Corporate Presentation
March 2018
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### Paratek Investment Highlights

*Omadacycline: Potential Blockbuster Antibiotic in Both Hospital and Community Settings*

| Potential Blockbuster Antibiotic | - If Approved, 1<sup>st</sup> New, Once-daily, Multi-indication, Oral Antibiotic in > 10Yrs
| - > $9 Billion Potential Addressable Market in U.S.* |

| Modernized Tetracycline: A Promising Antibiotic Profile | - Positive Ph3 Data in Skin Infections (IV/Oral + Oral only)
| - Positive Ph3 Data in Community Acquired Bacterial Pneumonia (IV/Oral)
| - Established Safety Profile in > 1,900 subjects |

| Clear Registration Path: U.S. FDA and EU EMA | - SPA + QIDP + Fast Track
| - NDA submitted in Q1 2018; under FDA review |

| Additional Pipeline Potential | - UTI Ph2 underway
| - Biodefense opportunity: Tx & prophylaxis in plague and anthrax
| - Life-cycle opportunities: Lyme Dx, prostatitis, Rickettsial Dx |

| Capital Efficient Commercial Model | - Significant Value Proposition = Hospitalization Minimization
| - Hospital Promotion Without Branded Broad-spectrum IV + Oral Competitors |

| Non-dilutive Funding Options | - Omadacycline: Ex-U.S. Commercial Rights (except China)
| - Sarecycline: Milestones + U.S. Royalties (Allergan); Ex-U.S. Rights (PRTK) |

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*Paratek estimates based on 2015 AMR data current treatment failure rates and a Zyvox 2015 pricing analogue*
Experienced Senior Management Team

Michael F. Bigham
Chairman & CEO

Evan Loh, MD
President, COO & CMO
Led Tygacil Development

Doug Pagán
Chief Financial Officer

Adam Woodrow
Chief Commercial Officer
Led Tygacil Commercialization

William Haskel
General Counsel & Corporate Secretary
Omadacycline: A Modernized Tetracycline
First-in-Class Aminomethylcycline: Restoring Tetracycline Efficacy by Overcoming Resistance

7-Position Modification:
Overcomes Efflux Pump

9-Position Modification:
Overcomes Ribosomal Protection

No known metabolites
No CYP interactions identified
No anticipated monitoring
No dosage modifications or monitoring anticipated in hepatic or renal impairment
No hERG channel effects (TQTc\(^{(1)}\) study completed at 3x therapeutic exposures)
No known DDI effects identified
Low propensity to induce C. diff\(^{(2)}\)

\(^{(1)}\) Thorough QTc study
\(^{(2)}\) Wilcox ECCMID 2016
### Two NDA-Ready Assets
**U.S. FDA NDA Approvals Projected in 2018**

<table>
<thead>
<tr>
<th>Research</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Pre-Registration</th>
<th>NDA Filing</th>
<th>Commercial Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Omadacycline</strong></td>
<td></td>
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<td>PARATEK® (Global*)</td>
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<tr>
<td>ABSSSI (Oral &amp; IV) – QIDP + SPA</td>
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<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
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<tr>
<td>CABP (Oral &amp; IV) – QIDP + SPA</td>
<td></td>
<td></td>
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<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSSSI (Oral only) – QIDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTI (Oral &amp; IV) – QIDP (cUTI / uUTI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
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<tr>
<td>Biodefense Pathogens</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td><strong>Sarecycline</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Allergan (U.S.)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>PARATEK® (ex-U.S.)</td>
</tr>
<tr>
<td>Inflammatory Acne (Acne Vulgaris)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Positive Efficacy Studies or NDA Filed

* We have entered into a collaboration agreement with Zai Lab (Shanghai) Co., Ltd., for greater China region
### Timing of Key Milestones

