WEBCAST
PROGRESS ON CORPORATE MILESTONES

January 28, 2016



NASDAQ: RDUS

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Safe Harbor

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Radius Highlights

Osteoporosis Program On Track for First Regulatory Approval in 2016

ABALOPARATIDE

Advancing daily subcutaneous

- CHMP opinion 210 active days (plus clock stoppage) from MAA validation
- 2016 Planned New Drug Application submission to the FDA at end of 1st Quarter

Developing short wear time transdermal patch

- Mid-year readout of human replicative study

Osteoporosis represents an attractive market opportunity

- Continuing partner discussions to establish partnership by time of first commercial launch

RAD1901

Advancing High Dose Program

- Continuing partnering discussions to establish clinical collaborations
- 2H16 initiation of expansion cohorts

Continuing Low Dose Program

- 4Q16 complete enrollment of Phase 2b study

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RAD1901

Oncology

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Radius-Novartis Clinical Collaboration

Consistent With Our Goals To Access Pipeline Compounds for RAD1901 Expansion Cohorts

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January 27, 2016

Radius Health Announces Clinical Collaboration With a Leading Pharmaceutical Company to Evaluate RAD1901 Combination Regimens in Advanced Breast Cancer

- Collaboration will evaluate Radius' investigational drug, RAD1901, in combination with Novartis investigational CDK4/6 inhibitor LEE011 for the treatment of breast cancer

-Additional studies are planned to evaluate effects of combining RAD1901 with BYL719, Novartis investigational PI3K inhibitor

WALTHAM, Mass., Jan. 27, 2016 (GLOBE NEWSWIRE) -- Radius Health, Inc. (Nasdaq:RDUS) today announced that it has entered into a worldwide clinical collaboration with Novartis Pharmaceuticals (NYSE:NVS) to evaluate the safety and efficacy of combining investigational agent RAD1901, a novel oral selective estrogen receptor degrader (SERD), with investigational agent LEE011 (ribociclib)*, a cyclin-dependent kinase (CDK) 4/6 inhibitor. Preclinical studies of RAD1901 have shown consistent and robust single agent anti-tumor activity in multiple wild type and ESR1-mutant breast cancer models and tumor regression when combined with targeted agents such as CDK 4/6 inhibitors in pre-clinical models. The parties also intend to conduct pre-clinical studies to evaluate the effects of RAD1901 in combination with BYL719 (alpelisib), an investigational phosphoinositide 3-kinase (PI3K) inhibitor, with the goal of initiating future clinical trials.

We Believe This Will Accelerate and Expand Clinical Development Activity for RAD1901

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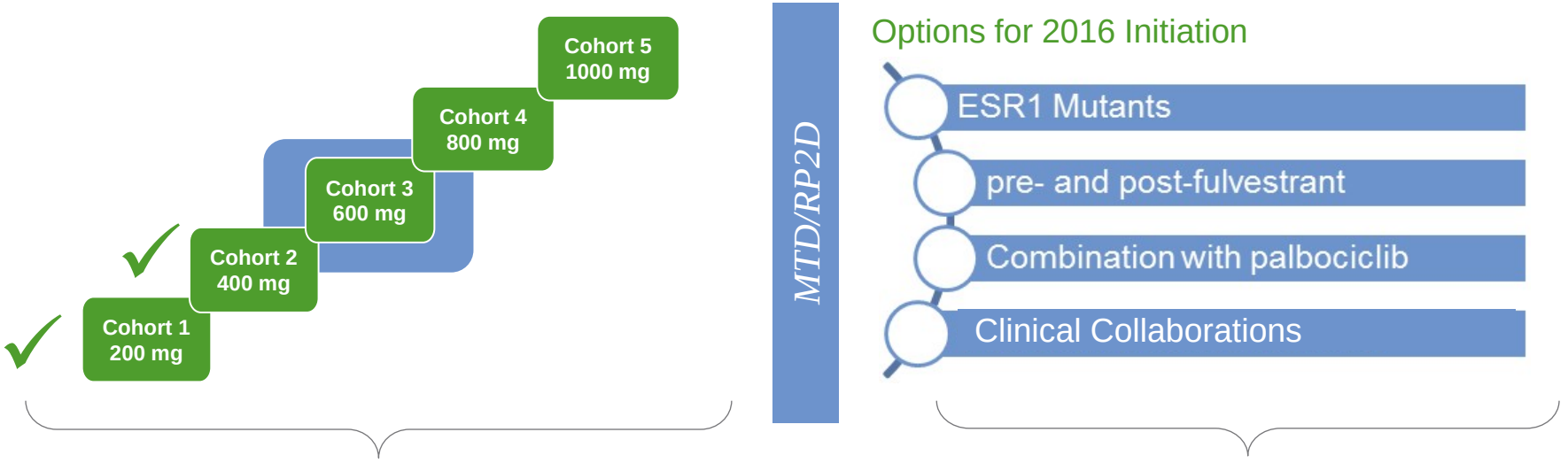
Currently Enrolling Phase 1 Study in Breast Cancer

