**Horizon Pharma plc**
**Fourth-Quarter 2018 Conference Call**
**Feb. 27, 2019**

**Tina Ventura**
**Senior Vice President, Investor Relations**

Thank you, Amanda. Good morning, everyone, and thank you for joining us.

On the call with me today are:

- **Tim Walbert**, Chairman, President and Chief Executive Officer;
- **Paul Hoelscher**, Executive Vice President, Chief Financial Officer;
- **Shao-Lee Lin, M.D., Ph.D.**, Executive Vice President, Head of Research and Development and Chief Scientific Officer;
- **Bob Carey**, Executive Vice President, Chief Business Officer; and
- **Vikram Karnani,** Executive Vice President, Chief Commercial Officer

Tim will provide a high-level review of the fourth-quarter and full-year results and an update on the business. Paul will provide detail on our financial performance and 2019 guidance and Shao-Lee will discuss the clinical development programs for our rare disease medicines. After closing remarks from Tim, we will take your questions.

As a reminder, during today's call we will be making certain forward-looking statements, including statements about financial projections, our business strategy and the expected timing and impact of future events. These statements are subject to various risks that are described in our filings made with the Securities and Exchange Commission, including our annual report on Form 10-K for the year ended Dec. 31, 2018, and our earnings press release, which were issued this morning.

You are cautioned not to place undue reliance on these forward-looking statements, and Horizon disclaims any obligation to update such statements.

In addition, on today's conference call, non-GAAP financial measures will be used. These non-GAAP financial measures are reconciled with the comparable GAAP financial measures in our earnings press release and other filings from today that are available on our investor website at www.horizonpharma.com.

I will now turn the call over to Tim.

**Tim Walbert**
**Chairman, President and Chief Executive Officer**

Thank you, Tina, and good morning, everyone.

2018 was a highly successful year for Horizon. In addition to record financial results, we made tremendous progress executing on our strategy to build a robust and differentiated pipeline and maximize the growth of our flagship medicine, KRYSTEXXA®:

- We enrolled our teprotumumab Phase 3 clinical trial ahead of schedule and anticipate topline data this quarter. We hope to bring to market the first-ever therapy for thyroid eye disease to the thousands of patients who are suffering without a treatment option.

- We also delivered on our full-year 2018 net sales growth target of 65 percent for KRYSTEXXA. This is a direct result of having doubled our commercial organization, which we started roughly one year ago. We continue to invest in KRYSTEXXA to help many more patients suffering from uncontrolled gout, a very painful and often disfiguring disease. In fact, more than 100,000 patients underwent gout-related amputations over the last five years. We believe KRYSTEXXA can certainly help prevent this type of last-resort measure.

Our focused execution resulted in strong financial performance – we increased full-year net sales 14 percent to $1.21 billion, a record for the Company, and achieved $451 million in adjusted EBITDA, well above our guidance.

The successful year was capped off by a strong fourth quarter with orphan and rheumatology segment net sales of $238 million. This segment makes up nearly 70 percent of our total net sales, reflecting the value of our rapid evolution into a company focused on rare and rheumatic diseases. Driving the segment's 33 percent growth in the quarter was the 90 percent increase in KRYSTEXXA net sales to $83 million. This is impressive performance when you take into account that KRYSTEXXA was first approved nine years ago, and we have quadrupled its annual sales in the three years since we acquired the medicine in 2016.

The investments we are making are working. During 2018, we opened 620 new KRYSTEXXA accounts, representing an increase of 25 percent compared to total KRYSTEXXA accounts at the end of 2017, and vials from existing accounts increased 30 percent year over year. We continue to expect double-digit growth for KRYSTEXXA for the full-year 2019.

Net sales of our orphan medicines, RAVICTI® and PROCYSBI®, grew 16 percent and 21 percent, respectively, in the fourth quarter. Demand remains strong for both medicines, driven by patient growth and improved compliance. Both medicines are benefitting from the updates we made to their labeled indications, which have served to increase physician confidence in the clinical profiles of the medicines for treating younger, treatment-naïve patients.

Our commercial success in 2018 was mirrored by key developments and progress in research and development (R&D). We built out our R&D leadership team, beginning with the addition of Shao-Lee Lin early in the year, and then with the new leadership team she brought in to enhance the organization's capabilities. This is all in support of our strategy, which is to bring new medicines to patients and maximize the benefits of our current medicines. Shao-Lee will discuss our R&D progress in more detail; I'll highlight a few milestones now:

- With teprotumumab, we enrolled our Phase 3 clinical trial well ahead of schedule and expect topline results this quarter. Teprotumumab is our fully human monoclonal antibody IGF-1 Receptor inhibitor in Phase 3 development for thyroid eye disease, or TED. We continue to anticipate a mid-year 2019 biologics license application (BLA) submission assuming positive clinical data, and if approved, teprotumumab would be the first and only approved treatment for TED.