**U.S. FDA NDA Approvals Projected in 2018 for Both Omadacycline and Sarecycline**

<table>
<thead>
<tr>
<th>Omadacycline Events</th>
<th>Timing</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSSSI Phase 3 data: IV and oral</td>
<td>Q2 2016</td>
<td>Positive Phase 3 data</td>
</tr>
<tr>
<td>UTI Phase 1b data: PK/PD</td>
<td>Q4 2016</td>
<td>Proof-of-principle</td>
</tr>
<tr>
<td>CABP Phase 3 data: IV and oral</td>
<td>Q2 2017</td>
<td>Positive Phase 3 data</td>
</tr>
<tr>
<td>ABSSSI Phase 3 data: Oral-only</td>
<td>Q3 2017</td>
<td>Positive Phase 3 data</td>
</tr>
<tr>
<td>UTI Phase 2 initiation</td>
<td>Q4 2017</td>
<td>Enrolling</td>
</tr>
<tr>
<td>NDA submission</td>
<td>Q1 2018</td>
<td>Completed</td>
</tr>
<tr>
<td>Projected NDA acceptance</td>
<td>Q2 2018</td>
<td>TBD</td>
</tr>
<tr>
<td>Projected NDA approval</td>
<td>Q4 2018</td>
<td>TBD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sarecycline Events¹</th>
<th>Timing</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 3 efficacy studies</td>
<td>Q1 2017</td>
<td>Positive Phase 3 data</td>
</tr>
<tr>
<td>NDA (Allergan) submission</td>
<td>Oct 2017</td>
<td>Accepted</td>
</tr>
<tr>
<td>Projected NDA Approval</td>
<td>2H 2018</td>
<td>TBD</td>
</tr>
</tbody>
</table>

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1. Allergan licensed U.S. development & commercial rights
Omadacycline Commercial Opportunity

Potential Blockbuster Antibiotic in Both Hospital and Community Settings
Omadacycline Possesses a Multitude of Differentiated Attributes
No Generic Broad Spectrum IV-Oral Hospital Competitors

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Omadacycline(^4)</th>
<th>Quinolones(^{1,2,3})</th>
<th>Cephalosporins(^{1,2,3})</th>
<th>Oxazolidinones(^{1,2,3})</th>
<th>Glycopeptides(^{1,2,3})</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>S. pneumoniae</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MDR <em>E. Coli</em>(^3)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>Legionella species</em></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><em>S. aureus</em> (MRSA, MSSA)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Low <em>C. diff</em> Incidence</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Limited Drug-Drug Interactions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>No Major Safety Considerations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Once Daily IV/Oral Dosing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Key Factors Enabling Omadacycline Formulary Endorsement

**Multiple Indications with a Bioequivalent\(^{(1)}\) IV and Oral Formulation**

<table>
<thead>
<tr>
<th></th>
<th>Omadacycline</th>
<th>Ceftaroline</th>
<th>Delafloxacin</th>
<th>Tedizolid</th>
<th>Dalbavancin</th>
<th>Oritavancin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple Community Indications at Launch</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Once-Daily IV</strong></td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✔️</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Once-Daily Oral</strong></td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><strong>Broad-Spectrum Bacterial Coverage</strong></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td><strong>No Renal or Hepatic Dosage Modifications</strong></td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✔️</td>
<td>✗</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Low C. difficile propensity</strong></td>
<td>✔️</td>
<td>✗</td>
<td>✗</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

Sources: Package Inserts, First Data Bank \(^{(1)}\) IV and oral exposures are equivalent.
## Compelling Educational Opportunity Amplifies Unmet Need Awareness at Launch

*Perception of Resistance to Oral Treatments is Low & Doesn’t Match Reality*

### Resistance rates for generic oral broad-spectrum antibiotics used for CABP

<table>
<thead>
<tr>
<th>Common Pathogens (&gt;80% of all infections)(^1)</th>
<th>Penicillin</th>
<th>Amoxi-Clav</th>
<th>Azithromycin</th>
<th>Tetracycline</th>
<th>Trim-Sulfa</th>
<th>Levofloxacin</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>S. pneumoniae</em></td>
<td>66.9%</td>
<td>29.8%</td>
<td>36.2%</td>
<td>33.8%</td>
<td>43%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

