

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): September 22, 2025**

**MBX Biosciences, Inc.**

(Exact name of Registrant as Specified in Its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-42272**  
(Commission File Number)

**84-1882872**  
(IRS Employer  
Identification No.)

**11711 N. Meridian Street**  
**Suite 300**  
**Carmel, Indiana**  
(Address of Principal Executive Offices)

**46032**  
(Zip Code)

**Registrant's Telephone Number, Including Area Code: (317) 659-0200**

**Not Applicable**  
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	MBX	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

### Item 7.01 Regulation FD Disclosure.

On September 22, 2025, MBX Biosciences, Inc. (the "Company") issued a press release (the "Press Release") titled "MBX Biosciences Announces Once-Weekly Canvuparatide Achieved Primary Endpoint in Phase 2 Trial with 63% Responder Rate at 12 Weeks; 79% Responder Rate Observed at Six Months in Open-Label Extension." A copy of the Press Release is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

Also, on September 22, 2025, the Company will host a conference call and webcast to discuss topline data from its Phase 2 Avail™ clinical trial of canvuparatide in adult patients with chronic hypoparathyroidism (HP). A copy of the presentation from the conference call and webcast will be available in the "Investors" section of the Company's website at www.mbxbio.com and is furnished as Exhibit 99.2 to this Current Report on Form 8-K.

*The information included under Item 7.01 of this Current Report on Form 8-K, including Exhibits 99.1 and 99.2 attached hereto, is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, and shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.*

### Item 8.01 Other Events.

On September 22, 2025, the Company announced topline data from its Phase 2 Avail™ clinical trial of canvuparatide in adult patients with chronic HP. The topline results are summarized below.

All patients (n=64) completed the 12-week study, and 94% of patients elected to enroll in the six month open-label extension (OLE) to further evaluate longer-term outcomes with once-weekly canvuparatide.

#### Phase 2 Avail Topline Results

##### 12-week and 6-month Responder Rates:

- **At 12 Weeks:** The primary composite endpoint (maintaining albumin-adjusted serum calcium levels in the normal range (8.2–10.6 mg/dL) and independence from conventional therapy (defined as independence from active vitamin D and receiving no more than 600 mg/day of calcium supplements)) was achieved in 63% of canvuparatide-treated patients (30/48) compared with 31% in placebo-treated patients (5/16) (p=0.042) at Week 12.
- **At 6 Months:** In the OLE, 79% of patients (44/56 evaluable) who received treatment achieved responder status at 6 months, including patients initially randomized to placebo.

##### Select Secondary and Exploratory Endpoints:

- **Pharmacokinetics:** Pharmacokinetic findings were consistent with the Phase 1 results, supporting a once-weekly dosing schedule.
- **Bone Activity:** Bone turnover and formation markers (BSAP, CTx and P1NP) increased over 12 weeks compared to placebo, consistent with enhanced bone remodeling.
- **Kidney Activity:** In patients with elevated urine calcium at screening that normalized at Week 12, mean urine calcium was reduced by 48% in patients treated with once-weekly canvuparatide compared with 33% on placebo.

##### Safety Summary:

- All doses of canvuparatide were generally well-tolerated with no discontinuations related to canvuparatide.
  - Most treatment emergent adverse events were categorized as mild or moderate.
  - No serious adverse events related to canvuparatide were reported.
  - Injection site reactions: 19% in the pooled treatment group versus 13% in placebo.
  - No deaths were reported.
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## Future Development Plans

The Company plans to initiate a Phase 3 clinical trial of once-weekly canvuparatide in 2026.

## Forward-Looking Statements

*This Current Report on Form 8-K contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, but are not limited to, express or implied statements regarding: trial results from MBX’s Phase 2 trial of canvuparatide, including topline results; statements related to the potential for canvuparatide to be a once-weekly PTH replacement therapy; expectations regarding future clinical evaluation of canvuparatide; and statements relating to canvuparatide having a favorable safety profile.*

*Forward looking statements are based on management’s current expectations and are subject to risks and uncertainties that could negatively affect MBX Biosciences’ business, operating results, financial condition and stock value. Factors that could cause actual results to differ materially from those currently anticipated include: risks relating to the Company’s research and development activities; MBX Biosciences’ ability to execute on its strategy including obtaining the requisite regulatory approvals on the expected timeline, if at all; uncertainties relating to preclinical and clinical development activities; the Company’s dependence on third parties to conduct clinical trials, manufacture its product candidates and develop and commercialize its product candidates, if approved; MBX Biosciences’ ability to attract, integrate and retain key personnel; risks related to the Company’s financial condition and need for substantial additional funds in order to complete development activities and commercialize a product candidate, if approved; risks related to regulatory developments and approval processes of the U.S. Food and Drug Administration and comparable foreign regulatory authorities; risks related to establishing and maintaining MBX Biosciences’ intellectual property protections; and risks related to the competitive landscape for MBX Biosciences’ product candidates; as well as other risks described in “Risk Factors,” in MBX Biosciences’ Annual Report on Form 10-K for the year ended December 31, 2024 filed with the SEC, as well as subsequent filings with the SEC. MBX Biosciences expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in its expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law, and claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.*

## Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	<a href="#">Press Release Issued by MBX Biosciences, Inc. on September 22, 2025</a>
99.2	<a href="#">Corporate presentation of MBX Biosciences, Inc., furnished herewith</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MBX BIOSCIENCES, INC.

Date: September 22, 2025

By: /s/ P. Kent Hawryluk  
President and Chief Executive Officer (Principal Executive Officer)

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**MBX Biosciences Announces Once-Weekly Canvuparatide Achieved Primary Endpoint in Phase 2 Trial with 63% Responder Rate at 12 Weeks; 79% Responder Rate at 6 Months in Open-Label Extension**

*Statistically significant responder rate achieved at 12 weeks with zero contribution from rescue therapy (PRN) and further improvement sustained in open-label extension (OLE)*

*Positive findings in bone and kidney biomarkers*

*All patients completed the 12-week Avail™ trial and 94% entered the OLE*

*Once-weekly canvuparatide was generally well tolerated, with no treatment-related serious adverse events or discontinuations during the 12-week trial*

*Preparation underway to initiate Phase 3 trial in 2026*

*Company to host conference call at 8:00 am ET today*

CARMEL, Ind., September 22, 2025 (GLOBE NEWSWIRE) -- MBX Biosciences, Inc. (Nasdaq: MBX), a clinical-stage biopharmaceutical company focused on the discovery and development of novel precision peptide therapies for the treatment of endocrine and metabolic disorders, today announced once-weekly canvuparatide achieved the primary endpoint with statistical significance at Week 12 in its Phase 2 Avail™ trial, and demonstrated positive 6-month results from the OLE, in adult patients with chronic hypoparathyroidism (HP). All patients (n=64) completed the 12-week study, and 94% of patients elected to enroll in the OLE.

