Safe Harbor

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Welcome
Jesper Høiland
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<tr>
<th><strong>TOPIC</strong></th>
<th><strong>PRESENTER</strong></th>
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<tr>
<td>Welcome</td>
<td>Jesper Høiland, President and Chief Executive Officer</td>
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<td>Overview</td>
<td>Gary Hattersley, PhD, Chief Scientific Officer</td>
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<td>Elacestrant Update</td>
<td>Alison O’Neill, MD, VP, Oncology Clinical Development</td>
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<tr>
<td>Closing Remarks</td>
<td>Jesper Høiland, President and Chief Executive Officer</td>
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Q&A
Strong TYMLOS performance. Elacestrant SABCS Update Strengthens “Speed to Market” Strategy; Potential to Advance Into Earlier Lines Therapy

- 3Q 2017: TYMLOS accelerating market access, steadily gaining market share and stabilizing the anabolic market
- Positive response to TYMLOS launch by physicians, payors and patients. Focus on gaining share in top potential anabolic prescribers
- Seeking to expand the product label through LCM. Aligned with the FDA for a Male OP study, planned start in first quarter 2018
- Elacestrant received FDA Fast Track designation. Driving towards a first patient in for Phase 2, potentially pivotal study, in early 2018
- Initiated Phase 1 clinical trial of RAD140 for the treatment of hormone receptor positive breast cancer
- Strengthened our Balance Sheet with a $305 million convertible note. Well positioned to drive TYMLOS commercialization, financing the pipeline
Overview
Gary Hattersley
Elacestrant continues to exhibit impressive single agent activity; advancing to a potentially pivotal clinical trial

**SABCS 2017**

- Today’s update includes mature data from Parts A, B and C (30 Oct 2017 data cutoff)
  - Objective Response Rate (ORR\(^*) = 27.3%$
  - Clinical Benefit Rate (CBR) = 47.4%
  - Median Progression Free Survival (mPFS) = **5.4 months**
- Responses documented in patients with prior fulvestrant therapy, prior CDK4/6i therapy and in patients with ESR1 mutations
- 10 out of 40 patients continue on treatment as of 30 October 2017; only 5 patients discontinued since 28 April 2017 cutoff
- Data supports advancement of elacestrant to potentially pivotal Phase 2 study

ASCO 28 April 2017 data cut off: ORR = 23%, CBR = 41.7%, mPFS = 4.5mths
\(^*\) 22 patients had RECIST measurable disease
Opportunity for next generation SERD to address unmet needs across lines of therapy and potentially delay the use of chemotherapy in later lines

• The standard of care for patients with ER+ breast cancer calls for hormonal therapy at all stages of treatment
  • Anti-estrogen therapies are prescribed as both monotherapy and increasingly as combination regimens with targeted therapies (e.g. CDKis) in earlier lines
• Expected response to conventional endocrine agents in late lines of therapy is in the low single digits
  • Fulvestrant (IM), only approved SERD, produced an ORR of 2.1%, CBR of 15.4% and mPFS of 1.8 months

Sources:
1 Decision Resources Group, ASCO 2016 guidelines
2 BELLE-3 study
Targeted Attributes of Next Generation SERD

- Demonstrate targeted ER degradation
- Inhibit tumor growth in resistant models
- Single agent activity in current late line treatment landscape
- Well tolerated safety profile
- Profile supports combination with targeted agents
- Convenient dosing form
Elacestrant Update
Alison O’Neill
Ph 1 005 study SABCS update includes mature data across all cohorts

Elacestrant, oral selective estrogen receptor degrader (SERD) in patients with ER positive (ER+)/HER2-advanced breast cancer: Updated phase 1 efficacy, safety and pharmacodynamic results

Aditya Bardia1, Peter Kabos2, Sharon Wilks3, Donald Richards4, Wael Harb5, Richard Elledge6, Dannie Wang7, Hai Jiang7, Lenore von Krusenstern7, Alison O’Neill7, and Virginia Kaklamani6

• Study Objectives
  • Primary: define recommended Phase 2 dose
  • Secondary: safety and tolerability, pharmacokinetics (PK), preliminary anti-tumor effect, and evaluation of circulating tumor DNA (ctDNA; exploratory objective)
  • Response evaluations performed every 8 weeks following RECIST v1.1 guidelines
  • Patient population ER+/HER2- postmenopausal women with mBC
    • ≤2 prior chemotherapies in the advanced or metastatic setting
    • No limit on number of prior endocrine therapies

SABCS 2017 Focus
Mature data from all cohorts including Part C tablet introduction

Affiliations:
1Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA
2University of Colorado, Aurora, CO, USA
3Cancer Care Centers of South Texas, San Antonio, TX, USA
4Texas Oncology, Tyler, TX, USA
5Horizon Oncology Center, Lafayette, IN, USA
6CTRCL, University of Texas Health Science Center San Antonio, San Antonio, TX, USA
7Radius Health
Patients enrolled had a median of 3 prior systemic therapies