- We are also investing in KRYSTEXXA to maximize its value and enable more patients who suffer from uncontrolled gout to benefit from the medicine's impressive efficacy in reducing serum uric acid. Our initiatives include MIRROR, our immunomodulation trial underway, which is evaluating the impact of combining KRYSTEXXA with methotrexate, the immunomodulator most commonly used by rheumatologists. We are currently adapting MIRROR to support the potential for registration and continue to expect the adapted trial to begin in the second quarter.

- Today we announced plans to initiate a KRYSTEXXA trial in the second half of this year to demonstrate the efficacy of KRYSTEXXA in reducing serum uric acid levels in kidney transplant patients with uncontrolled gout. Kidney transplant patients have more than a tenfold increase in the prevalence of gout compared to the general population, which makes this an important patient population to evaluate. We estimate a little over 30,000 patients, with an addressable population of about a third of this.

In 2019, we expect our orphan and rheumatology segment to continue to drive our growth, supported by our durable base of rare disease medicines and KRYSTEXXA. In addition, the $960 million in cash on our balance sheet allows us to pursue external opportunities to expand our pipeline.

Looking to the future, our two high-growth opportunities, KRYSTEXXA and, if approved, teprotumumab, could more than double our current net sales – with each expected to generate more than $750 million in peak net sales.

Finally, with continued strong growth of KRYSTEXXA expected for many years to come, the additional potential growth from teprotumumab beginning in 2020, and the potential acquisition opportunities to augment our pipeline, we believe we are in an excellent position to deliver long-term growth, margin expansion and shareholder value.

I will now turn it over to Paul.

**Paul Hoelscher**
**Executive Vice President, Chief Financial Officer**

Thanks, Tim.

My comments this morning will primarily focus on our non-GAAP results, unless otherwise noted.

**Fourth-Quarter 2018 Financial Results**
Fourth-quarter net sales of $355.5 million were driven by continued strong growth in our orphan and rheumatology segment. This segment generated net sales of $237.6 million in the quarter, an increase of 33 percent, and generated segment operating income of $84.8 million, an increase of nearly 40 percent. As we've discussed previously, we significantly increased our investment in 2018 in both our pipeline and our KRYSTEXXA commercial efforts. With the increase in KRYSTEXXA sales and continued growth from our orphan medicines and RAYOS®, fourth-quarter segment operating margin improved 130 basis points year over year. For the full year, the orphan and rheumatology segment generated net sales of $831.5 million and segment operating income was $290 million, increases of 22 percent and 20 percent, respectively.

Net sales for the primary care segment were $117.9 million, and segment operating income was $66.2 million. For the full year, the primary care business generated net sales of $376.1 million and segment operating income of $160.4 million. We delivered improved segment operating income from primary care, which we continue to invest back into our orphan and rheumatology segment.

Our non-GAAP fourth quarter gross profit ratio was 89.1 percent of net sales.

Non-GAAP operating expenses for the four quarter were $165.8 million. This included non-GAAP R&D expense of $18.7 million, reflecting investment in teprotumumab, as well as our rheumatology pipeline programs. Non-GAAP SG&A expense was $147.1 million.

Adjusted EBITDA was $151.1 million for the fourth quarter.

Non-GAAP income tax expense for the fourth quarter was $10.4 million.

Non-GAAP net income and non-GAAP diluted earnings per share were $116.8 million and $0.67, respectively.

The weighted average shares outstanding used to calculate fourth-quarter 2018 non-GAAP diluted EPS were 174.2 million shares.

And non-GAAP operating cash flow was $115.1 million.

As of December 31, cash and cash equivalents were $958.7 million, which gives us significant flexibility to manage our business. The total principal amount of our debt outstanding was $1.993 billion, and we have a long runway to our first debt maturity, which is not due until 2022. Net debt was $1.034 billion, and our net-debt-to-last-12-months adjusted EBITDA leverage ratio was 2.3 times, compared to 3.3 times at the end of 2017.

**Full-Year 2019 Guidance**

Moving now to our outlook for 2019. This morning, we provided 2019 full-year net sales guidance of $1.23 billion to $1.25 billion, underscoring our expectation for another year of commercial execution, driven by our orphan and rheumatology segment. In 2019, we continue to project double-digit full-year net sales growth for KRYSTEXXA. Our full-year net sales guidance also incorporates the divestiture of three of our medicines outside the United States – RAVICTI, AMMONAPS®, known as BUPHENYL® in the United States, and LODOTRA®, known as RAYOS in the United States. Therefore, beginning with the first quarter, we will no longer recognize RAVICTI and AMMONAPS net sales outside of North America and Japan or net sales of LODOTRA, which in 2018 represented about $12 million in the divested markets.