In the 12-week randomized portion of the trial, 63% of canvuparatide-treated patients met the prespecified primary composite endpoint with zero contribution from PRN rescue therapy. In the OLE, 79% of patients receiving once-weekly canvuparatide achieved responder status at 6 months. Responders were defined as patients who maintained serum calcium levels in the normal range (8.2–10.6 mg/dL) and independence from conventional therapy (active vitamin D and >600 mg/day of calcium supplements).

Based on these positive results, MBX is preparing to initiate a Phase 3 clinical trial of once-weekly canvuparatide in 2026.

“The results from the Avail trial are encouraging. A once-weekly therapy could simplify administration and help address important unmet medical needs of patients with hypoparathyroidism,” said Mishaela Rubin, MD, MS, Professor of Medicine at Columbia University Vagelos College of Physicians and Surgeons and an investigator in the Avail clinical trial. “Hypoparathyroidism poses a substantial burden to patients, who often face complex treatment regimens and unpredictable swings in calcium levels that can lead to serious

complications. The 12-week and 6-month data provide promising early evidence that this investigational therapy may offer a potential option for long-term management, pending further study.”

“We are very pleased with the clinically meaningful and statistically significant topline results from our once-weekly canvuparatide Phase 2 trial. These data reinforce our conviction that canvuparatide could become a potential best-in-class treatment for hypoparathyroidism and demonstrate the value of our novel Precision Endocrine Peptide platform technology,” said Kent Hawryluk, President and Chief Executive Officer of MBX Biosciences. “We believe the totality of the data support a once-weekly product profile with continuous infusion-like PTH exposure. These 12-week and 6-month results represent the potential for a meaningful improvement over current treatment options for HP patients and provide a strong foundation for further development. We look forward to sharing additional once-weekly canvuparatide clinical data at an upcoming medical meeting as we prepare for initiation of our Phase 3 trial.”

## Phase 2 Avail Topline Results

### 12-week and 6-month Responder Rates:

- **At 12 Weeks:** The primary composite endpoint (maintaining albumin-adjusted serum calcium levels in the normal range (8.2–10.6 mg/dL) and independence from conventional therapy (active vitamin D and >600 mg/day of calcium supplements)) was achieved in 63% of canvuparatide-treated patients (30/48) compared with 31% in placebo-treated patients (5/16) (p=0.042) at Week 12
- **At 6 Months:** In the OLE, 79% of patients (44/56 evaluable) who received treatment achieved responder status at 6 months, including patients initially randomized to placebo

### Select Secondary and Exploratory Endpoints

- **Pharmacokinetics:** Pharmacokinetic (PK) findings were consistent with the Phase 1 results, supporting a once-weekly dosing schedule
- **Bone Activity:** Bone turnover and formation markers (BSAP, CTx and P1NP) increased over 12 weeks compared to placebo, consistent with enhanced bone remodeling
- **Kidney Activity:** In patients with elevated urine calcium at screening that normalized at Week 12, mean urine calcium was reduced by 48% in patients treated with once-weekly canvuparatide compared with 33% on placebo

### Safety Summary

- All doses of canvuparatide were generally well-tolerated with no discontinuations related to canvuparatide
- Most treatment emergent adverse events were categorized as mild or moderate
- No SAEs related to canvuparatide were reported
- Injection site reactions (ISRs): 19% in the pooled treatment group versus 13% in placebo
- No deaths were reported

“We are thrilled with these trial results,” said Patty Keating, Executive Director of the HypoPARathyroidism Association. “For so many in our community, life with hypoparathyroidism means living with constant symptoms and the limitations of daily supplements. A once-weekly

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treatment option that maintains stable calcium control while reducing the day-to-day burden would be a major step forward.”

The Company will present additional data from the Phase 2 trial and OLE at an upcoming major medical meeting.

#### Conference Call

The Company will host a conference call and webcast today at 8 am ET to discuss the results from the Avail™ Phase 2 trial. Those who would like to participate may access the live webcast here or dial 1-877-407-0779 (US) or 1-201-389-0914 (international). The live and archived webcast of the call and slide presentation will be available in the Investors section of the Company’s website at <https://investors.mbxbio.com/news-events/events>.

#### **About the Avail™ Trial**

The Avail™ Phase 2 trial (NCT06465108) is a multicenter, randomized, double-blind, placebo-controlled study to evaluate the safety, pharmacokinetics, and efficacy of canvuparatide in patients with hypoparathyroidism. The study randomized 64 patients into four treatment arms: canvuparatide 400ug, 600ug, 800ug administered by subcutaneous once-weekly injection, and a placebo arm. The 12-week treatment period includes a four-week fixed dose period followed by an 8-week titration period during which canvuparatide dosing may be adjusted every two weeks in 200ug increments. The primary endpoint for efficacy is normalization of albumin adjusted serum calcium while independent from active vitamin D and calcium supplements (<600 mg/day) at Week 12. Secondary endpoints include safety and tolerability; pharmacokinetic profile; urine calcium, serum phosphorus, 1,25 dihydroxyvitamin D, and bone biomarkers. Following the 12-week treatment period, 60 patients (94%) elected to receive once-weekly canvuparatide in the two-year open-label extension study.

#### **About Hypoparathyroidism (HP)**

HP is a rare endocrine disease caused by a deficiency of parathyroid hormone (PTH) released by the parathyroid glands that results in decreased calcium levels in the blood, leading to hypocalcemia. Hypocalcemia can cause a variety of symptoms, such as muscle cramping or spasm, tingling, and neurological symptoms such as depression, confusion, and cognitive impairment. More serious complications can occur, including seizures and cardiac arrhythmia. HP can interfere with daily activities, negatively impacting the quality of life for patients. We estimate that HP affects more than 250,000 individuals in the U.S. and Europe. The current standard of care for HP does not address the underlying cause of the disease, PTH deficiency, and consists primarily of high doses of oral calcium and active vitamin D supplements.

#### **About Canvuparatide (MBX 2109)**

Canvuparatide is a parathyroid hormone peptide prodrug that is designed as a potential long-acting hormone replacement therapy for the treatment of HP. Leveraging the company’s proprietary Precision Endocrine Peptide™ (PEP™) platform technology, canvuparatide was designed to provide convenient, once-weekly administration and a continuous, infusion-like PTH exposure with lower daily peak-to-trough ratios than observed with daily PTH dosing regimens. Canvuparatide received orphan drug designation from the U.S. Food and Drug Administration for the treatment of HP.

