

ABALOPARATIDE-PATCH INVESTOR WEBCAST

August 5, 2019



NASDAQ: RDUS

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Safe Harbor

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Agenda

| TOPIC | PRESENTER |
|--|---|
| Abaloparatide-Patch Development Program | Dr. Charles Morris, Chief Medical Officer |
| Patient Assessment Study Phase 3 wearABLE Study | Dr Bruce Mitlak, VP Clinical Development |
| Commercial Opportunity Closing Remarks | Jesper Hoeiland, Chief Executive Officer |
| KOL Video | Dr Paul Miller |
| Q&A | Jesper Hoeiland, Chief Executive Officer Dr. Charles Morris, Chief Medical Officer Dr Bruce Mitlak, VP Clinical Development Pepe Carmona, Chief Financial Officer Chhaya Shah, SVP Technical Operations |

ABALOPARATIDE-PATCH DEVELOPMENT UPDATE

Dr Charles Morris, Chief Medical Officer



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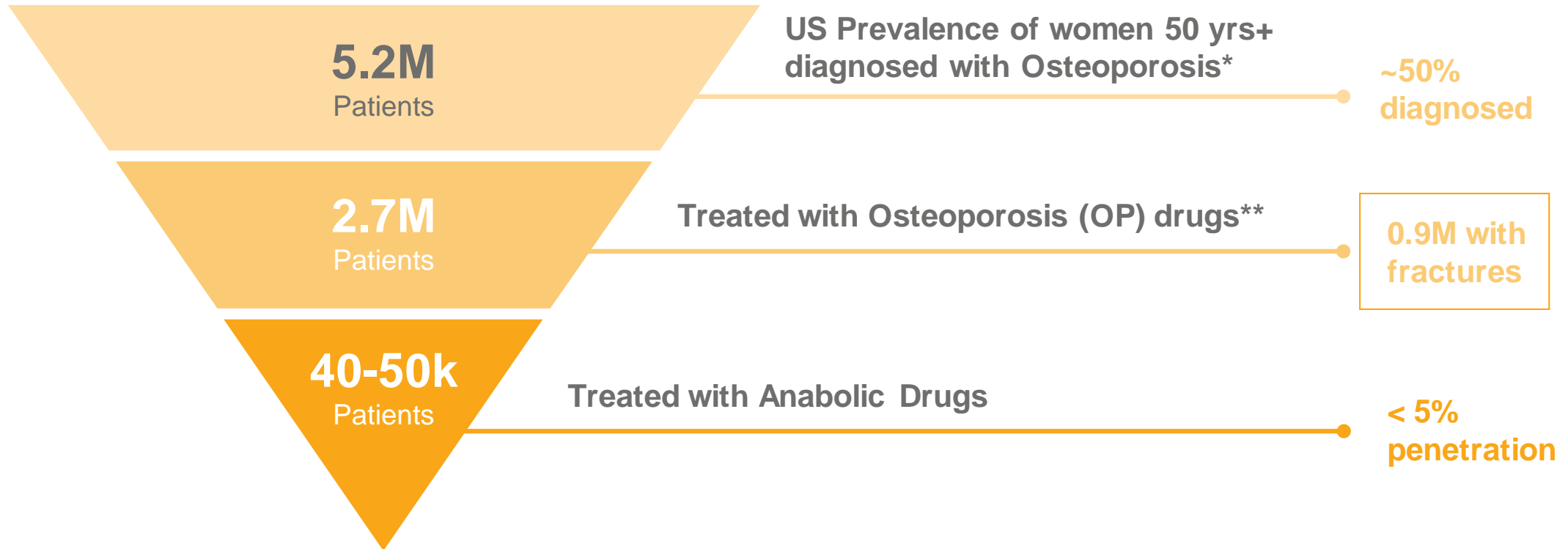
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Abaloparatide-Patch Phase 3 WearABLE Study Initiated!