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<thead>
<tr>
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<th>400 mg Capsule</th>
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<tr>
<td></td>
<td>(Part A+B)</td>
<td>(Part C)</td>
<td>(Part A+B+C)</td>
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<tr>
<td></td>
<td>n=26</td>
<td>n=14</td>
<td>n=40</td>
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<tr>
<td>Median age, years (range)</td>
<td>61.5 (43-74)</td>
<td>62 (51-81)</td>
<td>61.5</td>
<td>(43-81)</td>
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<tr>
<td>Discontinued, n (%)</td>
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<tr>
<td>Disease progression</td>
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<tr>
<td>AE</td>
<td>21 (80.8)</td>
<td>9 (64.3)</td>
<td>30 (75.0)</td>
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<tr>
<td></td>
<td>17 (65.4)</td>
<td>8 (57.1)</td>
<td>25 (62.5)</td>
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<td></td>
<td>4 (15.4)</td>
<td>1 (7.1)</td>
<td>5 (12.5)</td>
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<td>ECOG status at baseline, n (%)</td>
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<tr>
<td>0</td>
<td>15 (57.7)</td>
<td>8 (57.1)</td>
<td>23 (57.5)</td>
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<tr>
<td></td>
<td>11 (42.3)</td>
<td>6 (42.9)</td>
<td>17 (42.5)</td>
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<td>1</td>
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<td>Median prior therapies, n (range)</td>
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<td>Prior CDK 4/6 inhibitors, n (%)</td>
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<tr>
<td></td>
<td>3 (1-6)</td>
<td>2 (1-5)</td>
<td>3 (1-6)</td>
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<tr>
<td></td>
<td>12 (46.2)</td>
<td>4 (28.6)</td>
<td>16 (40.0)</td>
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<tr>
<td></td>
<td>12 (46.2)</td>
<td>3 (21.4)</td>
<td>15 (37.5)</td>
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<td>ctDNA baseline status, n (%)</td>
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<tr>
<td>Wild-type</td>
<td>11 (42.3)</td>
<td>9 (64.3)</td>
<td>20 (50.0)</td>
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<tr>
<td>Mutant</td>
<td>15 (57.7)</td>
<td>5 (35.7)</td>
<td>20 (50.0)</td>
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<tr>
<td>Response evaluable, n (%) (RECIST measurable disease)</td>
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<td></td>
<td>15 (57.7)</td>
<td>7 (50.0)</td>
<td>22 (55.0)</td>
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<tr>
<td>CBR evaluable, n (%) (≥1 post-baseline RECIST assessment)</td>
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<td></td>
<td>24 (92.3)</td>
<td>14 (100)</td>
<td>38 (95.0)</td>
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- 38% had previously received fulvestrant
- 40% had previously received CDK4/6 inhibitor therapy
- 50% had ESR1 mutations
Objective Response Rates (ORR) for Endocrine Agents in 2nd and 3rd Line for ER+ Breast Cancer Range from 2.1%* (mono) to 19%* (in combo)

- **2nd line**
  - SERD combo
  - mTOR combo

- **3rd line**
  - SERD combo
  - mTOR combo

**ORR**

- **20%**
  - 19% Fulvestrant + Palbociclib (PALOMA-3)
  - 17.4% Abemaciclib** (MONARCH I)
  - 9.5% Exemestane + Everolimus (BOLERO-2)
  - 7-9% Fulvestrant (SOFEA, PALOMA-3)
  - 2.1% Fulvestrant (BELLE-3)

*ORR is based on ITT
** FDA approval Sept 30, 2017
Elacestrant single agent ORR 27.3% in heavily pre-treated patients

- 22 patients had RECIST measurable disease
  - 6 confirmed partial responses
  - 8 patients with stable disease
- Confirmed responses observed in patients with
  - Prior fulvestrant
  - Prior CDK4/6i therapy
  - Wild-type and mutant ESR1
- Median duration of response = 17.4 weeks
Clinical Benefit Rates (CBR) for Endocrine Agents in 2\textsuperscript{nd} and 3\textsuperscript{rd} Line for ER+ Breast Cancer Range from 15.4\%* (mono) to 67\%* (in combo)

- **2\textsuperscript{nd} line**
  - SERD combo
  - 51.3\% Exemestane + Everolimus (BOLERO-2)
  - 67\% Fulvestrant + Palbociclib (PALOMA-3)

- **3\textsuperscript{rd} line** (CDKi – naïve)
  - 42.4\% Abemaciclib (MONARCH I)
  - 32-40\% Fulvestrant (SOFEA, PALOMA-3)
  - 15.4\% Fulvestrant (BELLE-3)