#### **About MBX Biosciences**

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MBX Biosciences is a biopharmaceutical company focused on the discovery and development of novel precision peptide therapies based on its proprietary PEP™ platform, for the treatment of endocrine and metabolic disorders. The Company is advancing a pipeline of novel candidates for endocrine and metabolic disorders with clinically validated targets, established endpoints for regulatory approval, significant unmet medical needs and large potential market opportunities. The Company's pipeline includes canvuparatide (MBX 2109) for the treatment of chronic hypoparathyroidism (HP) in Phase 2 development; imapexotide (1416) for the treatment of post-bariatric hypoglycemia (PBH) in Phase 2 development; and an obesity portfolio that includes MBX 4291 in Phase 1 development, as well as multiple discovery and pre-clinical obesity candidates. The Company is based in Carmel, Indiana. To learn more, please visit the Company website at <https://mbxbio.com/> and follow it on LinkedIn.

### **Forward-Looking Statements**

This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. These forward-looking statements include, but are not limited to, express or implied statements regarding: trial results from MBX's Phase 2 trial of canvuparatide, including topline results; statements related to the potential for canvuparatide to be a once-weekly PTH replacement therapy; expectations regarding future clinical evaluation of canvuparatide; and statements relating to canvuparatide having a favorable safety profile.

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MBX uses and intends to continue to use its Investor Relations website as a means of disclosing material nonpublic information and for complying with its disclosure obligations under Regulation FD. Accordingly, investors should monitor the Company's Investor Relations

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website, in addition to following the Company's press releases, SEC filings, public conference calls, presentations, and webcasts.

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## Phase 2 Trial and Open-Label Extension Top-Line Results:

Once-Weekly Canvuparatide in  
Adults with Hypoparathyroidism



**September 22, 2025**

# Disclaimer

This presentation includes forward looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding our product candidates, preclinical study and/or clinical trial timelines, including projected data announcements, future results of operations and financial position, strategy and plans, industry environment, potential growth opportunities, and our expectations for future operations, are forward looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "design," "expect," "could," "plan," "potential," "predict," "seek," "should," "would," or the negative version of these words and similar expressions are intended to identify forward looking statements.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including but not limited to, our ability to develop and advance our programs and product candidates, our regulatory approvals and filings, and other risks, uncertainties and assumptions identified in our filings with the Securities and Exchange Commission.

Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time, and it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations, unless required by law.

This presentation contains estimates and other information concerning our industry, our business and the markets for our product candidates. Information that is based on estimates, market research or similar methodologies, including prevalence studies which are extrapolated to broader populations, is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from our own internal estimates and research as well as from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable.

Although we believe the industry and market data to be reliable as of the date of this presentation, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. While we are responsible for the accuracy of such information and believe our internal company research as to such matters is reliable and the market definitions are appropriate, neither such research nor these definitions have been verified by any independent source.

# Agenda

## Once-Weekly Canvuparatide for the Potential Treatment of Hypoparathyroidism



Top-Line Results Summary  
Disease Overview and Current Landscape

**Kent Hawryluk**

Avail™ and Open-Label Extension Overview  
Clinical Results and Safety Data

**Sam Azoulay, MD**

Differentiation and Next Steps

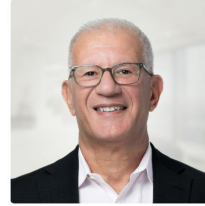
**Kent Hawryluk**

Q&A Session

**All**



**Kent Hawryluk**  
President & CEO



**Sam Azoulay, MD**  
Chief Medical Officer



**Rick Bartram, CPA**  
Chief Financial Officer

## Avail™ Once-Weekly Canvuparatide Achieved Primary Endpoint at Week 12; 79% Responder Rate at 6 Months in Open-Label Extension

- 63% of patients receiving once-weekly canvuparatide achieved the primary endpoint at Week 12 vs 31% on placebo ( $p < 0.05$ )
  - All patients completed Avail™ and 94% entered the Open-Label Extension (OLE)
- Responder status increased to 79% at 6 months in the OLE
- At Week 12, urine calcium excretion was reduced in canvuparatide-treated patients with elevated baseline values
- Bone biomarkers increased in canvuparatide-treated patients at Week 12 and continued to improve at 6 months
- Once-weekly canvuparatide was well-tolerated, with no treatment related serious adverse events or discontinuations during the 12-week trial

Results support development for once-weekly dosing and progression into Phase 3

# Hypoparathyroidism: A Chronic, Serious Endocrine Disease

Affects >250,000 patients in the U.S. and E.U., representing a significant unmet need and market opportunity<sup>1,2</sup>

## CAUSE

**Deficiency in parathyroid hormone (PTH)**

**Etiology:** Inadvertent removal of parathyroid during thyroid surgery and less commonly due to autoimmune disease and genetic disorders

## SYMPTOMS<sup>3,4</sup>

**Cognition:** Cognitive impairment, confusion

**Hypocalcemia – low calcium:**  
Tetany, muscle cramping/spasms/twitching, numbness, tingling, seizures

**Hypercalcemia – high calcium:**  
Polyuria, nausea, vomiting, constipation, weakness



## COMPLICATIONS<sup>3,4</sup>

**Depression / Infections**

**Cardiovascular:** Arrhythmias, ischemic heart disease

**Renal:** Kidney stones, chronic kidney disease, nephrocalcinosis

# Managing Hypoparathyroidism: A Significant Treatment Opportunity

Once-weekly canvuparatide designed to overcome key limitations of current therapies

## STANDARD OF CARE

Calcium and active vitamin D<sup>1</sup> supplementation

- Does not address underlying pathophysiology
- Significant pill burden
- Serum calcium fluctuations
- Contributes to renal complications