- ✓ Abaloparatide-Patch Phase 3 'WearABLE' Study initiated with a first patient randomized and multiple sites open for enrollment
- ✓ Abaloparatide-Patch patient assessment study demonstrated high patient acceptability and self-administration accuracy over a 29-day period
- De-risking the clinical and regulatory pathway:
 - ✓ PINP, a biomarker that indicates bone formation, levels after 1 month show consistent results with those seen in ACTIVE study of TYMLOS (abaloparatide-SC)
 - ✓ SPA agreement with FDA includes a non-inferiority margin of 2% for the difference in % change in lumbar spine BMD at 12 months (i.e. preserves ~77% of the historical effect of TYMLOS)

Osteoporosis is a Large and Underserved Market

Under treatment of high-risk osteoporosis patients with bone building (anabolic) therapies



* ~85% of OP cases postmenopausal; ** Confirmed DXA diagnosis 50% cases

Abaloparatide-Patch: Innovation to Transform Anabolic Use

Novel route of administration designed to increase anabolic usage as a result of higher patient acceptance, improved compliance and less training required by physicians*

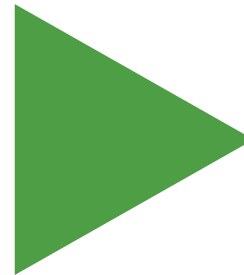
Anabolic Market Research *Top Reasons to Not Prescribe*

