Forward Looking Statements

The statements in this presentation that relate to future plans, events or performance are forward-looking statements, which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended. Such forward-looking statements involve significant risks and uncertainties, and actual results, events and performance may differ materially from those expressed or implied in this presentation. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, but are not limited to, statements concerning the following: (i) estimates of our expenses, future revenue and capital requirements; (ii) our ability to obtain additional funding on terms acceptable to us, or at all; (iii) our ability to advance product candidates into, and successfully complete, clinical trials; (iv) the initiation, timing, progress and results of future preclinical studies and clinical trials, and our research and development programs; (v) the timing or likelihood of regulatory filings and approvals; (vi) our expectations on sales and market acceptance for bremelanotide (Vyleesi®) for hypoactive sexual desire disorder (HSDD), a type of female sexual dysfunction (FSD), including our licensees outside North America jurisdictions; (vii) our expectation regarding timelines for development of our other product candidates; (viii) the potential for commercialization of our other product candidates, if approved for commercial use; (ix) our ability and the ability of our licensees to compete with other products and technologies similar to our product candidates; (x) the ability of third party collaborators to timely carry out their duties under their agreements with us and our licensees; (xi) the ability of contract manufacturers to perform their manufacturing activities in compliance with applicable regulations; (xii) our ability to recognize the potential value of our licensing arrangements with third parties; (xiii) the potential to achieve revenues from the sale of our product candidates; (xiv) our ability to maintain product liability insurance at a reasonable cost or in sufficient amounts, if at all; (xv) the retention of key management, employees and third-party contractors; (xvi) the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology; (xvii) our compliance with federal and state laws and regulations; (xviii) the timing and costs associated with obtaining regulatory approval for our product candidates; (xix) the impact of legislative or regulatory healthcare reforms in the United States; and (xx) other risks disclosed in our SEC filings. The forward-looking statements in this presentation do not constitute guarantees of future performance. We undertake no obligation to publicly update these forward-looking statements to reflect events or circumstances that occur after the date of this presentation.
Company Profile

- Technology and expertise in developing drugs that modulate the melanocortin system with a primary focus on inflammatory and autoimmune diseases

- Demonstrated expertise moving programs from discovery to FDA approval
- Expertise in the biology and chemistry of the melanocortin system
- First company to procure FDA approval for a melanocortin agent (Vyleesi®)
- Strategy leverages our chemistry and biology across multiple therapeutic opportunities
- MOAs with the potential to modify underlying disease pathologies - not just treat symptoms
### Development Programs

#### Clinical Pipeline

<table>
<thead>
<tr>
<th>Melanocortin Receptor Programs</th>
<th>Pre-clinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>NDA Submission</th>
<th>FDA Approval</th>
<th>Status/Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vyleesi® (bremelanotide)</strong></td>
<td></td>
<td></td>
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<td>FDA Approval 6/21/2019. Licensees: Fosun (China, Taiwan, HK, Macau) and Kwangdong (S. Korea) Seeking ROW licenses</td>
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<tr>
<td>Hypoactive Sexual Desire Disorder</td>
<td></td>
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<tr>
<td><strong>PL9643 MCR Agonist</strong></td>
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<td></td>
<td>Phase 2 Dry Eye 1Q2020 Positive Data Obtained 4Q2020 Initiate Phase 2/3 2H2021 Phase 2/3 data 1H2022</td>
</tr>
<tr>
<td>Dry Eye Disease</td>
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<td></td>
<td></td>
<td></td>
<td>Evaluating options</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>File IND for DR/DME 2022</td>
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<td>Second Front of the Eye Indication</td>
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<td></td>
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<td></td>
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<td>Initiate ulcerative colitis Phase 2 in 2H2021. Ulcerative colitis Phase 2 data 2022</td>
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<td><strong>MCR Agonist</strong></td>
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<td>Diabetic Retinopathy</td>
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<tr>
<td>Non-Infectious Uveitis</td>
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<tr>
<td><strong>PL8177 MC1R Agonist (Oral)</strong></td>
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<tr>
<td>Inflammatory Bowel Disease</td>
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<table>
<thead>
<tr>
<th>Natriuretic Peptide Receptor Programs</th>
<th>Pre-clinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>NDA Submission</th>
<th>FDA Approval</th>
<th>Status/Next Steps</th>
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<tbody>
<tr>
<td><strong>PL3994 NPR-A</strong></td>
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<td>Entering Phase 2a clinical trial supported by a grant from the American Heart Association in 2H2020</td>
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<td>Cardiovascular Disease</td>
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<td><strong>PL5028 NPR-A/C Agonist</strong></td>
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<td>Cardiovascular and Fibrotic Diseases</td>
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Source: Company Filings
## Milestones