### Resistance rates for generic oral broad-spectrum antibiotics used for ABSSSI

<table>
<thead>
<tr>
<th>Common Pathogens (&gt;80% of all infections(^1)(^a))</th>
<th>TMP/SMX(^2)</th>
<th>Tetracycline(^3)</th>
<th>Clindamycin(^3)</th>
<th>Amoxicillin/Clavulanic acid(^3)</th>
<th>Levofloxacin(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>2.3%</td>
<td>3.6%</td>
<td>15.0%</td>
<td>42.3%</td>
<td>36.5%</td>
</tr>
<tr>
<td>MRSA</td>
<td>4.3%</td>
<td>4.7%</td>
<td>28.5%</td>
<td>100%</td>
<td>63.3%</td>
</tr>
<tr>
<td>β-hemolytic streptococci</td>
<td>NA(^4)</td>
<td>43.6%</td>
<td>18.6%</td>
<td>0%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

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1a. Clinical and Laboratory Standards Institute (CLS) 2015 Criteria

4. JMI Surveillance. 2010. Data on file. β-hemolytic streptococci are not tested with TMP/SMX and it is presumed to be at least 25% resistant. All other streptococci combined resistance is 35%.
Hospital Launch: Narrow Spectrum or IV-Only Antibiotic Launches

Omadacycline Will Be Competitive with the Best of These Launches

Key Omadacycline launch attributes

- 1st new monotherapy for CABP in over a decade
- 2 indications at launch
- Once daily dosing
- Both an IV and Oral formulation

Launch Dates:

- Ceftazidime/Avibactam: Apr 2015
- Ceftolozane/Tazobactam: Dec 2014
- Dalbavancin: Jul 2014
- Oritavancin: Oct 2014
- Ceftaroline: Jan 2011
- Tigecycline: Jun 2005
- Daptomycin: Nov 2003
Hospital Launch for Omadacycline: Success Begins with Specialists in Years 1-2 Post-Launch

1-2 years post launch
- IDs
- Pulmonologists
- Hospitalists
- PharmD IDs
- ER Doctors

~6.7M\(^1\) CABP and ABSSSI Patients Suffer Annually
~900k CABP and ABSSSI Patients We Can Help with Omadacycline

2+ years post launch
- Internal Medicine
- Primary Care Provider
- NPs, PAs
- Urgent Care

~23.7M\(^1\) CABP and ABSSSI Patients Suffer Annually
~1.2M CABP and ABSSSI Patients We Can Help with Omadacycline

Source 1. 20% est failures (based on hospital patterns) of first line MRSA treatment
Community Promotion 2+ Years Post-Launch Expands The Market

Omadacycline Has the Potential to Realize This Opportunity

IV & Oral, Broad Spectrum Launch Comparison - Monthly Gross $s (M)

Launch Dates:
Moxifloxacin: Dec 1999
Levofloxacin: Jan 1997
Azithromycin: Mar 1992
Clarithromycin: Oct 1991

Note: Zithromax relaunched ~July 1997 (Year 5) and then surpassed Biaxin to become the largest selling macrolide (and eventually the most prescribed antibiotic)

Source: IMS NSP data
Physicians Confirm Unmet Medical Needs
Omadacycline Provides a Valuable Option

There are Unmet Needs that Omadacycline Will Address

- Lower C.diff Potential
- Lack of Different Class Options
- Reduce Nursing Time

- New Therapies to Overcome Drug Resistance
- Alternative to Quinolones
- Reduce Hospital Length of Stay

- More Oral Options
- Reduce Usage of Multi-Drug Combinations
- Greater Safety

- Equivalent IV & Oral
- Established Efficacy in a Monotherapy
- Known Safety Profile

- Confidence to Discharge Patient
- Modernized Tetracycline
- Once Daily Dosing

Physicians Recognize the Positive Attributes of Omadacycline

Source: Paratek sponsored market research
Physician Antibiotic Treatment Decision Priorities

Omadacycline Offers Simplified Solutions to a Complicated Treatment Decision

**Physician Decision Priorities**

1. **How Confident am I About the Coverage for this Patient?**
   - Suspected resistance
   - gram +, gram -, atypical, or anaerobe
   - Potentially polymicrobial

2. **Are There Safety Concerns that Outweigh Expected Efficacy?**
   - Drug-drug interactions
   - C. difficile history
   - QTc, neurological, tendonitis
   - Renal impairment

3. **Are There Affordability Concerns?**
   - Cost to hospital
   - Cost to patient
   - Barriers to prescribing

Source: Paratek sponsored market research
Antibiotic Use-Limiting IV-only Formulations & Safety Considerations in CABP