MULTICENTER, OPEN-LABEL, TWO-PART, DOSE-ESCALATION STUDY OF RAD1901 IN POSTMENOPAUSAL WOMEN WITH ER + AND HER2- BREAST CANCER*

- PM women with ER+/HER- with locally advanced, inoperable and/or metastatic breast cancer
- Determine the MTD and/or the RP2D, with DLT incidence assessed during 28-day cycle
- Safety, tolerability, PK will be assessed, and also preliminary evaluation of tumor response
- 3+3 study design for dose escalation phase



Part A: Dose Escalation

Part B: Expansion cohort

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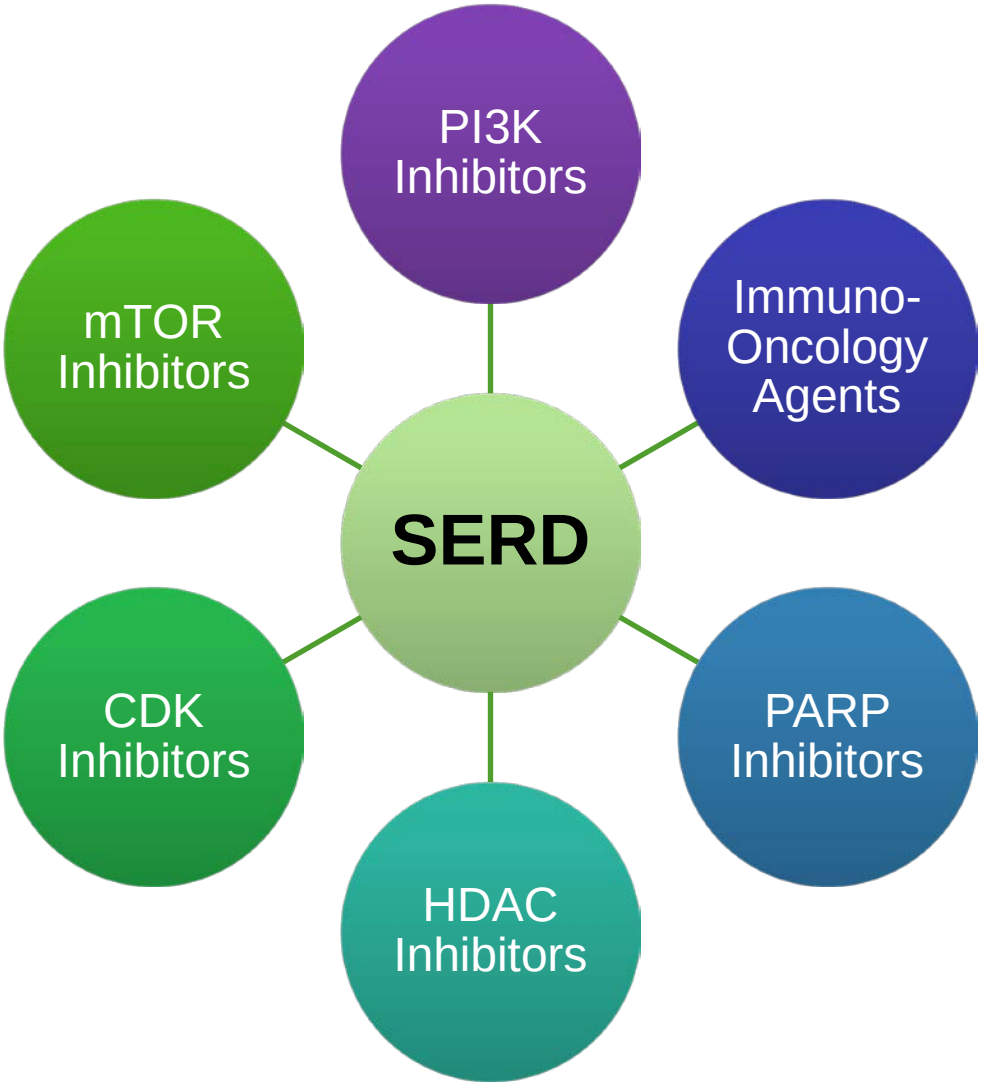
*Ref: clinical trials.gov

Several Targeted Therapies May Be Combined with RAD1901 to Improve Clinical Outcomes



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ABALOPARATIDE

Osteoporosis

NASDAQ: RDUS

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What is Abaloparatide?