- **2\textsuperscript{nd} line mTOR combo**
  - 32-40\%

*CBR is based on ITT
Elacestrant single agent CBR at 24 weeks 47.4%
Median Progression Free Survival (mPFS) for Endocrine Agents in $2^{nd}$ and $3^{rd}$ Line for ER+ Breast Cancer Range from 1.8 mo* (mono) to 9.5 mo* (in combo)

- $2^{nd}$ line SERD combo
  - 9.2 mo Fulvestrant + Palbociclib (PALOMA-3)
  - 7.8 mo Exemestane + Everolimus (BOLERO-2)
- $2^{nd}$ line mTOR combo
  - 6 mo Abemaciclib (MONARCH I)
  - 4.6-4.8 mo Fulvestrant (PALOMA-3, SOFEA)
- $3^{rd}$ line (CDKi – naïve)
  - 1.8 mo Fulvestrant (BELLE-3)

*mPFS is based on ITT"
Elacestrant single agent mPFS 5.4 months

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<th>400 mg Capsule (Part A+B)</th>
<th>400 mg Tablet (Part C)</th>
<th>400 mg (Part A+B+C)</th>
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<tr>
<td>Median mPFS</td>
<td></td>
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<tr>
<td></td>
<td>Median Progression-Free</td>
<td>Median Progression-Free</td>
<td>Median Progression-</td>
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<tr>
<td>Overall population</td>
<td>4.5 months</td>
<td>8.5 months</td>
<td>5.4 months</td>
</tr>
<tr>
<td>Prior fulvestrant</td>
<td>4.5 months</td>
<td>NA†</td>
<td>4.9 months</td>
</tr>
<tr>
<td>Prior CDK4/6 inhibitor</td>
<td>3.8 months</td>
<td>NA†</td>
<td>4.5 months</td>
</tr>
<tr>
<td>ESR1 mutant</td>
<td>5.9 months</td>
<td>11.2 months</td>
<td>7.4 months</td>
</tr>
<tr>
<td>ESR1 wild-type</td>
<td>2.8 months</td>
<td>5.4 months</td>
<td>3.7 months</td>
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†NA due to small sample size (N<5)
Most common (≥10%) treatment-related adverse events

- Elacestrant 400 mg administered orally on a continuous daily schedule was well tolerated
- Predominantly G1 and G2 upper GI events (nausea, dyspepsia, vomiting)
- Profile supportive of potential for combination with other agents
Update on Phase 1 study FES-PET study in the EU

• 18F-fluoroestradiol positron emission tomography (18F-FES-PET) is an imaging modality that can measure ER levels based on 18F-FES uptake and has been previously utilized to assess the possibility of response to endocrine therapy

• RAD1901-106 is a Phase 1 study of elacestrant in women with MBC to explore the use of 18F-FES-PET imaging as an early indicator of clinical response to elacestrant investigational treatment

Study Design

Primary objective:
• Determine effect of elacestrant investigational treatment on ER expression and estradiol binding 18F-FES-PET imaging

Secondary objective:
• Correlate changes in 18F-FES uptake after elacestrant investigational treatment to clinical responses as assessed by RECIST v1.1
• Evaluate preliminary anti-tumor effects
• Assess safety and tolerability

Patient Demographics

• 16 patients enrolled
  • 8 in 400 mg cohort
  • 8 in 200 → 400 mg cohort

• Median prior therapies – 3
  • 38% prior fulvestrant
  • 0% CDKi
  • 44% Wild-type ESR1
  • 57% Mutant ESR1

Study enrollment is complete

* First 3 patients were enrolled under the original protocol and an additional 5 patients will be enrolled (for a total of 8 patients) in the 400 mg QD cohort.
Target engagement demonstrated by 18F-FES-PET supports 400 mg monotherapy dose

• ≥75% reduction in tumor 18F-FES uptake after fulvestrant treatment was associated with stable disease or partial response*

• ≥75% reduction in 18F-FES uptake was observed in 7 out of 8 patients in the 400 mg cohort and 4 out of 7 in the 200 → 400 mg cohort, suggesting strong target engagement

• Reduction in 18F-FES uptake was similar in patients harboring mutant or wild-type ESR1

• The data supports flexibility for both 200mg and 400mg dosing in combination studies with various targeted agents

*Kruchten et al. Cancer Discovery, 2014
Preclinical data at SABCS 2017 continues to demonstrate elacestrant anti-tumor activity, as a single agent and in combination, in multiple models.

Three preclinical posters will be presented tomorrow morning (December 8th 7:00A – 9:00A) at the Tumor cell and molecular biology: Endocrine Therapy and Resistance session.