Omadacycline: A Convenient Monotherapy Once-Daily Oral-IV Alternative

Primary Antibiotic Options in CABP

IDSA/ATS Recommends a Targeted Empirical Antimicrobial Therapy\(^{(1)}\)

- Beta-lactam + Macrolide
- Quinolones

The Omadacycline Patient:
- Elevated Resistance Risk
- Polymicrobial Pathogen Risk:
  - Diabetes, Elderly
- Contraindications to Generic Options
  - $\beta$-lactam allergy
  - Quinolone AE’s (tendon rupture, confusion)
  - Recent history of \textit{C.diff}

Antibiotic Use-Limiting IV-only Formulations & Safety Considerations in ABSSSI

Omadacycline: A Convenient Monotherapy Once-Daily Oral-IV Alternative

Primary Antibiotic Options in ABSSSI

**IDSA Recommends a Targeted MRSA Antimicrobial Therapy**

- Vancomycin
- Vancomycin/Linezolid
- Piperacillin Tazobactam
- Linezolid
- OR
- Vancomycin/Linezolid + Piperacillin Tazobactam


The Omadacycline Patient:

- **Elevated Resistance Risk**
- **Polymicrobial Pathogen Risk:**
  - Diabetes, Elderly, IVDU
- **Contraindications to Generic Options**
  - Renal insufficiency
  - SSRI/MAOI DDI
  - ß-lactam allergy

The Omadacycline Patient:

- **Elevated Resistance Risk**
- **Polymicrobial Pathogen Risk:**
  - Diabetes, Elderly, IVDU
- **Contraindications to Generic Options**
  - Renal insufficiency
  - SSRI/MAOI DDI
  - ß-lactam allergy
Addressable U.S. Hospital Market: ~890K patients $2.6B Opportunity by 2028
Empiric IV to Oral Monotherapy in Patients Who Fail to Respond or Are Intolerant to Generic Option

**ABSSSI: Empiric IV to Oral, resistance suspected or intolerant**

- 3,300K (1) Hospitalized ABSSSI
- ~12% (2) Need broad sp + MRSA coverage
- ~400k patients
- $3,000 (5) x $1.2B opportunity

**CABP: Empiric IV to Oral, resistance suspected or intolerant**

- 3,400K (1) Hospitalized CABP
- ~14% (3) Need alternative to FQ or cep + macrolide
- ~490k patients
- $3,000 (5) x $1.4B opportunity

**Total $2.6B (7) Potential Opportunity**

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1. AMR data (2015): Projected to 2028
2. Of patients never receiving confirmed pathogen and getting potential MRSA coverage, 30%+ switch therapies (i.e., to another empiric therapy)
3. Primary market research (est 18% of hospitalized CABP patients & 16.5% of community CABP patients are “high-risk” and suspected/confirmed to have a resistant pathogen)
4. DRG Current Treatment: Gram Negative Infections (ID’s est ~20% failure rate for fluoroquinolones)
5. Cost per course based on health outcome analysis, 10 day course of therapy and cost of branded Zyvox therapy as an analogue
6. Cost per course based on mid point for levofloxacin course in UTI, a 450mg OMC daily dose, and 50% price premium to branded oral Zyvox as an analog
7. Paratek estimates based on 2015 AMR data current treatment failure rates and a Zyvox 2015 pricing analogue
Focus of Launch Efforts
Awareness & Education Leading to Access & Use

Pre Launch

Advocacy

Formulary Access

Utilization

Post Launch

Awareness & Education + Access = Behavior Change

- Scientific Exchange
- Unbranded Disease State Education Programs
- Publications

- HEOR Publications
- Payer Discussions
- Guidelines

- Trial
- Usage
- Adoption
Pre-Launch and 1st Year Post-Launch Key Deliverables
Publications, Payer Reviews, Distributors & Patient Assistance Programs in Place

**Pre Launch**

- **Publications:**
  - All phase 3 manuscripts in press
  - OMC CID supplement in press