Abaloparatide is a novel synthetic 34 amino acid peptide that binds to the PTH1 Receptor

Abaloparatide Amino Acid Sequence

AVSEHQLLHDKGKSIQDLRRRELLEKLLXKLHTA

X=Aib

PTH Analogs (Forteo, PTHrP) have different sequences with some shared amino acids

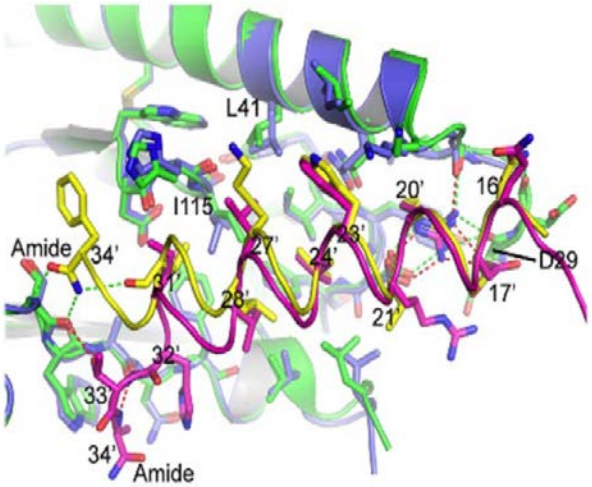
The first 34 amino acids of PTH analogs contain the PTH1 receptor binding domain

Abaloparatide is <u>not</u> PTH – Abaloparatide has 41% homology to Forteo (PTH 1-34)

Abaloparatide is <u>not</u> PTHrP – Abaloparatide has 76% homology to PTHrP 1-34

PTH 1-34

PTHrP 1-34



Computer Model showing the PTH/PTHrP 1-34 binding domain in the cleft of the PTH1 Receptor

J Clin Endocrinol Metab 2012, 97(9):2947–2956

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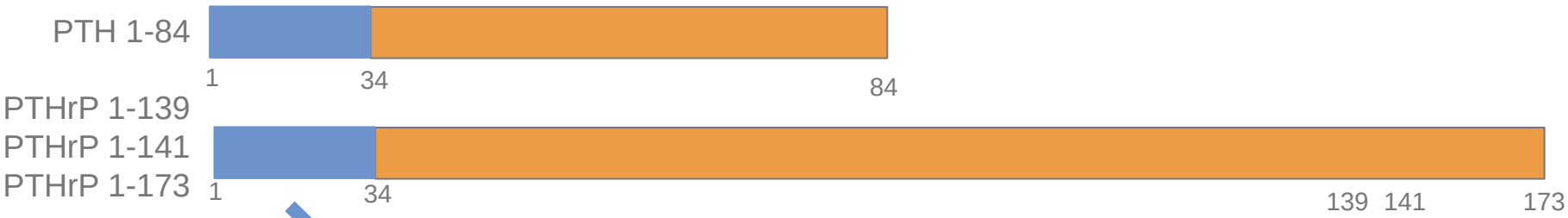
Peptides Differ in Biologic Activity from Full Length Proteins

PTH analogs represent a family of proteins and peptides that share regions of partial or complete amino acid sequence similarity

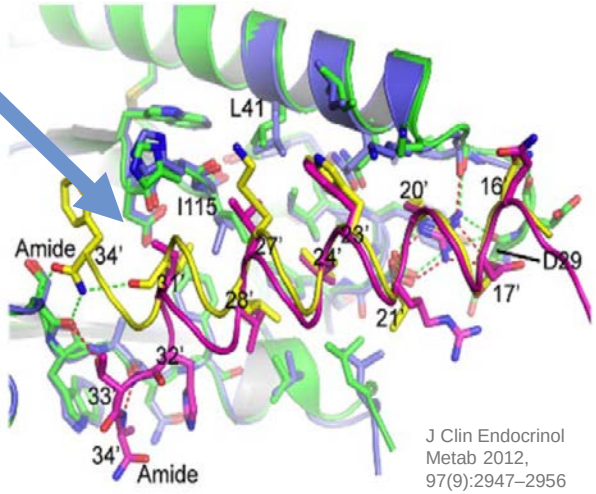
Different regions (domains) of these proteins confer different functional activities

The first 34 amino acids of PTH analogs represent the “PTH1 receptor binding domain”



PTH 1-34

PTHrP 1-34



Computer Model showing the PTH/PTHrP 1-34 binding domain in the cleft of the PTH1 Receptor

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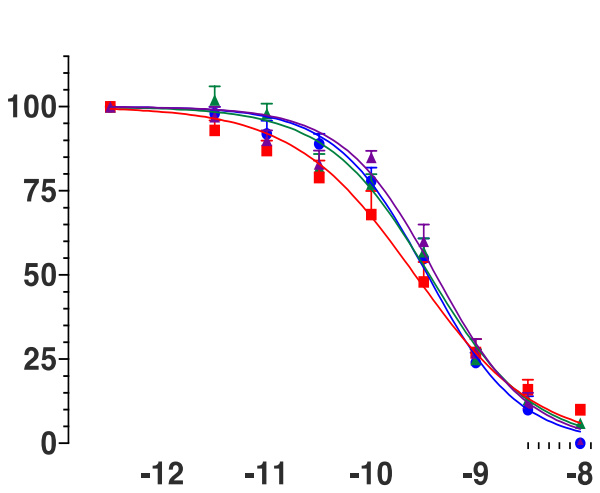
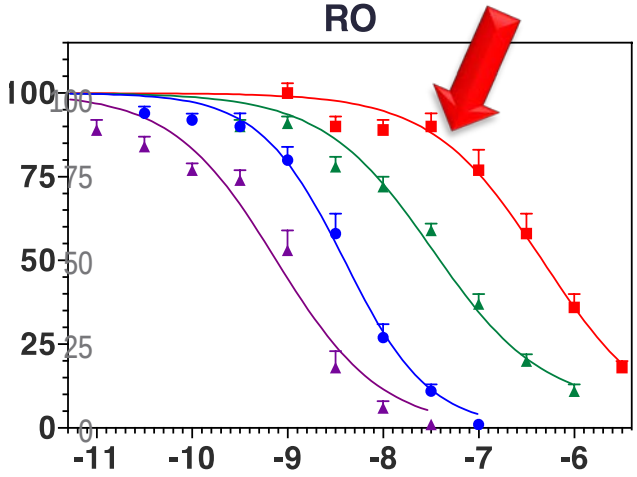
Changes in PTH Analog amino acid sequence alter receptor binding