<table>
<thead>
<tr>
<th>Vyleesi (bremelanotide) for Hypoactive Sexual Desire Disorder</th>
<th>Initiated</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>North American rights regained</td>
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<td>3Q2020</td>
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<tr>
<td>China licensee PK study</td>
<td></td>
<td>1H2021</td>
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<tr>
<td>South Korea licensee PK study</td>
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<td>1H2021</td>
</tr>
<tr>
<td>Additional ROW partnerships</td>
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<td>2021</td>
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</table>

<table>
<thead>
<tr>
<th>Melanocortin System Inflammatory &amp; Autoimmune Disease Programs</th>
<th>Initiated</th>
<th>Data</th>
</tr>
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<tbody>
<tr>
<td>PL9643 – Dry Eye</td>
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<td></td>
</tr>
<tr>
<td>IND</td>
<td>4Q2019</td>
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<tr>
<td>Phase 2</td>
<td>1Q2020</td>
<td>4Q2020</td>
</tr>
<tr>
<td>Phase 2/3</td>
<td>2H2021</td>
<td>1H2022</td>
</tr>
<tr>
<td>Phase 3</td>
<td>1H2022</td>
<td>2H2023</td>
</tr>
<tr>
<td>PL8177 – Ulcerative Colitis</td>
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<tr>
<td>Phase 2 Ulcerative Colitis Proof-of-Concept</td>
<td>2H2021</td>
<td>1H2022</td>
</tr>
<tr>
<td>PL9643-2™nd front of eye indication</td>
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<tr>
<td>Phase 2 Proof-of-Concept</td>
<td>1H2022</td>
<td>2H2022</td>
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<tr>
<td>MCR Agonist-Retinal indication</td>
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<tr>
<td>Proof-of-Mechanism DR/DME</td>
<td>2022</td>
<td>2023</td>
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</table>

<table>
<thead>
<tr>
<th>Natriuretic Peptide System Cardiovascular &amp; Fibrosis Programs</th>
<th>Initiated</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL3994 – Heart Failure</td>
<td></td>
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</tr>
<tr>
<td>Open label Phase 2a HF-pEF patients</td>
<td>2H2020</td>
<td>2H2021</td>
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</tbody>
</table>
FDA Approved Vyleesi®

Helping Premenopausal Women with Hypoactive Sexual Desire Disorder (HSDD)

Hey, you. Meet Vyleesi. ...it’s Now Approved

Vyleesi is the first and only as-needed* treatment for premenopausal women with acquired, generalized hypoactive sexual desire disorder (HSDD).

*Administer subcutaneously as needed at least 45 minutes before anticipated sexual activity. The duration of its effect after each dose is unknown. Do not administer more than one dose within 24 hours or more than 8 doses per month.
FDA Approved Vyleesi®

Vyleesi is a valuable asset (FDA approved product with limited competition)

Goal
- Demonstrate the commercial value of Vyleesi and re-license to a committed partner

Highlights and recent operational results
- Quarter ended March 31, 2021 over the prior quarter ended December 31, 2020
  - Gross product sales increased 89%
  - Net revenue increased 154%
  - Prescriptions increased 24%
- Geo-targeted marketing efforts expected to drive healthcare provider and consumer engagement
  - Current digital campaign applications reach thousands of healthcare providers and millions of premenopausal women monthly and has resulted in increased website and telemedicine traffic
- Market access
  - Achieved ~75% of commercially insured lives and ~50% of commercial formulary coverage
HSDD is a Significant Market Opportunity

Number of premenopausal women who have low desire with associated distress

1/10\(^1,2\)

1. Focused on relevant digital channels
2. Creating an online community for HSDD patients
   - Provide accurate information
   - Tools to support the HSDD patient - symptom check, speaking with your doctor and additional resources
3. Ensure HCP readiness, provide information and tools to diagnose and treat HSDD patients with Vyleesi

3 Palatin supported research that was performed by Burke, Inc., an ISO 20252-certified company, in compliance with the established standard for market, opinion, and social research.