- **Health value dossier:**
  - Budget Impact Model in press

- **Payers:**
  - OMC reviewed by major payers

- **Distributors:**
  - All distributors for both IV and Oral under contract

- **PRTK patient assistance program:**
  - In place at launch

**Post Launch**

- **3 months Post-Launch:**
  - 33% of covered lives under contract

- **12 months Post-Launch:**
  - 66% of covered lives under contract

- **12 months Post-Launch:**
  - 50% of target hospital formularies
Omadacycline Efficacy and Safety in ABSSSI and CABP

Positive Benefit:Risk Profile Supports Regulatory Path to Approval
Omadacycline OASIS-1 Study Results
Achieved Primary Efficacy Endpoints for Both FDA and EMA

Early Clinical Response
- FDA Primary Endpoint
  - Delta (95% CI)
    - -0.7 (-6.3, 4.9)

mITT PTE - Clinical Success
- EMA Co - Primary Endpoints
  - Delta (95% CI)
    - +2.5 (-3.2, 8.1)

CE-PTE - Clinical Success
- Delta (95% CI)
  - +2.8 (-0.9, 7.1)
Clinical Success at PTE by Baseline Pathogen (OASIS-1)

Highly Effective Across Key Gram (+) Skin Pathogens

<table>
<thead>
<tr>
<th>Baseline Pathogen</th>
<th>Omadacycline (N=228)</th>
<th>Linezolid (N=227)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N1</td>
<td>Favorable Response n (%)</td>
</tr>
<tr>
<td><strong>Staphylococcus aureus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRSA</td>
<td>69</td>
<td>57 (82.6)</td>
</tr>
<tr>
<td>MSSA</td>
<td>88</td>
<td>74 (84.1)</td>
</tr>
<tr>
<td><strong>Streptococcus anginosus group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>36 (76.6)</td>
</tr>
<tr>
<td><strong>Streptococcus pyogenes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>8 (72.7)</td>
</tr>
<tr>
<td><strong>Enterococcus faecalis (VSE)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>9 (90.0)</td>
</tr>
</tbody>
</table>

*10 or More Isolates for Omadacycline

*S. anginosus group consists of: S. anginosus, S. intermedius, and S. constellatus.

MRSA, methicillin-resistant *Staphylococcus aureus*; MSSA, methicillin-susceptible *Staphylococcus aureus*; VSE, vancomycin-susceptible enterococci.
Omadacycline OPTIC Study Results
Achieved Primary Efficacy Endpoints for Both FDA and EMA

Early Clinical Response - ITT
- FDA Primary Endpoint
  - Delta (95% CI): -1.6 (-7.1, 3.8)

Clinical Success at PTE - ITT
- EMA Co - Primary Endpoints
  - Delta (97.5% CI): +3.3 (-2.7, 9.3)

Clinical Success at PTE - CE-PTE
- Delta (97.5% CI): +2.0 (-3.2, 7.4)
**Clinical Success at PTE by Baseline Pathogen* (OPTIC)**
**Highly Effective Across Key Gram (+), Gram (−) & Atypical CABP Pathogens**

<table>
<thead>
<tr>
<th>Baseline Pathogen</th>
<th>Omadacycline (N=204)</th>
<th>Moxifloxacin (N=182)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Clinical Success</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>n (%)</td>
</tr>
<tr>
<td><strong>Atypical Pathogens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mycoplasma pneumoniae</td>
<td>118</td>
<td>109 (92.4)</td>
</tr>
<tr>
<td>Chlamydophila pneumoniae</td>
<td>70</td>
<td>66 (94.3)</td>
</tr>
<tr>
<td>Legionella pneumophila</td>
<td>28</td>
<td>25 (89.3)</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>35 (94.6)</td>
</tr>
<tr>
<td><strong>Gram-Negative Bacteria (aerobes)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemophilus influenzae</td>
<td>79</td>
<td>67 (84.8)</td>
</tr>
<tr>
<td>Haemophilus parainfluenzae</td>
<td>32</td>
<td>26 (81.3)</td>
</tr>
<tr>
<td>Klebsiella pneumoniae</td>
<td>18</td>
<td>15 (83.3)</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>10 (76.9)</td>
</tr>
<tr>
<td><strong>Gram-Positive Bacteria (aerobes)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streptococcus pneumoniae</td>
<td>61</td>
<td>52 (85.2)</td>
</tr>
<tr>
<td>PSSP</td>
<td>43</td>
<td>37 (86.0)</td>
</tr>
<tr>
<td>Macrolide Resistant</td>
<td>26</td>
<td>23 (88.5)</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>10</td>
<td>10 (100.0)</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>8 (72.7)</td>
</tr>
</tbody>
</table>