The novel abaloparatide amino acid sequence is uniquely selective



Abaloparatide



Hattersley et al. Endocrinology 157(1) 2016.

PTH analogs stimulate bone formation or resorption through their binding activity at the PTH1 receptor

The novel amino acid sequence of abaloparatide results in high selectivity for the RG vs R0 conformation of the PTH1 receptor

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Anabolic Agents and Rodent Osteosarcoma

- Teriparatide is a form of recombinant human parathyroid hormone that was approved for use in postmenopausal osteoporosis by the FDA in November 2002
- Preclinical rat studies have shown that near lifetime rodent dosing with teriparatide is associated with increased incidence of osteosarcoma
- Postmarketing studies and studies in monkeys did not find any increase in incidence
- The severity of this potential adverse effect prompted the FDA to issue a box warning and recommend limiting the length of therapy to no more than 2 years
- Abaloparatide preclinical findings are consistent with anabolic effects bone formation and osteoblast-mediated increases in both trabecular and cortical BMD
- In a similar manner, abaloparatide is associated with an increased incidence of osteosarcoma in rats that have had near lifetime administration of the drug
  - There were no osteosarcomas in primate studies or with any other species treated with abaloparatide

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Postmarketing Surveillance Study in Humans

- The Osteosarcoma Surveillance Study was established in 2003 as a postmarketing commitment to the FDA for teriparatide to evaluate a potential association between teriparatide and osteosarcoma in humans based on preclinical (animal) findings
- The incidence of osteosarcoma in the general population is 4.2 cases/million (or roughly 1 case per 238,000) over the period 1973-2004 in individuals more than 60 years old (Mirabello 2009)
- There have only been three documented cases of osteosarcoma with over one million patients who have received teriparatide around the world (Cipriani 2012)
- The incidence of osteosarcoma may not be higher in patients who received teriparatide in comparison with general population

Andrews EB, Gilsenan AW, Midkiff K, et al. The US postmarketing surveillance study of adult osteosarcoma and Teriparatide: Study design and findings from the first 7 years. J Bone Miner Res. 2012;27(11):2429-2437.

Mirabello L, Troisi RJ, Savage SA. Osteosarcoma incidence and survival rates from 1973 to 2004: data from the surveillance, epidemiology, and end results program. Cancer 2009;115:1531e43.

Cipriani C, Irani D, Bilezikian JP. Safety of osteoanabolic therapy: a decade of experience. J Bone Miner Res 2012;27:2419e28

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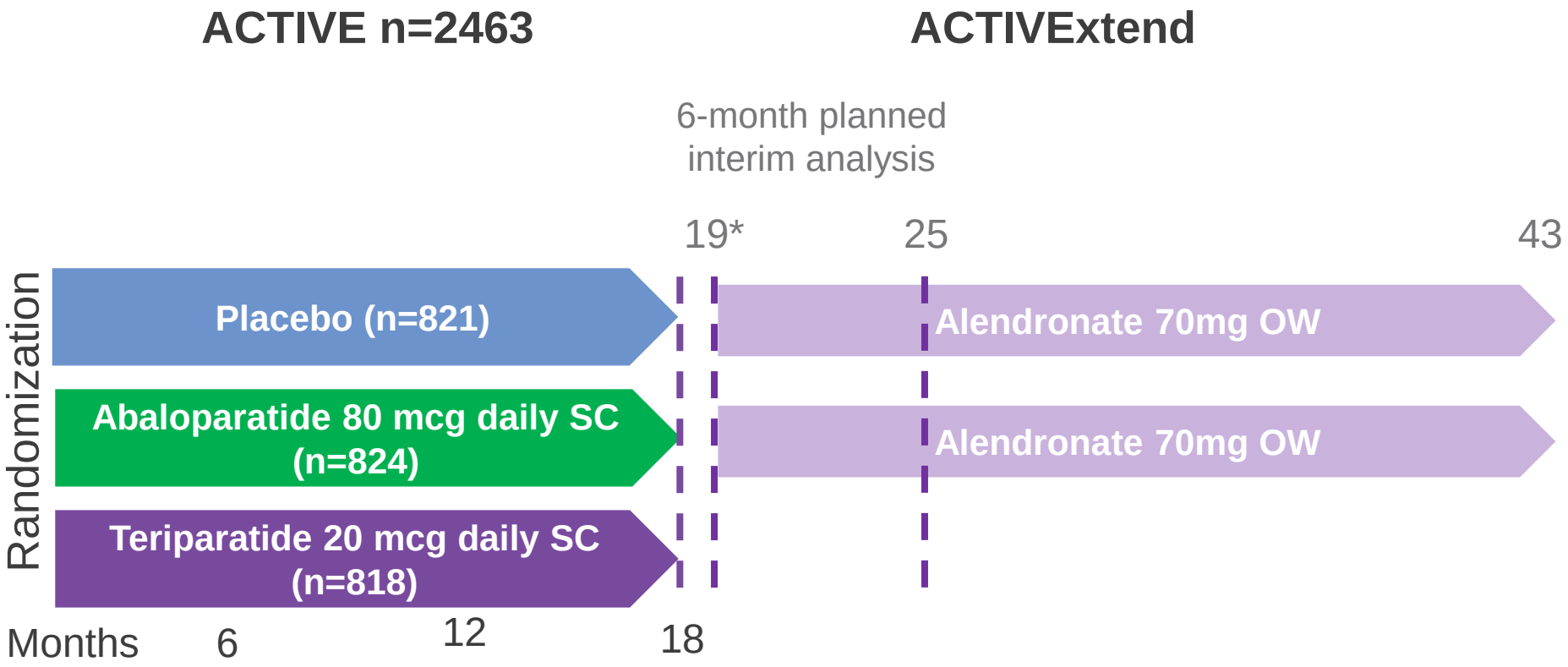
ACTIVE and ACTIVExtend Trial Design