## DAILY INJECTIONS

Daily PTH replacement therapy

Palopegteriparatide

- Approved in U.S. and E.U. for the treatment of hypoparathyroidism in adults

Eneboparatide

- In Phase 3 development

## CANVUPARATIDE WEEKLY INJECTION

Investigational once-weekly PTH replacement therapy

### Designed to:

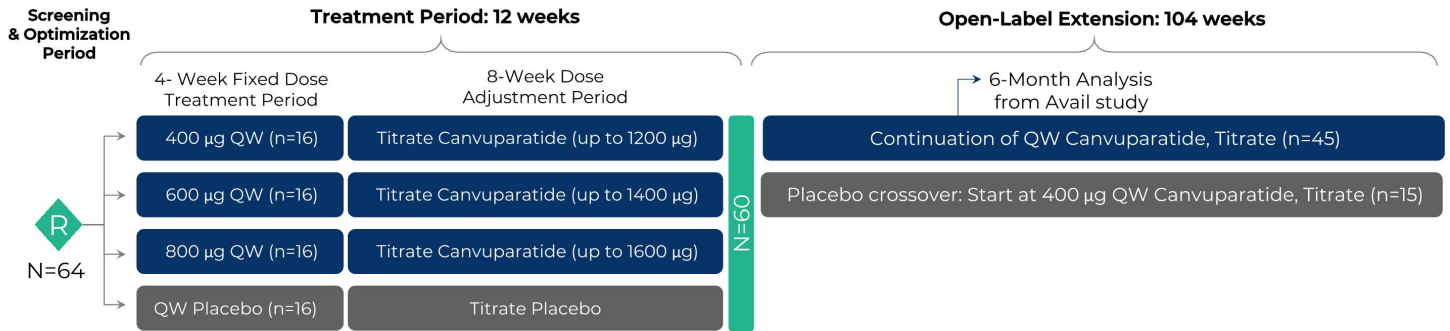
- ✓ Lower daily peak-to-trough PTH exposures vs. daily injectables
- ✓ Normalize serum and urine calcium
- ✓ Eliminate pill burden
- ✓ Convenient weekly dosing
- ✓ Improve QoL
- ✓ Reduce complications



Avail™ Phase 2 Trial and OLE Overview

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## 12-Week Trial and 2-Year Open-Label Extension Study Design



## Key Endpoints from Phase 2 Avail™ and OLE

### Primary Composite Endpoint (Week 12)

Proportion of patients (% Responders) meeting all three criteria:

- Normal albumin-adjusted serum calcium (8.2 mg/dL to 10.6 mg/dL)
- Independence from active vitamin D
- Calcium supplements ( $\leq 600$  mg/day)

### Select Secondary and Exploratory Endpoints

- % Responders of each starting dose at Week 12
- % Meeting each individual component of composite criteria
- % Responders at 6 months
- Change from baseline in 24h urine calcium excretion
- Change from baseline in bone turnover biomarkers
- Safety and tolerability

# Avail™ Baseline Demographic and Clinical Characteristics

Characteristic	Canvuparatide				Placebo (n = 16)	All Patients (N = 64)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)		
Age, years, median (range)	50.0 (35–68)	45.0 (28–58)	55.5 (23–72)	49.0 (23–72)	44.5 (19–63)	48.5 (19–72)
Female, n (%)	13 (81.3)	15 (93.8)	13 (81.3)	41 (85.4)	15 (93.8)	56 (87.5)
Race, n (%)						
Asian	0	0	0	0	1 (6.3)	1 (1.6)
Black/African American	1 (6.3)	1 (6.3)	2 (12.5)	4 (8.3)	2 (12.5)	6 (9.4)
White	15 (93.8)	15 (93.8)	13 (81.3)	43 (89.6)	13 (81.3)	56 (87.5)
Other	0	0	1 (6.3)	1 (2.1)	0	1 (1.6)
Ethnicity, n (%)						
Hispanic or Latino	11 (68.8)	9 (56.3)	9 (56.3)	29 (60.4)	9 (56.3)	38 (59.4)
Not Hispanic or Latino	5 (31.3)	7 (43.8)	7 (43.8)	19 (39.6)	7 (43.8)	26 (40.6)
BMI, kg/m <sup>2</sup> , mean (SD)	30.6 (4.3)	32.9 (7.2)	30.4 (7.0)	31.3 (6.3)	30.2 (5.4)	31.0 (6.1)

# Avail™ Hypoparathyroidism Baseline Clinical Characteristics

Characteristic	Canvuparatide				Placebo (n = 16)	All Patients (N = 64)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)		
Duration of hypoparathyroidism, years, mean (SD)	10.5 (7.5)	9.4 (9.9)	11.7 (9.9)	10.5 (9.0)	8.9 (4.8)	10.1 (8.2)
Etiology of hypoparathyroidism, n (%)						
Postsurgical chronic	15 (93.8)	14 (87.5)	14 (87.5)	43 (89.6)	14 (87.5)	57 (89.1)
Idiopathic	1 (6.3)	1 (6.3)	1 (6.3)	3 (6.3)	2 (12.5)	5 (7.8)
Autoimmune	0	1 (6.3)	0	1 (2.1)	0	1 (1.6)
Genetic	0	0	1 (6.3)	1 (2.1)	0	1 (1.6)
Calcium dose, mg/day, median (range)	1900 (1000–12,000)	2400 (800–5400)	2000 (800–13,500)	2000 (800–13,500)	2325 (1300–4000)	2000 (800–13,500)
Vitamin D dose, µg/day, median (range)	0.750 (0.50–2.50)	0.875 (0.50–2.00)	0.875 (0.50–2.00)	0.750 (0.50–2.50)	0.750 (0.50–1.50)	0.750 (0.50–2.50)
Serum AdjCa, mg/dL, mean (SD)	9.3 (0.9)	9.4 (0.7)	9.2 (0.7)	9.3 (0.7)	9.0 (1.0)	9.2 (0.8)
Serum PTH, ng/L, mean (SD)	9.2 (5.8)	10.1 (4.4)	11.2 (7.0)	10.2 (5.7)	12.1 (12.6)	10.6 (7.9)
Urine calcium excretion, n (%)						
< 250 mg/day	9 (56.3)	8 (50.0)	9 (56.3)	26 (54.2)	9 (56.3)	35 (54.7)
≥ 250 mg/day	7 (43.8)	8 (50.0)	7 (43.8)	22 (45.8)	7 (43.8)	29 (45.3)