*10 or More Isolates for Omadacycline
Omadacycline OASIS-2 Study Results
Achieved Primary Efficacy Endpoints for Both FDA and EMA

mITT Early Clinical Response

<table>
<thead>
<tr>
<th></th>
<th>Omadacycline</th>
<th>Linezolid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>87.5</td>
<td>82.5</td>
</tr>
</tbody>
</table>

Delta (95% CI)

+5.0 (-0.2, 10.3)

mITT PTE - Clinical Success

<table>
<thead>
<tr>
<th></th>
<th>Omadacycline</th>
<th>Linezolid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>84.2</td>
<td>80.8</td>
</tr>
</tbody>
</table>

Delta (95% CI)

+3.3 (-2.2, 9.0)

CE-PTE - Clinical Success

<table>
<thead>
<tr>
<th></th>
<th>Omadacycline</th>
<th>Linezolid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>97.9</td>
<td>95.5</td>
</tr>
</tbody>
</table>

Delta (95% CI)

+2.3 (-0.5, 5.8)

FDA Primary Endpoint

EMA Co-Primary Endpoints
Clinical Success at PTE Baseline Pathogen (OASIS-2)
Highly Effective Across Key Gram (+) Skin Pathogens

<table>
<thead>
<tr>
<th>Baseline Pathogen</th>
<th>Omadacycline (n=276)</th>
<th>Linezolid (n=287)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Clinical Success n (%)</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>220</td>
<td>182 (82.7)</td>
</tr>
<tr>
<td>MRSA</td>
<td>104</td>
<td>89 (85.6)</td>
</tr>
<tr>
<td>MSSA</td>
<td>120</td>
<td>97 (80.8)</td>
</tr>
<tr>
<td><em>Staphylococcus lugdunensis</em></td>
<td>5</td>
<td>4 (80.0)</td>
</tr>
<tr>
<td><em>Streptococcus pyogenes</em></td>
<td>29</td>
<td>20 (69.0)</td>
</tr>
<tr>
<td><em>Streptococcus anginosus group</em></td>
<td>57</td>
<td>49 (86.0)</td>
</tr>
<tr>
<td><em>Streptococcus anginosus</em></td>
<td>27</td>
<td>24 (88.9)</td>
</tr>
<tr>
<td><em>Streptococcus intermedius</em></td>
<td>23</td>
<td>18 (78.3)</td>
</tr>
<tr>
<td><em>Streptococcus constellatus</em></td>
<td>9</td>
<td>8 (88.9)</td>
</tr>
<tr>
<td><em>Enterococcus faecalis</em></td>
<td>8</td>
<td>8 (100.0)</td>
</tr>
<tr>
<td>VRE</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VSE</td>
<td>7</td>
<td>7 (100.0)</td>
</tr>
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</table>
### Most Frequent TEAEs in the OASIS-1, OASIS-2 and OPTIC Studies

**Omadacycline Safety and Tolerability Profile Established**

<table>
<thead>
<tr>
<th>Selected TEAS Occurring in ≥2% of Patients Receiving Omadacycline in the Pooled Phase 3 CABP and ABSSSI Clinical Trials</th>
<th>Omadacycline (N = 1073)</th>
<th>Linezolid (N = 689)</th>
<th>Moxifloxacin (N = 388)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea(^1)</td>
<td>14.9</td>
<td>8.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Vomiting(^1)</td>
<td>8.3</td>
<td>3.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Diarrhea(^2)</td>
<td>2.4</td>
<td>2.9</td>
<td>8.0</td>
</tr>
<tr>
<td>Transaminase Elevations Increased</td>
<td>4.3</td>
<td>4.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Headache</td>
<td>2.9</td>
<td>3.0</td>
<td>1.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Events of Nausea and Vomiting in Phase 3 CABP and ABSSSI Clinical Trials</th>
<th>CABP IV/Oral</th>
<th>ABSSSI IV/Oral</th>
<th>ABSSSI Oral-Only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>IV</td>
<td>Oral</td>
</tr>
<tr>
<td>Nausea(^1)</td>
<td>0.5</td>
<td>2.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Vomiting</td>
<td>1.8</td>
<td>1.0</td>
<td>1.2</td>
</tr>
</tbody>
</table>

\(^1\) Nearly all events of nausea and vomiting were mild or moderate in severity, resolved, and were not treatment limiting. Only 4 patients (0.4%) discontinued OMC treatment for nausea or vomiting.