*1-month gap in treatment was allowed for rollover from ACTIVE to ACTIVExtend

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Summary of ACTIVE and ACTIVExtend

- The sequence of abaloparatide followed by six months of alendronate
  - –Improves BMD and reduces fracture risk rapidly throughout the skeleton
  - –Has the potential to be a highly effective treatment option for patients at risk for osteoporosis-related fractures

Friday, April 1, 2016 ENDO oral presentation
Abaloparatide Significantly Reduces Vertebral and Nonvertebral Fractures and Increases BMD Regardless of Baseline Risk

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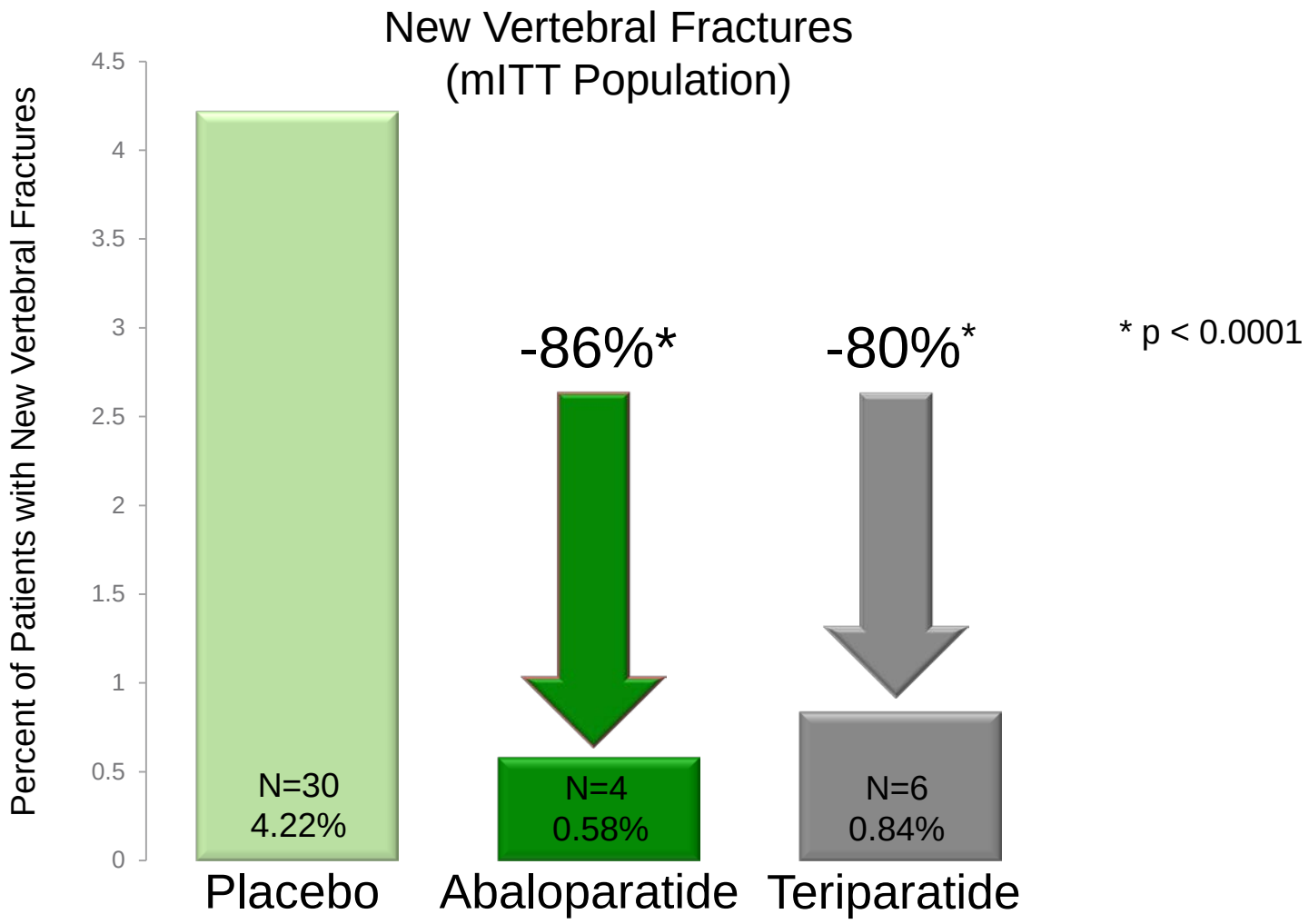
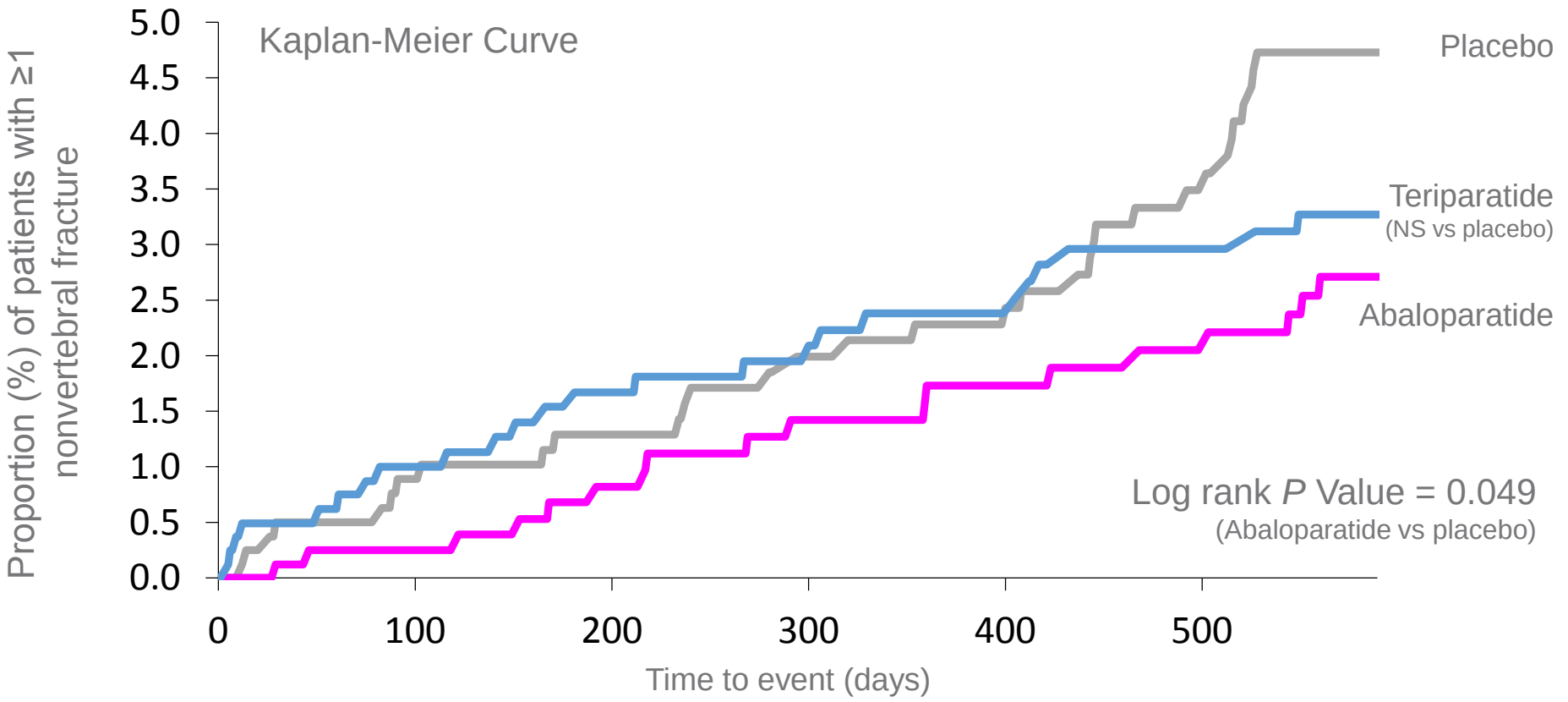
Vertebral Fracture – ACTIVE Primary Endpoint