Avail™ Phase 2: Clinical Results

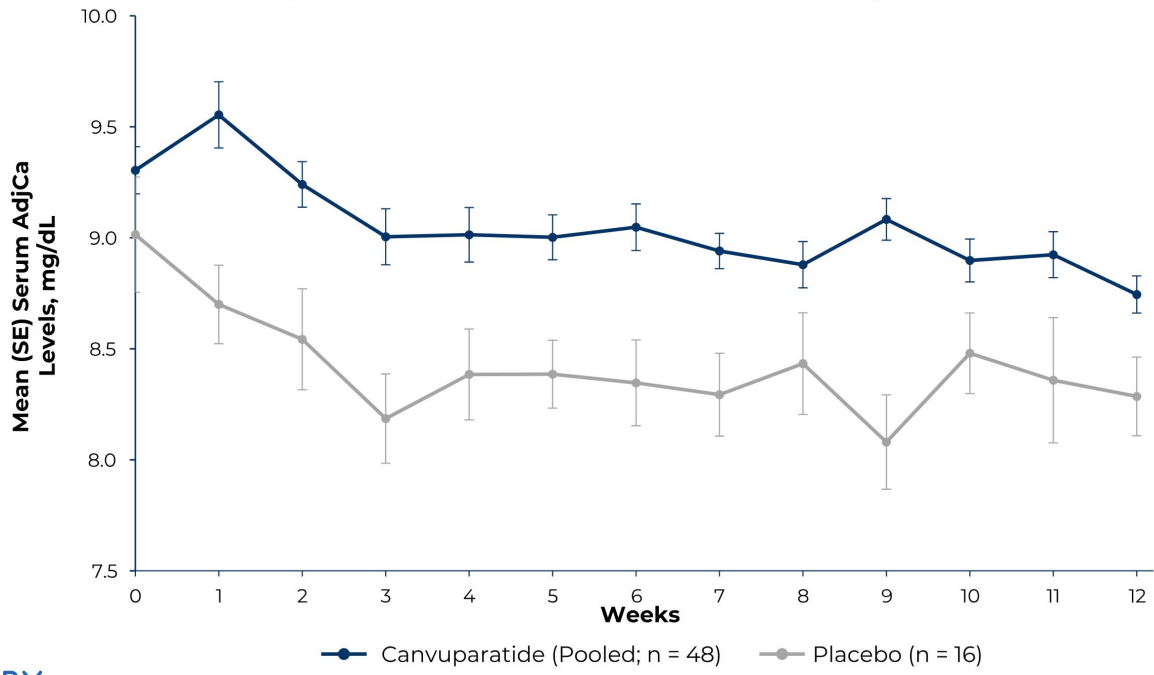
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**Avail™** 63% of Patients Treated with Once-Weekly Canvuparatide met the Primary Composite Endpoint with Zero PRN use at Week 12

Parameter, n (%)	Canvuparatide (Pooled) (n = 48)	Placebo (n = 16)	P Value vs Placebo*
Proportion of Patients Meeting Primary Endpoint Criteria at Week 12 (Responders)	30 (63%)	5 (31%)	0.0427
Proportion of Patients Meeting Each Component of Composite Criteria, (n, %)			
Independence from active vitamin D	47 (98%)	10 (63%)	0.0004
Independence from oral calcium (≤600 mg/day)	36 (75%)	5 (31%)	0.0026
Serum AdjCa within normal range (8.2–10.6 mg/dL)	39 (81%)	7 (44%)	0.0062

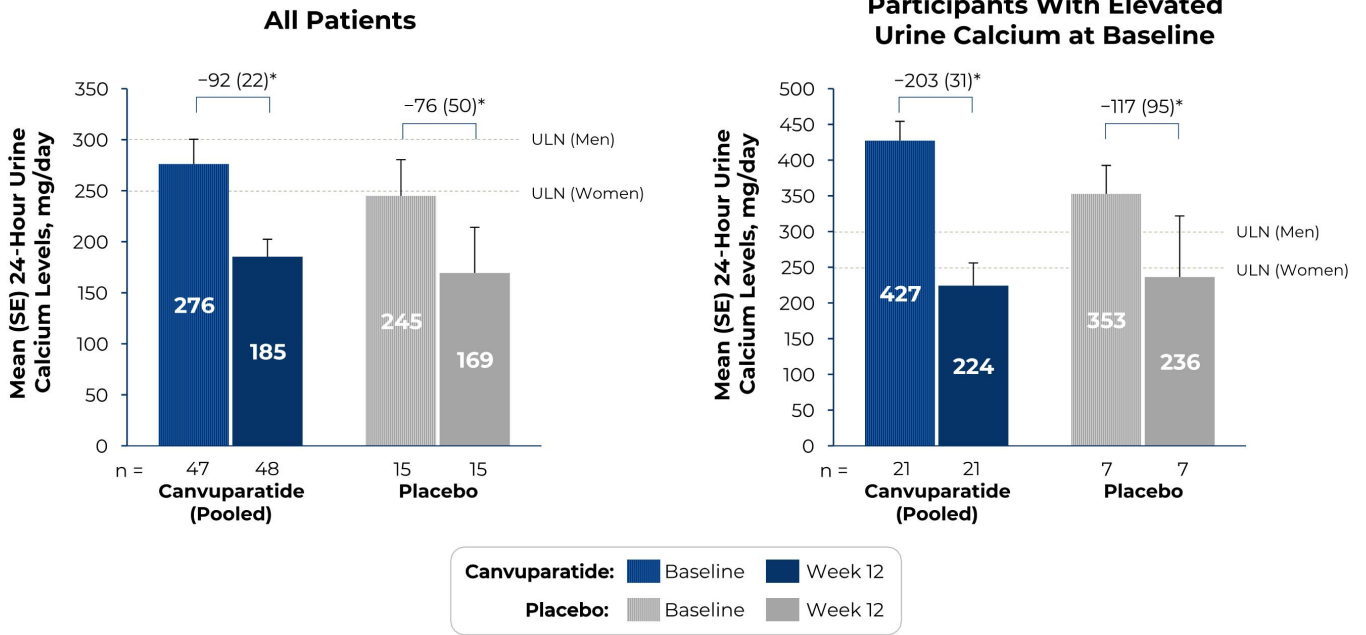
Parameter, n (%)	Canvuparatide				Placebo (n = 16)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)	
Proportion of Patients Achieving Responder Status at Week 12	8 (50%)	11 (69%)	11 (69%)	30 (63%)	5 (31%)
Median Dose for Responders at Week 12, µg (range)	600 (400, 600)	800 (600, 1400)	800 (400, 1400)	800 (400, 1400)	600 (600, 1400)
P Value vs Placebo*	0.2384	0.0637	0.0393	0.0427	

Avail™ Once-Weekly Canvuparatide Treated Patients Maintained Mean Serum AdjCa Levels Within Normal Range Over 12 Weeks