Out of pocket, coverage

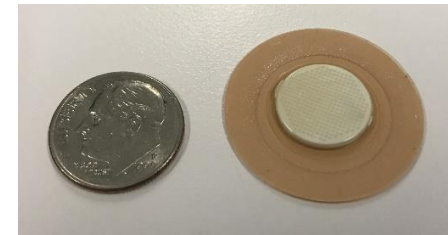
Needle averse patients

Needle phobic patients

Expected compliance

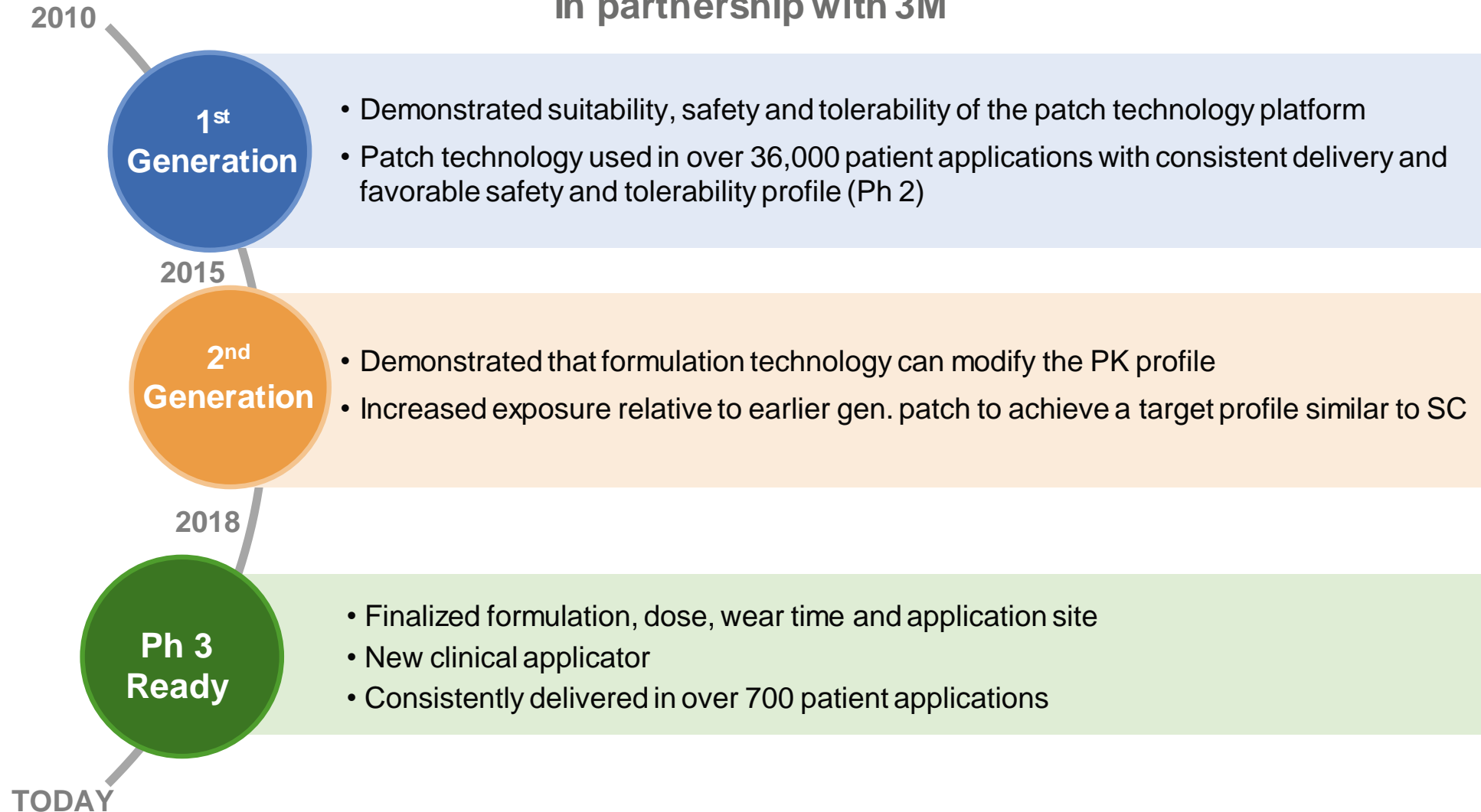


Abaloparatide-Patch and applicator



Groundbreaking Patch Development Protected by IP* and Know-How

In partnership with 3M



* Expected LOE: October 2036

ABALOPARATIDE-PATCH PATIENT ASSESSMENT STUDY

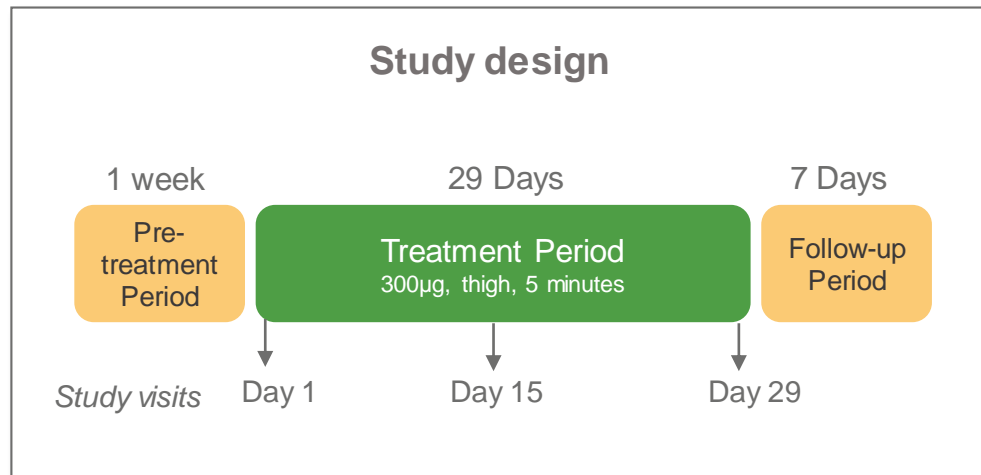
Dr Bruce Mitlak, VP Clinical Development



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Top-Line Results from Patient Assessment Study