Affects 5.8 million U.S. premenopausal women\(^3\)
(1 in 10 premenopausal women)\(^1,2\)

98% (5.7M) of affected premenopausal women not on therapy\(^3\)

Effects Affects 5.8 million U.S. premenopausal women (1 in 10 premenopausal women) 98% (5.7M) of affected premenopausal women not on therapy.
ROW Vyleesi Licensing Agreements

**FOSUN PHARMA**

Chinese pharmaceutical company focused on developing and commercializing innovative healthcare solutions with >$2B in annual sales

- Exclusive licensing agreement covers China, Hong Kong, Taiwan and Macau markets
- $5M upfront payment, $7.5M regulatory milestone
- Up to $92.5M in sales milestones plus tiered royalties from high single digits to low double digits
- Fosun responsible for all development, regulatory and commercial activities

**KWANGDONG PHARMACEUTICAL CO.**

Republic of Korea leading pharmaceutical company with >$900M in annual sales

- Exclusive licensing agreement for the Republic of Korea
- $500,000 upfront, ~$40M in regulatory and sales milestones plus royalties on sales
- Kwangdong responsible for all development, regulatory and commercial activities
Melanocortin Inflammatory & Autoimmune Disease Programs
Immunological Effects of Melanocortin System

- Melanocortin system is up-regulated by and integral to the resolution of autoimmune pathologies
- Modulates the activity of cells of the immune system
- Activated during disease state
- Activates resolution of proinflammatory processes
  - Reduces NF-κB and other pro-inflammatory cytokines (IL-1, IL-2, IL-4, IL-6, IL-13, TNF-α, IFN-γ)
  - Increased production of IL-10, an anti-inflammatory cytokine
  - Mediates antigen specific T-cell and macrophage responses from pro-inflammatory to regulatory
- MC1R specific peptides and small molecules have demonstrated in vivo activity in numerous disease models of inflammation*
Mechanism of Action of Melanocortins

Mechanism of Melanocortin Signaling, Leading to Inhibition of Inflammation

- Melanocortin receptor activates adenyl cyclase, which generates cAMP activating protein kinase A (PKA) and protein kinase C (PKC)
- PKA activation leads to an influx of extracellular calcium and activation of IP3
- IP3 activates PI3K and JAK-STAT pathways, which inhibit degradation of NFkB and activate CREB, which prevents NFkB from activating transcription of inflammatory cytokines
- CREB is involved in downstream resolution of inflammation through production of immune signaling cytokines such as IL-10, which regulates the stimulation of immune cells

Immune cell

PALATIN
Melanocortin Anti-inflammatory Program

Rational design and synthesis of selective MC1R & MC1/5R agonists

PL8177: cyclic peptide selective MC1R agonist
PL9643: cyclic peptide MCR agonist

Reversal of pathology in multiple inflammatory and autoimmune disease models

Including inflammatory bowel disease, dry eye, uveitis, diabetic retinopathy and pulmonary fibrosis

PL8177 Phase 2 clinical development candidate for indications requiring local or systemic administration

Oral formulation: Phase 2 for ulcerative colitis FPI 2H2021
Preclinical data in bleomycin pulmonary fibrosis model

Multiple opportunities for ocular indications

PL9643 topical DED
- Positive Phase 2 data
- Progressing to registrational studies
PL9643 topical for 2nd front of eye indication
PL8177 SC non-infectious uveitis Orphan designation
Candidate in IND-enabling activates for retinal indications
Dry Eye Overview