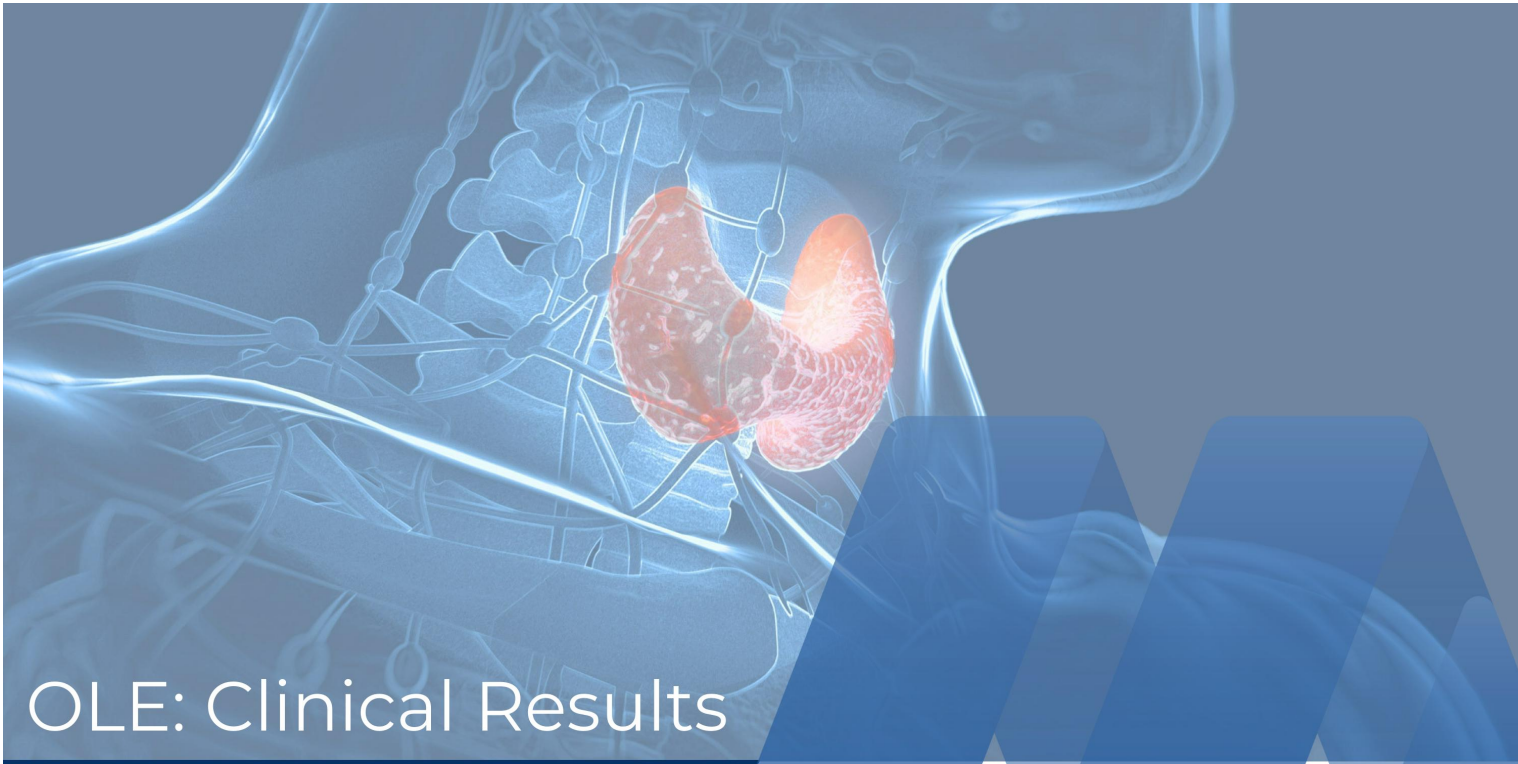


AdjCa, albumin-adjusted calcium.

**Avail™** Once-Weekly Canvuparatide Demonstrated Meaningful Reduction in 24h Urine Calcium



\*Mean (SE) difference  
 ULN, upper limit of normal.