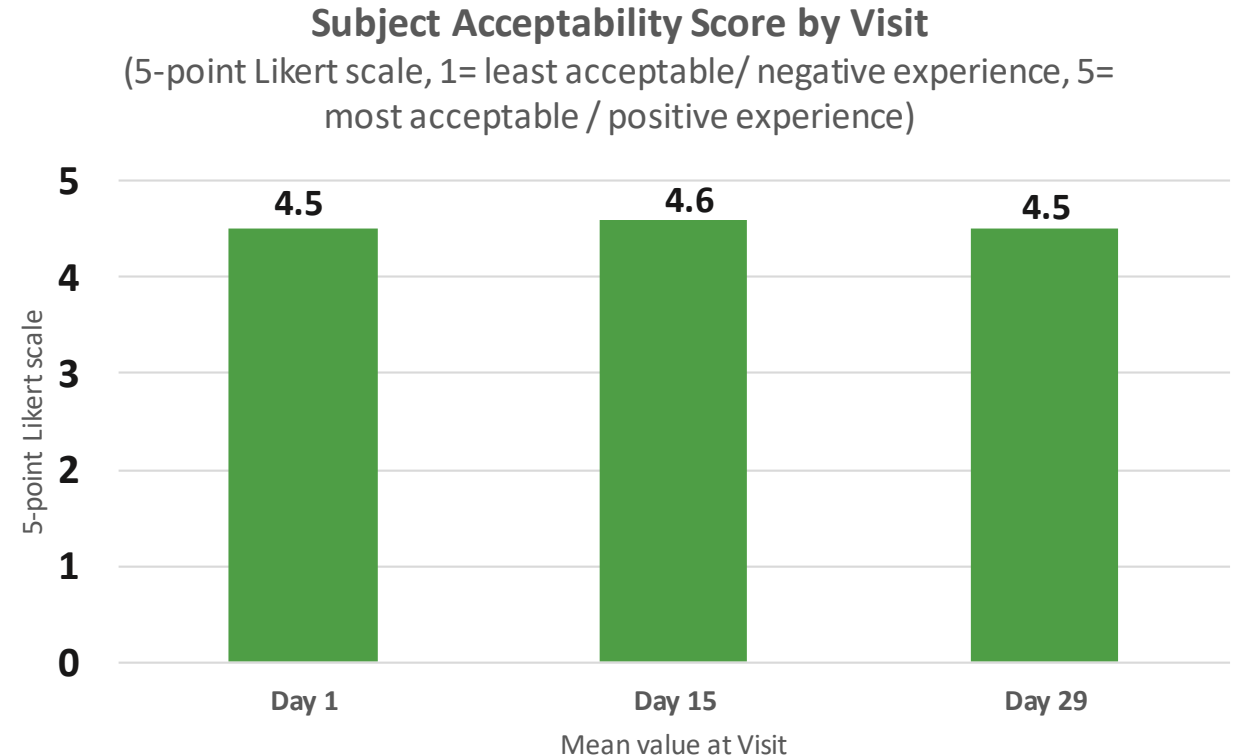


- Prospective study to evaluate self-administration of abaloparatide-patch
- Postmenopausal women with low bone density (n=22)
- Application to the thigh with a 5-minute wear time
- Study Endpoints:
 - PK*, s-PINP assessed at Day 1, Day 15, Day 29
 - Dermal safety assessed by investigator and subjects
 - Ease of use and subject acceptability