- Dry eye disease (DED) or keratoconjunctivitis is a multifactorial disorder of the tears and ocular surface.
- Symptoms include dryness, irritation, redness, discharge and blurred vision.
- Inflammation plays a prominent role in the development and amplification of the signs and symptoms of DED.
- Current Treatments >$2 billion in revenue:
  - Restasis®-topical cyclosporin
  - Xiidra®-topical integrin inhibitor
  - Topical steroids
  - Artificial tears
- Current treatments have efficacy and tolerability issues and there remains a high medical need for new innovative treatments that affect underlying disease processes.
DED is one of the most common eye diseases in the United States\(^1\)

\[\text{AMERICAN ADULTS} \text{ suffer from symptoms of DED}^{2,3}\]

\[= \frac{1}{7}\text{ American Adults}^{2,3}\]

PL9643 Dry Eye Program

- PL9643 represents a novel approach to treating Dry Eye Disease (DED) by targeting the ability of the MS to resolve pathological inflammation
  - PL9643 treats inflammation underlying the development and maintenance of DED, addressing both signs and symptoms of DED
- PL9643 is an agonist at the melanocortin 1 receptor (MC1r) and melanocortin 5 receptor (MC5r)
- PL9643 base patent runs to 2041
- Preclinical, DED studies PL9643 significantly reduced corneal epithelial damage with effects similar to Restasis®, a comparator reference agent
- Phase 2 study completed 2020
  - Positive study
  - 1st evaluation of MS agonist in ocular inflammatory indication
PL9643 Dry Eye Phase 2 Strategy

• Multi-center phase 2 RCT comparing PL9643 to placebo in DED patients with a 12-week treatment period

• Co-primary end points, a sign and symptom of DED
  ◦ Sign: improvement in inferior fluorescein staining at week 12
  ◦ Symptom: ocular discomfort measured at week 12

• Phase 2 study was exploratory with evaluations of multiple sign and symptom end points, patient segments, and time points

• Multiple outcomes can support a successful phase 2 DED study
  ◦ Statistical significance for both co-primary end points
  ◦ Statistical significance inferior fluorescein staining and a secondary symptom end point
  ◦ Statistical significance ocular discomfort and a secondary sign end point

• Phase 3 registrational studies will need to achieve statistical significance on co-primary end points of a sign and symptom of DED
PL9643 Dry Eye Phase 2 Results

- Met primary objective of providing data required to advance into registration studies
- Statistical significance for the primary endpoints was not achieved in the ITT population that included mild, moderate, and severe patients
- In the sub-population of moderate to severe patients (N=61), PL9643 achieved statistical significance (P value <0.05 vs. vehicle) at week 2 and week 12 for multiple signs and symptoms
- PL9643 demonstrated excellent ocular safety and tolerability
  - No drug related serious adverse or adverse events
  - No drug related discontinuations
  - High ocular comfort
- Favorable emerging product profile
  - Rapid onset, well tolerated and global efficacy
In patients with moderate or severe disease significant improvement was observed for PL9643 compared with placebo for the primary endpoint of inferior corneal fluorescein staining ($P<0.05$).
Differences between PL9643 & Placebo in Conjunctival Redness and Tear Film Break-up Time Patients with Moderate or Severe Disease

Signs of conjunctival redness showed numeric improvements (as demonstrated by negative change from baseline) and tear film break-up time showed significant improvement at 12 weeks

*P≤0.05
Differences between PL9643 & Placebo Ora Calibra® Ocular Discomfort & 4-Symptom Questionnaire† Score's patients with Moderate or Severe Disease

PL9643 demonstrated significant improvement in ocular discomfort over placebo at Week 2 (as shown by negative change from baseline)

†Measured on 0-5 continuous scale
DED is estimated to affect over 20 million people in the United States
- Majority of people suffering from DED are in the moderate to severe category (>75%)
- Most patients have persistent disease (>5yrs)

Existing therapies for dry eye disease generally regarded as inadequate by many physicians and patients
- Limited clinical trial evidence for both signs and symptoms
- Require weeks or months to demonstrate activity
- High discontinuation due to due to slow onset, lack of efficacy and high rates of side effects