\(^2\) Diarrhea occurred in 2.4% of OMC patients and no cases of *C. difficile* infection were reported in OMC patients.
Completed Omadacycline Phase 1b UTI Study Design
Imminent Need to Replace Quinolones in Cystitis

**Group 1 (n=10)**
- Dose 200 mg IV Day 1
- Dose 300 Oral q24h Days 2-5

**Group 2 (n=10)**
- Dose 300 mg Oral q12h Day 1
- Dose 300 mg Oral q24h Days 2-5

**Group 3 (n=11)**
- Dose 450 mg Oral q12h Day 1
- Dose 450 mg Oral q24h Days 2-5

- **Screening** (≤ 48 hours prior to randomization)
- **End of Treatment** (Day 6)
- **Post Treatment Evaluation**
- **Follow-Up**

- 5 – 9 Days Post Last Dose
- 30 – 37 Days Post First Dose

Serial Blood and Urine Samples Collected for Pharmacokinetic (PK)
Oral Bioavailability Results in High Omadacycline Concentrations in Urine Supports Development for a UTI Indication

Day 1

Day 5
Phase 2 UTI Program Underway
Adaptive Dosing Designs Employed in Cystitis and Acute Pyelonephritis Studies

Cystitis

~200 patients

oral omadacycline (up to 450mg) 7 days
oral nitrofurantoin 7 days

Day 1
Day 7
End of Treatment (EOT)
Day 14 (+/- 2d)
Post-Therapy Evaluation (PTE)
Day 30 - 37
Final Follow-up

Acute Pyelonephritis (1)

IV omadacycline 7-10 days
IV to oral omadacycline 7-10 days
IV to oral levofloxacin 7-10 days

Day 1
Day 7-10
EOT
Days 21
(± 2 days)
PTE
Day 28
(± 2 days)
Final Follow-up

(1) Design and comparator subject to FDA discussions prior to initiation
### Key Financial Information

#### Key Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>12/31/17 balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cash, Cash Equivalents, and Marketable Securities</td>
<td>$151.7 million</td>
</tr>
<tr>
<td>Gross Long-term Debt Obligation</td>
<td>$60.0 million</td>
</tr>
<tr>
<td>Basic Shares Outstanding</td>
<td>27,941,015</td>
</tr>
<tr>
<td>Stock Options, Restricted Stock Units, and Warrants Outstanding</td>
<td>4,897,977</td>
</tr>
</tbody>
</table>

#### Funding Projected through late 2019 (1)

(1) Includes $50 million gross proceeds from January 2018 equity offering
Paratek Pharmaceuticals, Inc. is followed by the analysts listed above. Please note that any opinions, estimates or forecasts regarding Paratek Pharmaceuticals, Inc.’s performance made by these analysts are theirs alone and do not represent opinions, forecasts or predictions of Paratek Pharmaceuticals, Inc. or its management. Paratek Pharmaceuticals, Inc. does not by its reference above or distribution imply its endorsement of or concurrence with such information, conclusions or recommendations.

<table>
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<tr>
<th>Firm</th>
<th>Analyst</th>
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<tr>
<td>Baird</td>
<td>Mike Ulz</td>
</tr>
<tr>
<td>BTIG Research</td>
<td>Robert (Bert) Hazlett</td>
</tr>
<tr>
<td>Cantor Fitzgerald</td>
<td>Louise Chen</td>
</tr>
<tr>
<td>Gabelli</td>
<td>Kevin Kedra</td>
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<tr>
<td>Guggenheim</td>
<td>Adnan Butt</td>
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<tr>
<td>HC Wainwright</td>
<td>Ed Arce</td>
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<tr>
<td>Ladenburg Thalmann</td>
<td>Kevin DeGeeter</td>
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<td>Leerink Partners</td>
<td>Paul Matteis</td>
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<tr>
<td>Raymond James</td>
<td>Laura Chico</td>
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<td>Wedbush</td>
<td>Robert Driscoll</td>
</tr>
<tr>
<td>LifeSci Advisors</td>
<td>David Sherman</td>
</tr>
</tbody>
</table>
Paratek Investment Highlights