1. “Elacestrant (RAD1901) demonstrates anti-tumor activity in a fulvestrant-resistant PDX model” Abstract # 1086

2. “Anti-tumor activity of elacestrant (RAD1901) in combination with alpelisib (BYL-719) in patient-derived xenograft models of ER+ breast cancer”, Abstract # 1437

3. “New oral SERD elacestrant (RAD1901) shows efficacy in breast cancer models harbouring ESR1 mutations and enhances the antiproliferative activity of mTORC1 and CDK4/6 inhibitors”, Abstract # 939, Royal Marsden / ICR collaboration.
Preclinical data indicates elacestrant use in combination with targeted therapies increases tumor growth inhibition in breast cancer models.

Preclinical PoC with elacestrant established.

SERD

PI3K Inhibitors

mTOR Inhibitors

CDK Inhibitors

PARP inhibitors

Immuno-Oncology Agents

BCL2 Inhibitors

HDAC Inhibitors

Preclinical PoC with elacestrant established.

MCF7 cell line xenograft
ESR1: wild-type

PDX: ST941
ESR1: Y537S

Bihani et al., Clinical Cancer Research 2017
Elacestrant profile demonstrates potential opportunity to achieve targeted attributes of a next generation SERD

- Demonstrate targeted ER degradation
- Inhibit tumor growth in resistant models
- Single agent activity in current late line treatment landscape
- Well-tolerated safety profile
- Profile supports combination with targeted agents
- Convenient dosing form
Advance elacestrant “Speed to Market” Strategy; assess strategic options for combination studies to maximize growth potential

• Elacestrant received Fast Track designation from the FDA
  • Agency agrees that elacestrant has demonstrated the potential to address an unmet need in a patient population with a serious condition
  • Provides opportunity for frequent meetings and communications to support expedited drug approval; rolling review of NDA

• “Speed to Market” strategy
  • Plan to initiate Phase 2 clinical study, potentially pivotal, of elacestrant monotherapy for women with ER+/HER2- breast cancer early in 2018
    • Primary endpoint to be Objective Response Rate ("ORR"), coupled with Duration of Response ("DOR")
    • Radius will provide further study details when the Phase 2 study is initiated

• Potential combination studies with targeted therapies to enable earlier lines of treatment

*Based on June 26, 2017 FDA meeting
Elacestrant continues to exhibit impressive single agent activity; advancing to a potentially pivotal clinical trial.

SABCS 2017

- Today’s update includes mature data from Parts A, B and C (30 Oct 2017 data cutoff)
  - Objective Response Rate (ORR^) = 27.3%
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^ 22 patients had RECIST measurable disease
Closing Remarks
Jesper Høiland
Leading, fully integrated biopharmaceutical company committed to bone health and oncology through innovative therapies

| GOAL | Osteoporosis / Bone Health | • #1 TYMLOS leadership
• Expand and differentiate label to own OP
• Disrupt the market with transdermal patch |
| Hormone driven tumors / Breast Cancer | • Foothold in breast cancer through the elacestrant, backbone hormonal therapy
• Fuel the breast cancer pipeline with SARM RAD140
• Partner elacestrant to develop in earlier lines of therapy |

| Priorities | • Continue to drive sales of TYMLOS
• Go Global, partner OUS
• Continue differentiating TYMLOS PI; seek expanded TYMLOS clinical benefit (e.g. Men)
• Execute transdermal patch clinical program |
| • Initiate Elacestrant Phase 2, potentially pivotal, clinical study
• Assess initiation of studies in earlier lines of therapy with support of a strategic partner
• Secure OUS elacestrant partner
• Advance RAD140 |

| Corporate | • Lean structure to support front line customer facing osteoporosis and breast cancer capabilities
• Be an attractive partner for innovation and international operations
• Become a "Best place to work" in the US |
Elacestrant serves as the foundation for establishing US oncology capabilities to advance the oncology portfolio

- Committed to developing and commercializing therapies to address unmet needs in the treatment of hormone driven cancers
- Focus on US commercialization, partner OUS
TYMLOS shares of key measures continues to improve

TYMLOS Anabolic Market Share
(New PMOT & PMOT)

New PMOT  PMOT  NBRx

Sources:
IQVIA NPA Weekly (week ending 11/17/2017)
IQVIA Patient Insights New to Brand (week ending 11/17/2017)
Highlights and Expected Upcoming Milestones

- ✔ FDA Approval of TYMLOS April 28, 2017
- ✔ ACTIVEExtend trial data readout on primary and secondary endpoints
- ✔ Initiate first-in-human trial for RAD140 in HR+ breast cancer in 2H’17
- ✔ Submit labelling supplement to update the TYMLOS PI with ACTIVEExtend data before year end 2017
- ○ CHMP opinion on MAA for abaloparatide-SC by the end of 2017
- ○ Abalo-patch FDA meeting scheduled for Jan’18; update soon thereafter
- ○ Initiate Ph 2 study single-arm monotherapy trial for elacestrant in breast cancer in early 2018
- ○ OUS/ROW partnership for abaloparatide