PL9643 has a favorable commercial product profile /
Differentiating factors to current approved therapies
- Quick onset of efficacy
- Excellent tolerability profile
PL9643 Dry Eye Disease Development – Next Steps

- **Submit Phase 2 Study to FDA**
  - 1H2021

- **EOP2 FDA Meeting**
  - 1H2021

- **Complete Non-clinical Activities**
  - 1H2021

- **Initiate Phase 2/3 Study**
  - 2H2021
  - Data 1H2022

- **Initiate 2nd Phase 3 Study**
  - 1H2022

- **NDA to FDA Submission**
  - 1H2023
Diabetic Retinopathy & Macular Edema

• By 2050, the number of Americans with diabetic retinopathy is expected to nearly double, from 7.7 million to 14.6 million
• DME affects ~10% of people with diabetic retinopathy
  ◦ ~750,000 in the USA & 2.2 million people in the EU
• IVT VEGF antagonists and steroids are the main treatments for DME
  ◦ Annual global sales for DR/DME estimated at $1.85b
• There is a high need for additional treatments
  ◦ To delay progression, maintain and improve visual acuity
  ◦ Replacement for steroids without glaucoma or cataract side effects
• Our melanocortin agonist have been evaluated in multiple animal models of retinal disease
PL9643 is as efficacious as Restasis® and several orders of magnitude more potent.

- PL8331 is a melanocortin receptor agonist
- VEGF and TNF-α levels are similar to healthy mice even though the diabetic mice remain hyperglycemic throughout the study
- IL-10 is a marker of inflammation resolution
Melanocortin Agonists Preserve Contrast Vision and Acuity

Rat diabetic retinopathy model
Non-Infectious Uveitis (NIU) is a potentially blinding intraocular inflammatory disease that arises without a known infectious trigger and is often associated with immunological responses to unique retinal proteins.

- **Prevalence of NIU in N. America**
  - Adults: ~72,000
  - Pediatric: ~21,000

- NIU causes bilateral legal blindness in 6% of patients and unilateral blindness in 18% of patients.

- **Only 2 FDA approved treatment options**
  - Ozurdex® (dexamethasone intravitreal implant)
  - Humira® (adalimumab)
  - Significant off-label treatments – steroids, infliximab, methotrexate, azathioprine, etc.

- **There remains a high need for new safer treatments**
  - Use of steroids leads to glaucoma and cataracts and has systemic toxicities
  - Humira® increases serious infection risk and has substantial contraindications

- **Orphan drug designation for PL8177 for NIU**
PL8177 Experimental Autoimmune Uveitis

MC1R agonism has significant effects in reversing uveitis

Conducted in collaboration with Dr. A. Taylor at Boston University School of Medicine
Ocular Development Programs

- Demonstrated efficacy, safety and tolerability in phase 2 DED study
  - 1st evaluation of melanocortin system therapeutic in ocular inflammatory indication
  - Establishes translation of preclinical data into humans
  - Moving forward into registrational studies
- PL9643 phase 2 exploratory study in 2nd front of the eye indication
- PL8177 SC non-infectious uveitis Orphan Disease Designation ready for phase 2 proof-of-concept study
- MCR agonist demonstrated efficacy in animal models of retinal disease
  - Suppresses VEGF production and reduces vascular leakage
  - Preserves retinal structure
  - Suppresses inflammation and promotes resolution of inflammatory activity
  - Maintains visual acuity
## Financial Snapshot

### Financial Highlights as of March 31, 2021

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$68.6 million</td>
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<tr>
<td>Working Capital</td>
<td>$69.4 million</td>
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### Summary Capitalization as of March 31, 2021

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<td>Common Stock</td>
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<td>Preferred</td>
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<td>Warrants</td>
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<td>Options</td>
<td>19.8 million shares</td>
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<tr>
<td>RSUs</td>
<td>11.6 million shares</td>
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<tr>
<td>Fully Diluted Shares</td>
<td>274.2 million shares</td>
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THANK YOU