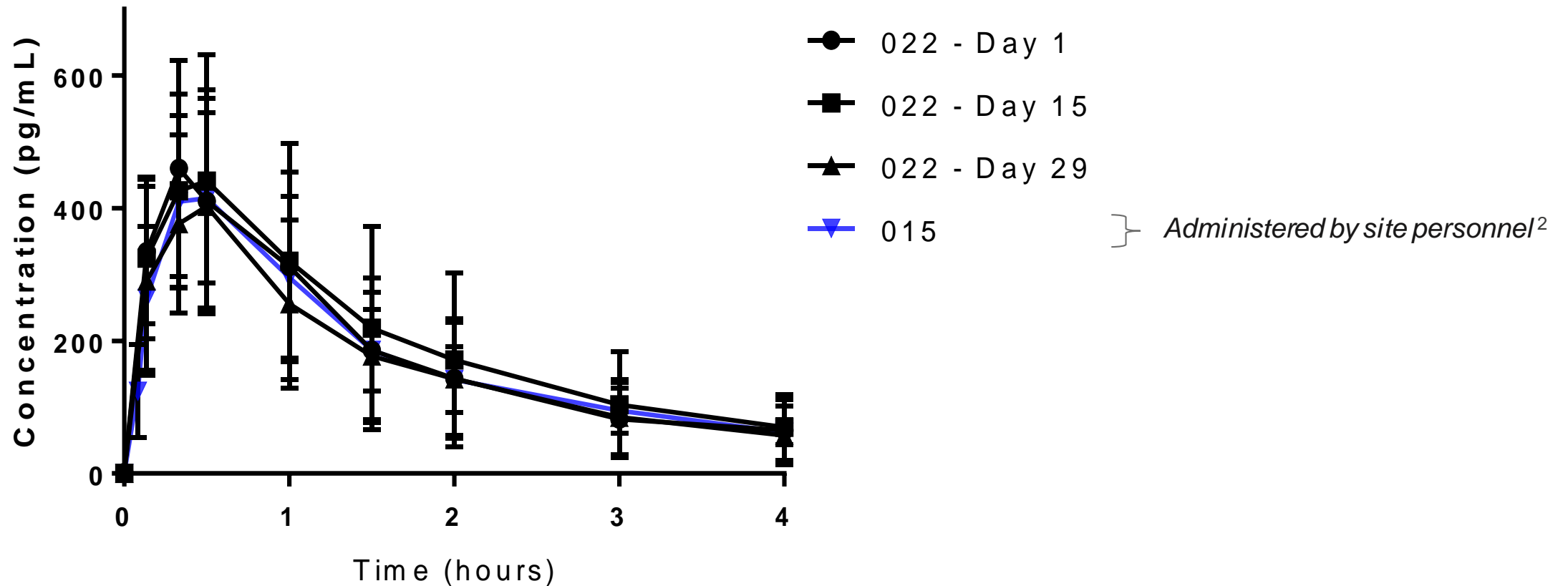
* 0-4 hours

Successful Patient Self-Administration and Acceptability

- **Subjects were able to follow instructions with few errors for 29 days**
 - 99.7% success rate with self-application
 - Mean wear time = 5.3 mins
- **Acceptability score on Day 29 = 4.5 out of 5**
 - Transient mild erythema most commonly observed application site reaction

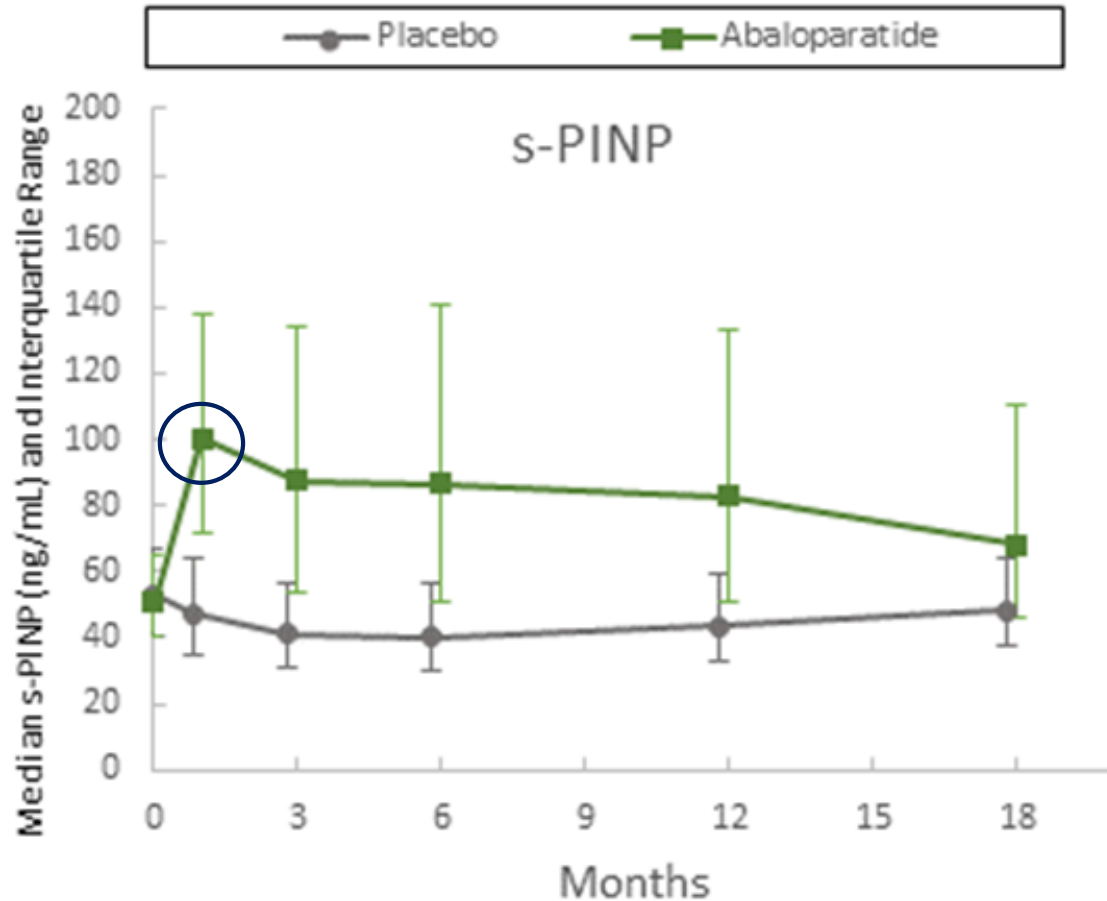


Consistent PK¹ Exposure during 29 days of Self-Administration, similar to Prior Study in a Controlled Environment²



¹ AUC_{0-t} (4 h); ² Study 015 (Ph 1 PK study): n=20; 5 minute on-thigh application

PINP: Serum Biomarker Indicating Bone Formation



- PINP value peaks at 1 month
- Established relationship between early change in PINP and 18-month change in BMD*