OLE: Clinical Results

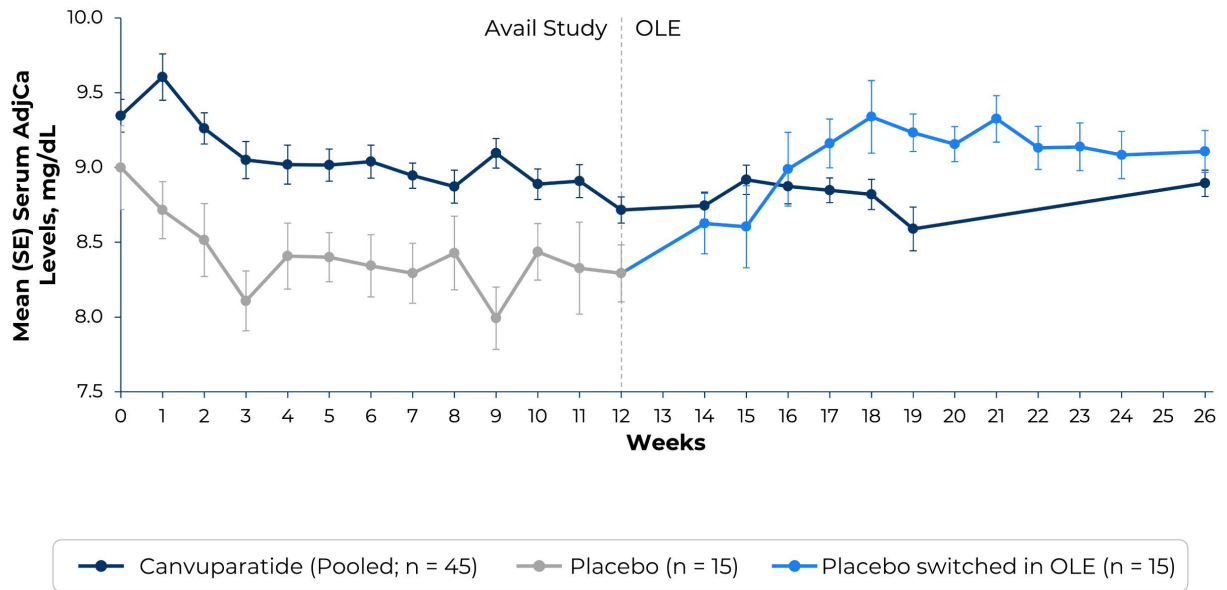


## Responder Rates Increased to 79% at 6 Months in OLE

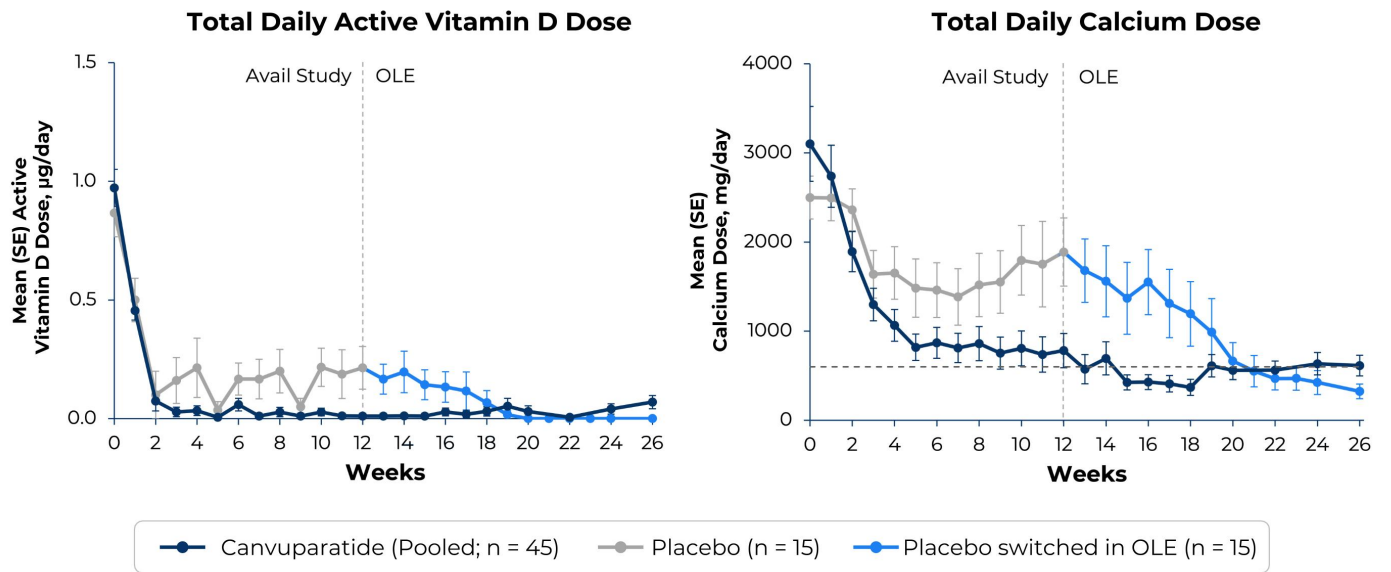
96% of responders at Week 12 remained responders at 6 months\*

Parameter, n (%)	Week 12	6 Months
	Canvuparatide (Pooled) (n = 48)	All Treated (n = 56) <sup>a</sup>
Proportion of Patients Achieving Responder Status	30 (63%)	44 ( <b>79%</b> )
Proportion of Patients Meeting Each Component of Responder Criteria, (n, %)		
Independence from active vitamin D	47 (98%)	52 ( <b>90%</b> ) <sup>b</sup>
Independence from oral calcium ( $\leq 600$ mg/day)	36 (75%)	47 ( <b>81%</b> ) <sup>b</sup>
Serum AdjCa within normal range (8.2-10.6 mg/dL)	39 (81%)	53 ( <b>95%</b> )

# Once-Weekly Canvuparatide Treated Patients Maintained Mean Serum AdjCa Levels Within Normal Range Over 6 Months

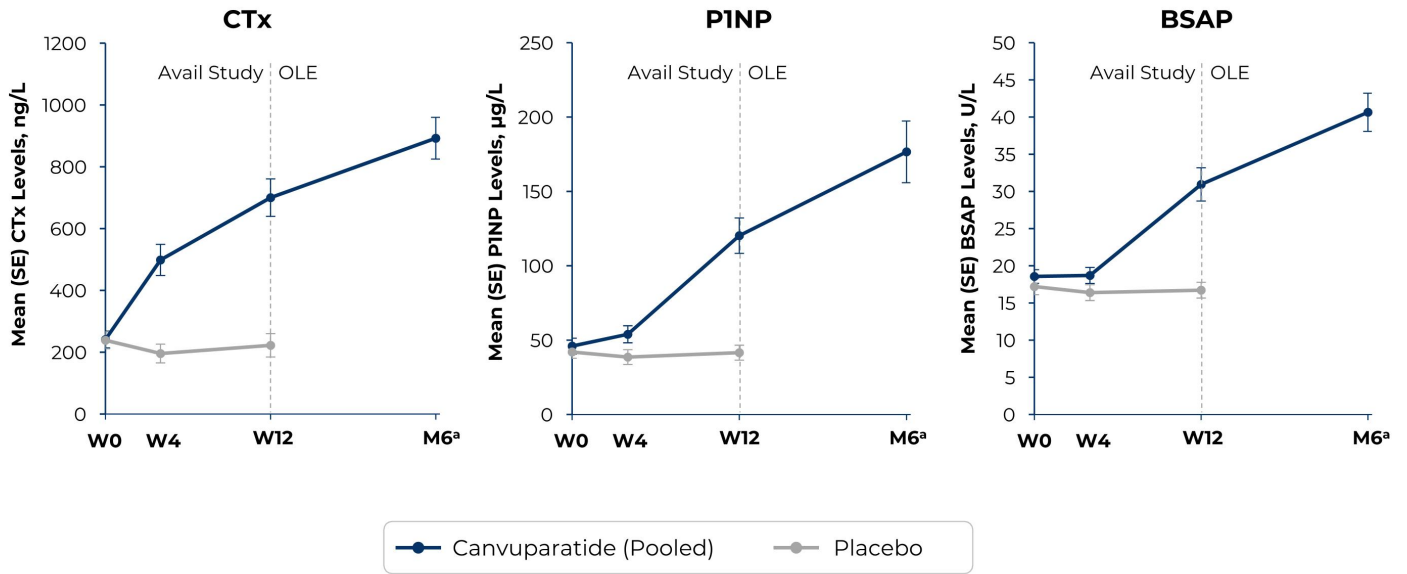


# Once-Weekly Canvuparatide Lowered Daily Supplement Requirements Over 6 Months



Dashed line indicates target calcium dose (600 mg/day).  
OLE, open-label extension.

# Bone Turnover Markers Increased Over 12 Weeks and Continued Over 6 Months



<sup>a</sup>The canvuparatide (pooled) cohort at M6 includes patients initially randomized to canvuparatide or placebo for W12 in the Avail study. BSAP, bone-specific alkaline phosphatase; CTx, C-terminal telopeptide of type I collagen; M, month; OLE, open-label extension; PINP, procollagen 1 intact N-terminal propeptide; W, week.