ACTIVE Early Risk Reduction of Nonvertebral Fractures



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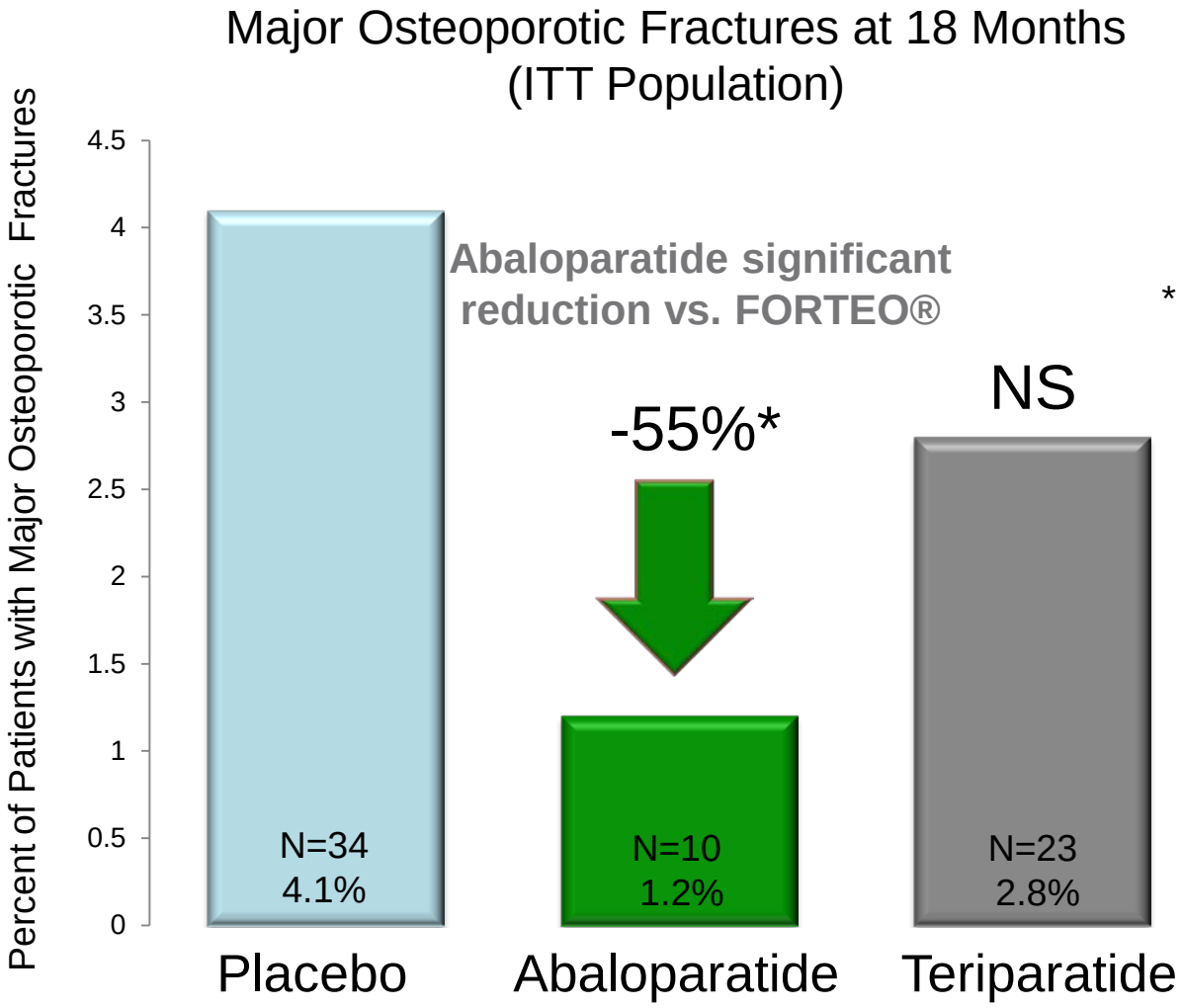
ACTIVE Fracture Reduction – Major Osteoporotic Fracture

Comparison to **Teriparatide**



* ABL vs. PBO, p<0.0004
ABL vs TER p=0.031

Includes clinical fractures of the upper arm, forearm, wrist, hip, shoulder and spine

ACTIVE Overall Safety, Safety Population, N=2460

Most Frequently Reported AEs reported by ≥5% in any treatment group	Placebo, n=820	Abaloparatide, n=822	Teriparatide, n=818
Hypercalcemia*	0.37%	3.41%†	6.37%†
Hypercalciuria	9.0%	11.3%	12.5%‡
Dizziness	6.1%	10.0%‡	7.3%
Arthralgia	9.8%	8.6%	8.6%
Back Pain	10.0%	8.5%	7.2%‡
Nausea	3.0%	8.3%‡	5.1%‡
Upper respiratory tract infection	7.7%	8.3%	8.9%
Headache	6.0%	7.5%	6.2%
Hypertension	6.6%	7.2%	5.0%
Influenza	4.8%	6.3%	4.2%
Nasopharyngitis	8.0%	5.8%	6.5%
Urinary tract infection	4.6%	5.2%	5.0%
Palpitations	0.4%	5.1%‡	1.6%‡
Pain in extremity	6.0%	4.9%	5.1%
Constipation	5.1%	4.5%	4.2%

*Serum albumin-corrected calcium value ≥10.7 mg/dL. †P=0.006 abaloparatide vs teriparatide; ‡P<0.05 vs placebo.