**Omadacycline: Potential Blockbuster Antibiotic in Both Hospital and Community Settings**

- **Potential Blockbuster Antibiotic**
  - If Approved, 1st New, Once-daily, Multi-indication, Oral Antibiotic in > 10Yrs
  - > $9 Billion Potential Addressable Market in U.S.*

- **Modernized Tetracycline: A Promising Antibiotic Profile**
  - Positive Ph3 Data in Skin Infections (IV/Oral + Oral only)
  - Positive Ph3 Data in Community Acquired Bacterial Pneumonia (IV/Oral)
  - Established Safety Profile in > 1,900 subjects

- **Clear Registration Path: U.S. FDA and EU EMA**
  - SPA + QIDP + Fast Track
  - NDA submitted in Q1 2018; under FDA review

- **Additional Pipeline Potential**
  - UTI Ph2 underway
  - Biodefense opportunity: Tx & prophylaxis in plague and anthrax
  - Life-cycle opportunities: Lyme Dx, prostatitis, Rickettsial Dx

- **Capital Efficient Commercial Model**
  - Significant Value Proposition = Hospitalization Minimization
  - Hospital Promotion Without Branded Broad-spectrum IV + Oral Competitors

- **Non-dilutive Funding Options**
  - Omadacycline: Ex-U.S. Commercial Rights (except China)
  - Sarecycline: Milestones + U.S. Royalties (Allergan); Ex-U.S. Rights (PRTK)

*Paratek estimates based on 2015 AMR data current treatment failure rates and a Zyvox 2015 pricing analogue
Addressable U.S. Community Market: ~2.1M patients $5.4B Opportunity by 2028

Empiric Oral Monotherapy in Patients Who Fail to Respond or are Intolerant to Generic Option

**ABSSSI: Empiric oral treatment, resistance suspected or Intolerant**

- Community ABSSSI: 14,400K
  - ~5% Need broad sp + MRSA coverage
  - = ~735k cases
  - $2,100 = $1.5B opportunity

**CABP: Empiric oral treatment, resistance suspected or Intolerant**

- Community CABP: 9,370K
  - ~6% Need alternative to FQ
  - = ~510k cases
  - $2,100 = $1.1B opportunity

**UTI: Empiric treatment, ESBL suspected or Intolerant**

- Community UTI: 33,000K
  - ~3% Need alternative to FQ
  - = ~890k cases
  - $3,150 = $2.8B opportunity

**Total $5.4B Opportunity**

---

(1) IMS-NDTI date (2014-2015): Projected to 2028
(2) Estimate based on current oral treatment failure rates
(3) Primary market research (est 18% of hospitalized CABP patients & 16.5% of community CABP patients are “high-risk” and suspected/confirmed to have a resistant pathogen)
(4) Estimate from 2016 Primary research with Urologists.
(5) Cost per course based on health outcome analysis, 7 day course of therapy and cost of branded Zyvox therapy as an analogue
(6) Cost per course based on mid point for levofloxacin course in UTI, a 450mg OMC daily dose, and 50% price premium to branded oral Zyvox as an analog
(7) Paratek estimates based on IMS-NDTI (2014-2015) projected to 2028 using current treatment failure rates and a Zyvox 2015 pricing analogue
Omadacycline IP Protection and Market Exclusivity

GAIN Act Ensures 10 Years of Market Exclusivity

- Anticipated Patent Term Extension
  - Key Composition of Matter Patent (U.S. 7,553,828)
    - Expires June 2023
  - Possible 6 month pediatric exclusivity extension

- In Parallel -
  - U.S. Data Exclusivity: Hatch-Waxman 5 years
  - GAIN Act Extension 5 years

Follow-On IP Protection:
Issued Patents and Pending Applications Covering Salts, Polymorphs, Formulations, Methods of Use, Methods of Manufacture, Modes of Administration, and Dosage Regimens