* Eastell, R et Al : Bone turnover markers to explain changes in lumbar spine BMD with abaloparatide and teriparatide: results from ACTIVE. Osteoporosis International. ISSN 0937-941X

Achieving consistent PINP levels with TYMLOS*

| | Study-022 Abalo patch 300 µg Day 29 N = 22 | ACTIVE Abalo SC 80 µg Month 1 N = 187 |
|---|---|--|
| Baseline (ng/mL) Median | 50.5 | 50.6 |
| Value at Day 29 (ng/mL) Median | 100.1 | 100.5 |
| Baseline (ng/mL) Mean (SD) | 57.0 (22.2) | 54.2 (20.5) |
| Value at Day 29 (ng/mL) Mean (SD) | 109.5 (54.7) | 110.6 (64.2) |

* Data from Phase 3 ACTIVE Study

*ABALOPARATIDE-PATCH
PHASE 3 wearABLE STUDY*

Dr Bruce Mitlak, VP Clinical Development



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Special Protocol Assessment Agreement for Pivotal Phase 3

Special Protocol Assessment:

- Agreement with the FDA under a SPA for the entry criteria, dose selection, endpoints and planned analyses

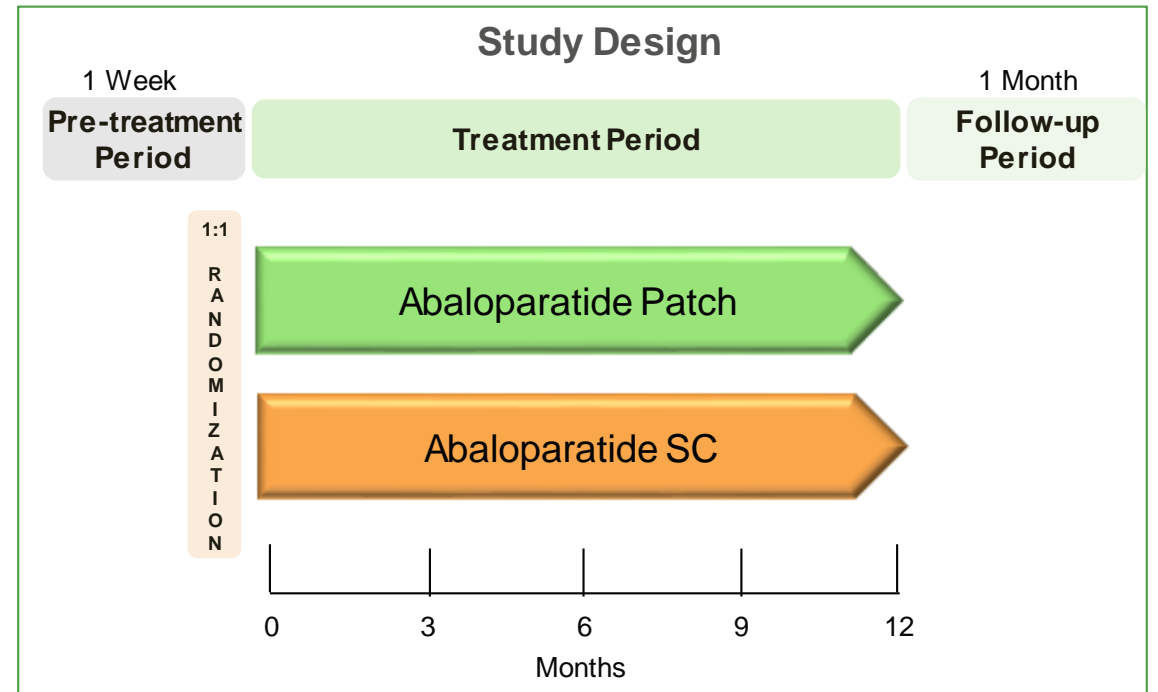
Pivotal Phase 3 Study Design:

- Approximately 470 patients with postmenopausal OP at high risk of fracture
- 1:1 randomization abaloparatide-SC vs abaloparatide-patch
- Primary endpoint: % change in lumbar spine BMD at 12-month, 1 month follow up
- Non-inferiority margin of 2% for the difference in % change in lumbar spine BMD at 12 months (i.e. preserves ~77% of the historical effect of TYMLOS*)

*Based on TYMLOS' placebo-adjusted effect of 9.096% (95% CI: 8.557%, 9.634%) 12 months in the Phase 3 ACTIVE study.