Avail™ Phase 2: Safety Results

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TEAE, n (%)	Canvuparatide				Placebo (n = 16)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)	
TEAE	12 (75.0)	10 (62.5)	13 (81.3)	35 (72.9)	10 (62.5)
Mild	10 (62.5)	5 (31.3)	7 (43.8)	22 (45.8)	9 (56.3)
Moderate	2 (12.5)	3 (18.8)	6 (37.5)	11 (22.9)	1 (6.3)
Severe	0	2 <sup>a,b</sup> (12.5)	0	2 (4.2)	0
Treatment-related TEAE	7 (43.8)	8 (50.0)	10 (62.5)	25 (52.1)	6 (37.5)
SAE	0	1 <sup>a</sup> (6.3)	0	1 (2.1)	0
Treatment-related SAEs	0	0	0	0	0
TEAE leading to discontinuation					
Of study drug	0	0	0	0	0
Of study	0	0	0	0	0
Deaths	0	0	0	0	0

Avail™ Phase 2 Most Common TEAEs (≥ 5% of Any Treatment Group<sup>a</sup>)

TEAE, n (%)	Canvuparatide				Placebo (n = 16)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)	
Headache	5 (31.3)	1 (6.3)	4 (25.0)	10 (20.8)	1 (6.3)
Hypercalcemia	2 (12.5)	2 (12.5)	5 (31.3)	9 (18.8)	1 (6.3)
Arthralgia	1 (6.3)	4 (25.0)	2 (12.5)	7 (14.6)	0
Nausea	1 (6.3)	0	5 (31.3)	6 (12.5)	1 (6.3)
Injection site reaction	2 (12.5)	0	3 (18.8)	5 (10.4)	1 (6.3)
Diarrhea	1 (6.3)	1 (6.3)	2 (12.5)	4 (8.3)	1 (6.3)
Fatigue	0	3 (18.8)	1 (6.3)	4 (8.3)	0
Abdominal pain	0	1 (6.3)	2 (12.5)	3 (6.3)	0
Asthenia	0	0	2 (12.5)	2 (4.2)	1 (6.3)
Injection site erythema	0	2 (12.5)	1 (6.3)	3 (6.3)	0
Muscle spasms	0	2 (12.5)	0	2 (4.2)	1 (6.3)
Vomiting	0	0	3 (18.8)	3 (6.3)	0
Muscle twitching	2 (12.5)	0	0	2 (4.2)	0

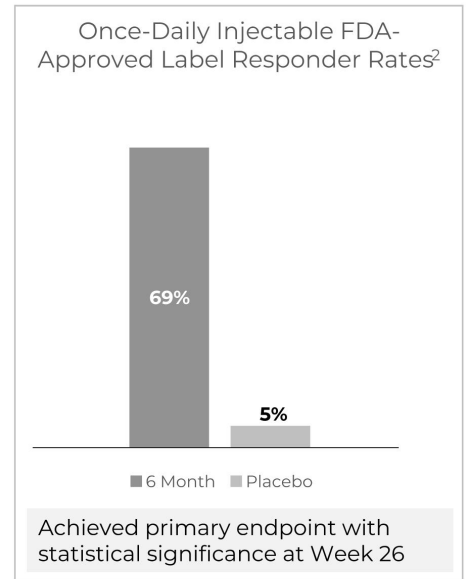
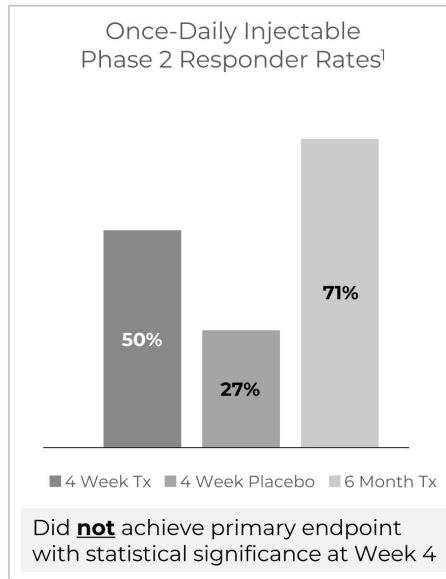
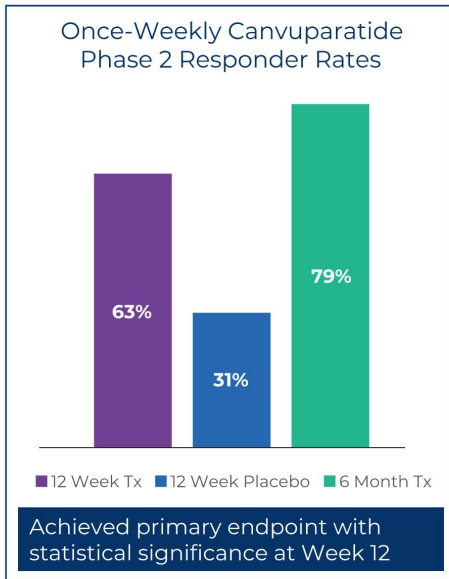


<sup>a</sup>Most common TEAEs defined as ≥ 5% of any treatment group and occurring at a ≥ 2% incidence higher than placebo.  
TEAE, treatment-emergent adverse event.

TEAE, n (%)	Canvuparatide				Placebo (n = 16)
	400 µg (n = 16)	600 µg (n = 16)	800 µg (n = 16)	Pooled (n = 48)	
Metabolism and nutrition disorders					
Hypercalcemia	2 (12.5)	2 (12.5)	5 (31.3)	9 (18.8)	1 (6.3)
Urgent care visit	0	0	1 (6.3)	1 (2.1)	0
Required hospitalization	0	0	0	0	0
Hypocalcemia	1 (6.3)	1 (6.3)	2 (12.5)	4 (8.3)	3 (18.8)
Urgent care visit	0	0	0	0	1 (6.3)
Required hospitalization	0	0	0	0	0
General disorders and administration site conditions					
Injection site TEAEs (grouped terms)	3 (18.8)	2 (12.5)	4 (25.0)	9 (18.8)	2 (12.5)



# Once-Weekly Canvuparatide Demonstrated a Competitive Responder Rate in the Phase 2 Avail and OLE Studies



Data sourced from (1) "PaTH Forward: A Randomized, Double-Blind, Placebo-Controlled Phase 2 Trial of TransCon PTH in Adult Hypoparathyroidism", <https://pmc.ncbi.nlm.nih.gov/articles/PMC8684498/>; (2) Palopegteriparatide prescribing information  
 Note: These data are derived from different clinical trials at different points in time, with differences in trial design, including endpoints, and patient populations. As a result, cross-trial comparisons cannot be made, it is only provided for illustrative purposes, and no head-to-head clinical trials have been conducted.

# Once-Weekly Canvuparatide: Potential to Become Preferred Treatment for Hypoparathyroidism

**Once-Weekly  
Canvuparatide**

1/week




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**52/year**

**Daily  
Injectable**

7/week



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**365/year**

## Plans for Advancing Potential Best-in-Class Canvuparatide Program

- Present Phase 2 topline results at the International HypoPARAthyroidism Conference (Oct 2025)
- Request End-of-Phase 2 meeting with FDA
- Share full Phase 2 results at major medical meeting and in publication
- Report 52-week OLE follow-up data in 2026
- Plan to initiate global Phase 3 in 2026



We thank the patients and their caregivers, investigators, partners, and the passionate team at MBX who helped to make Avail™ a success

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