With regards to primary care, our 2019 guidance assumes a single-digit year-over-year decline in net sales for the segment, with no price increases this year. We will continue to deploy the strong cash flows from primary care to support investment in our orphan and rheumatology segment.

Our 2019 full-year adjusted EBITDA guidance of $440 million to $455 million reflects continued investment in our key growth drivers, including an increase in spend to prepare for the potential U.S. launch of teprotumumab, assuming positive Phase 3 data. It also incorporates continued investments in our KRYSTEXXA and uncontrolled gout pipeline programs, including two new KRYSTEXXA studies in 2019 – our MIRROR registrational immunomodulation trial and our KRYSTEXXA trial with kidney transplant patients.

We expect our non-GAAP gross profit ratio to be approximately 90 percent.

Non-GAAP R&D expense as a percentage of sales is projected to be in the high single digits for 2019, a significant year-over-year increase, driven by KRYSTEXXA and our uncontrolled gout pipeline programs.

We anticipate a year-over-year increase in non-GAAP SG&A expense, which primarily reflects the investments we are making to prepare for the potential teprotumumab U.S. launch.

We expect full-year non-GAAP net interest expense to range between $90 million and $95 million.

We expect a full-year non-GAAP tax rate in the low-to-mid teens. As we see every year, we anticipate variability in our non-GAAP tax rate on a quarterly basis.

We estimate that our cash tax rate will be in the low-to-mid single digits in 2019, increasing to the mid-to-high teens over the next several years. As always, this projection could change significantly as a result of any acquisitions or divestitures made by the Company or any changes in tax laws.

We expect our full-year 2019 weighted average diluted share count to be higher than 2018, ranging between 172 million and 177 million shares.

And finally, for the first quarter, we expect double-digit growth for both net sales and adjusted EBITDA. We expect total net sales to be approximately 20 percent of our full-year 2019 net sales, in line with prior years. As we discuss every year, first-quarter net sales are generally the lowest of the year, impacted by seasonality as patient deductibles reset or patients experience changes in their health insurance coverage. In addition, for KRYSTEXXA, as expected, we will see an impact from 340B pricing, as well as seasonality. We expect the first-quarter KRYSTEXXA net sales to be a similar percentage of full-year net sales as we saw in 2018, or approximately 18 percent. We continue to expect full-year double-digit net sales growth for KRYSTEXXA.

We expect first-quarter adjusted EBITDA to be in the low double digits as a percentage of our full-year 2019 adjusted EBITDA. This is in line with first-quarter adjusted EBITDA contributions in prior years.

With that, I'll turn the call over to Shao-Lee.

**Shao-Lee Lin, M.D., Ph.D.,**
**Executive Vice President, Head of Research and Development and Chief Scientific Officer**

Thank you, Paul, and good morning, everyone.

We continued to make strides in the fourth quarter on our strategy to expand our pipeline, advance our current research and development programs, and maximize the benefits of our on-market medicines.

**Teprotumumab**
I'll begin today's update with teprotumumab – our fully human monoclonal antibody IGF-IR inhibitor in development for the treatment of thyroid eye disease, or TED. We are particularly enthusiastic about this program, given that there are no approved treatments for TED despite the thousands of patients impacted by this debilitating disease. Based on the data from the Phase 2 study, we believe that teprotumumab may demonstrate a disease-modifying effect, and therefore has the potential to be the first approved therapy for TED.

In 2018, we achieved two significant milestones for teprotumumab: One, we presented additional Phase 2 data in the fourth quarter that demonstrated durability of response almost a full year post treatment – for both proptosis, or bulging of the eyes, and diplopia, or double vision. And secondly, we enrolled OPTIC, our Phase 3 confirmatory trial, ahead of schedule.

We expect 2019 to be an exciting year, as we anticipate top-line Phase 3 data results in the first quarter and continue to expect a mid-2019 BLA submission, assuming positive data.

Ahead of the Phase 3 data read-out, I'd like to provide a brief overview of TED and several key points about the Phase 3 trial.

In patients with TED, the IGF-1 Receptor is overexpressed on orbital tissues, resulting in local inflammation, orbital fibroblast proliferation and tissue swelling, which in turn causes proptosis. Patients may experience discomfort simply closing or even blinking their eyes, which can lead to poor sleep patterns and result in painful ulcers on the surface of the eye itself. Proptosis can result also in diplopia, or double vision. Overall, the morbidity that patients experience with TED can be highly detrimental to activities of daily living, such as the ability to drive a car, read or even walk down stairs. In some instances, pressure on the optic nerve from proptosis can even result in blindness.