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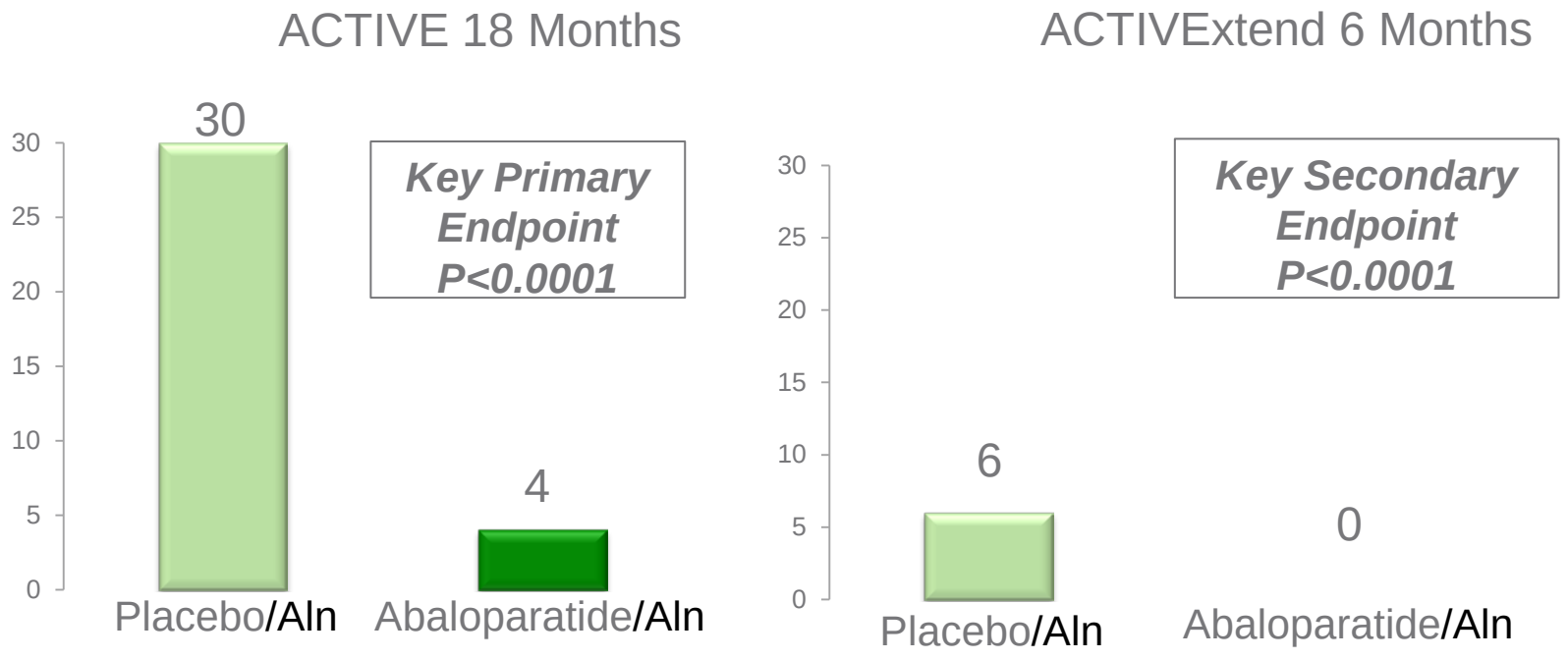
ACTIVExtend Vertebral Fracture – Fracture Free Interval

No patients from the abaloparatide treatment group had a vertebral fracture during the 6 month alendronate treatment



ACTIVExtend First 6 Months: Most Frequently Reported Adverse Events

MOST FREQUENTLY REPORTED AES ACTIVEXTEND SAFETY POPULATION, N=1133	*PLACEBO/ ALENDRONATE (N=580)*	*ABALOPARATIDE/ ALENDRONATE (N=553)*
Arthralgia	4.7%	4.3%
Dyspepsia	2.2%	2.7%
Upper respiratory tract infection	4.5%	2.5%
Urinary Tract Infection	1.0%	2.4%
Bone Pain	1.2%	2.2%
Diarrhea	1.4%	2.0%
Hypercalciuria	1.6%	2.0%
Influenza	1.0%	2.0%
Nasopharyngitis	1.4%	2.0%
Abdominal pain, upper	2.6%	1.8%
Back pain	2.1%	1.6%
Pain in extremity	2.4%	1.3%
Hypertension	2.1%	1.1%

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Expanding and improving treatment options

Multiday Injectable Pen (SC)

- Increased DOT in device
- No Refrigeration required by patient

Transdermal (TD)

- Easy to use
- Alternative option with >50,000 Osteoporosis treating physicians who rarely prescribe injectables
- Human replicative study started in December 2015 – currently ongoing

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