First Patient Randomized in wearABLE Study!!

- Multiple sites initiated and patients in screening
- Enrollment expected to be completed by year-end



PATCH OPPORTUNITY

Jesper Hoeiland, Chief Executive Officer

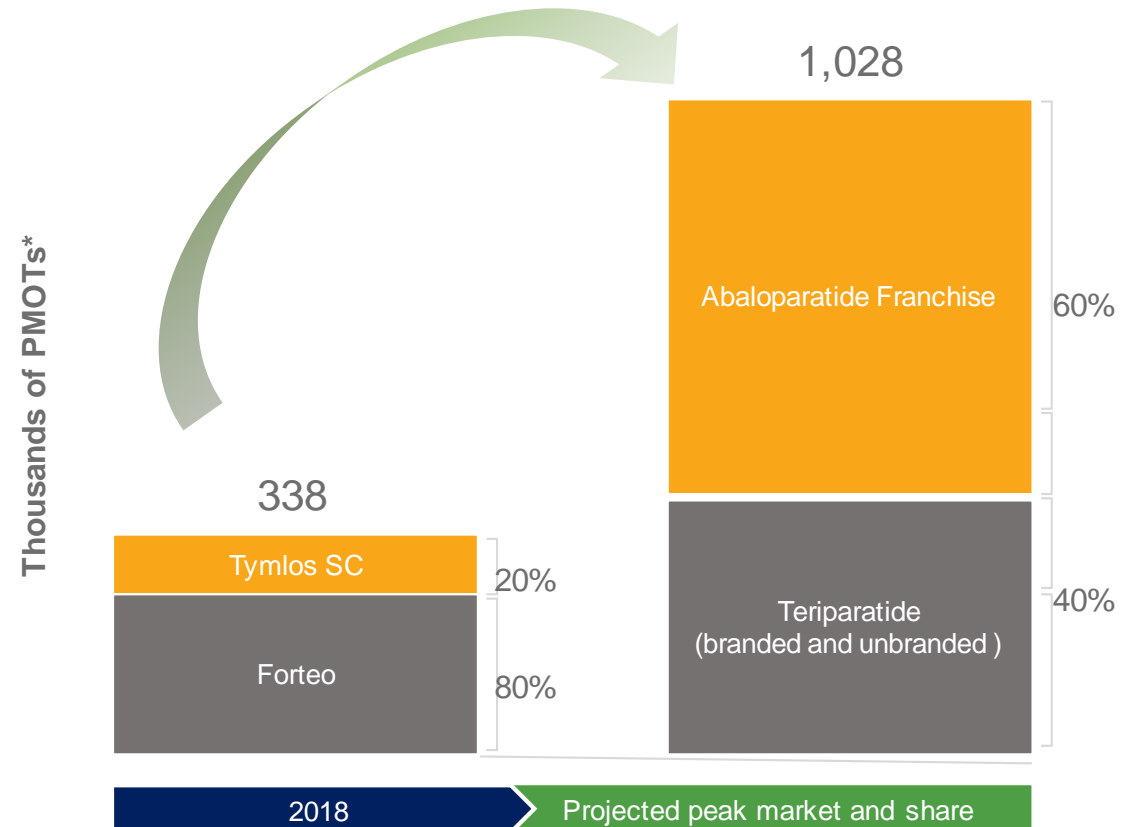


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Abalo-Patch Blockbuster Potential in a Tripled Anabolic Market

Anabolic therapy market evolution to peak potential (U.S.)



* PMOT: Patient Months on Therapy. Corresponds to 1 TYMLOS pen (30 days of therapy) and 30-day patch supply
Source: Quantitative Survey Results. Market Research data on file (Q4 2018, n=200 physicians)

Continued Execution and Advancement of Patch Program

- ✓ Initiated Abaloparatide-Patch Phase 3 'wearABLE' Study
- ✓ Successful results from patient assessment study
- ✓ De-risked clinical and regulatory pathway
- ✓ Plan to finalize Phase 3 wearABLE enrollment by end of 2019
- ✓ Exploit blockbuster potential of abaloparatide-patch in a tripled anabolic market

VIDEO

Dr Paul Miller

Distinguished Clinical Professor of Medicine University of
Colorado Health Sciences Center

Panorama Orthopedics and Spine Center



Q&A



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