaluating Immunomodulation

• One potential strategy to manage anti-drug antibody response with biologics is the co-administration of immunomodulators
  • Biologic rationale based on anecdotes in the literature
  • Rheumatologists use immunomodulators in other diseases – common and successful
  • Can evaluate many different immunomodulators that rheumatologists commonly use:
    - Azathioprine
    - MMF (CellCept®)
    - Methotrexate
Rationale for Adding an Immunomodulator to Improve Response to KRYSTEXXA

• Proof of concept study designed to address how immunomodulation extends to KRYSTEXXA
  • Using CellCept® (mycophenolate mofetil, or MMF)
• Why CellCept/MMF?
  • MMF is a commonly used immunomodulator by rheumatologists and they are familiar with the medicine
  • We believe MMF will likely demonstrate a favorable risk/benefit in the planned study population
REduCing Immunogenicity to PegloticasE (RECIPE) Study Overview

- Phase 2, double blind, multisite proof of concept trial in subjects (n = 32) initiating a pegloticase for the treatment of chronic refractory gout
- Testing hypothesis that a short term course of MMF can delay or prevent immunogenicity to pegloticase
- 3:1 randomization
  - pegloticase + MMF (n = 24)
  - pegloticase + PBO (n = 8)
- Each participant will be followed for up to 6 months
- 1° outcome is achievement of sUA <6 mg/dL through week 12

MMF-mycophenolate mofetil/CellCept; PBO-placebo
Prior to initial pegloticase infusion: pegloticase+MMF arm receives MMF 500mg twice daily for two weeks ("Run-in")

First 12 weeks: dual therapy phase for both arms

Second 12 weeks: open-label pegloticase only therapy (all patients)

MMF—mycophenolate mofetil/CellCept; PBO—placebo
Key Takeaways for Today’s Call

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- Can result in complete resolution in *months*, not years

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