Therefore, and importantly, reduction in proptosis is the primary endpoint for teprotumumab's Phase 3 confirmatory trial. It is an objective, physical measurement that was agreed upon with the FDA to be the primary outcome measure. The design of OPTIC is similar to the Phase 2 trial: teprotumumab and placebo are infused once every three weeks over a course of 24 weeks. The enrollment criteria for Phase 3 match those of Phase 2; and eight of the 13 clinical trial investigators are also the same. These eight investigators enrolled 80 percent of the 83 patients in OPTIC.

We are also conducting an extension study, OPTIC-X, that will allow up to an additional 24 weeks of teprotumumab treatment. Data from OPTIC-X will inform as to whether non-responders from the initial 24 weeks of treatment during OPTIC would benefit from longer treatment, and if patients who lose response off drug after the initial 24 weeks of treatment would benefit from retreatment.

**KRYSTEXXA and Rheumatology Programs**

Moving now to our uncontrolled gout programs and KRYSTEXXA – a core component of our clinical strategy for KRYSTEXXA is to maximize its benefit for patients, given that it is the only FDA-approved treatment for uncontrolled gout. In the KRYSTEXXA pivotal Phase 3 trials, 42 percent of patients achieved complete response, maintaining a serum uric acid level of less than six mg/dL over six months. Our goal is to increase the number of patients who can achieve a complete response with KRYSTEXXA, and we are investigating ways to do this. There is evidence that the addition of immunomodulators to biologic therapies can reduce the formation of anti-drug antibodies, and therefore has the potential to improve response rates. As we discussed last quarter, we are conducting the MIRROR study to evaluate the effect on the response rate of KRYSTEXXA with co-administration of methotrexate. Based on a positive case series presented by external investigators at the Annual College of Rheumatology meeting in the fourth quarter, we are in the process of adapting the MIRROR study to support the potential for registration. We expect to begin enrollment in the adapted MIRROR trial, as a randomized and placebo-controlled study, in the second quarter of 2019.

And as we have shared today, we are also initiating a clinical trial in the second half of 2019 evaluating KRYSTEXXA in kidney transplant patients. These patients were excluded as part of the original pivotal trials for KRYSTEXXA. However, they have more than a tenfold increase in the prevalence of gout when compared to the general population, and literature also suggests that high serum uric acid levels are associated with organ rejection. Managing uncontrolled gout is therefore both a common and significant unmet need of kidney transplant patients. This trial will also serve as an opportunity to further inform nephrologists as to the use and effectiveness of KRYSTEXXA and its potential benefit for chronic kidney disease patients with uncontrolled gout.

Finally, our pipeline includes three preclinical programs designed to enhance and sustain our leadership position in uncontrolled gout. Two of the programs are next-generation biologics, which we continued to advance in 2018. These programs are exploring the use of optimized uricase technology as well as optimized PEGylation and PASylation technologies to potentially improve the half-life of the molecule and enhance response rates. We are targeting subcutaneous formulations for both programs. The third program, which we recently announced, is a long-term discovery collaboration with HemoShear Therapeutics that provides us with the capability to explore novel targets for lowering serum uric acid levels in chronic gout and treating acute gout flares.

As always, I look forward to updating you on our continued progress. I'll now turn the call over to Tim for his concluding remarks.

**Tim Walbert**
**Chairman, President and Chief Executive Officer**

Thank you, Shao-Lee.

In summary:

- 2018 was a year of continued transformation for the Company. We made significant progress building a robust pipeline of differentiated medicines and maximizing KRYSTEXXA to enhance our leadership in uncontrolled gout. We generated double-digit growth rates for both our record net sales of $1.21 billion and adjusted EBITDA of $451 million.

- Our diversification strategy is working, with 70 percent of our total net sales now generated from our rare and rheumatic disease medicines.

- We're building on that momentum in 2019, continuing to drive strong commercial execution and pipeline expansion. We expect continued growth from our orphan and rheumatology segment, with KRYSTEXXA net sales growing double-digits. And we are looking forward to the Phase 3 teprotumumab top-line data read-out this quarter. Assuming positive data, we intend to submit our BLA by mid-year and begin our launch preparation.

- We will also continue to advance our uncontrolled gout programs to enable more patients to benefit from KRYSTEXXA, including the MIRROR registrational trial and our new KRYSTEXXA trial in kidney transplant patients that have uncontrolled gout.

- It is truly an exciting time for Horizon, where we are well on our way toward our goal of being a leading rare disease biopharma company – delivering innovative therapies for patients and generating sustainable long-term growth and value for our shareholders.

With that, we'll open it up for questions.

**Tina Ventura**
**Senior Vice President, Investor Relations**

Thank you, Amanda. That concludes our call this morning. A replay of this call and webcast will be available in approximately 2 hours. Thank you for joining us.