

# CONVERGE-01: Phase 2 Study of Ac-225 Rosopatomab Tetraxetan (CONV01- $\alpha$ )

Lu-PSMA-pretreated metastatic androgen pathway modulator-resistant (APMR) prostate cancer

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# Key Takeaway Points

**1**

**CONV01- $\alpha$  is safe for patients with prior exposure to Lu-177-PSMA radioligand therapy (Lu-PSMA)**

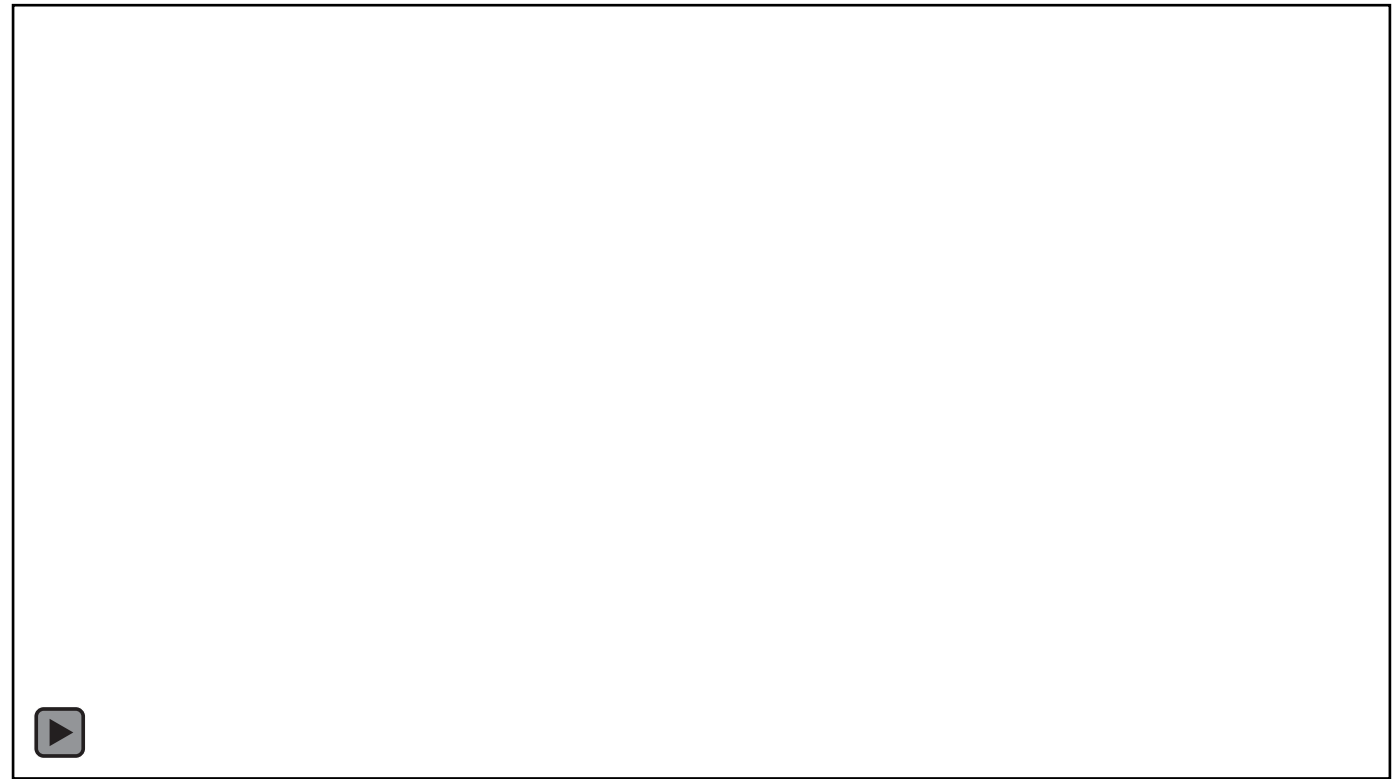
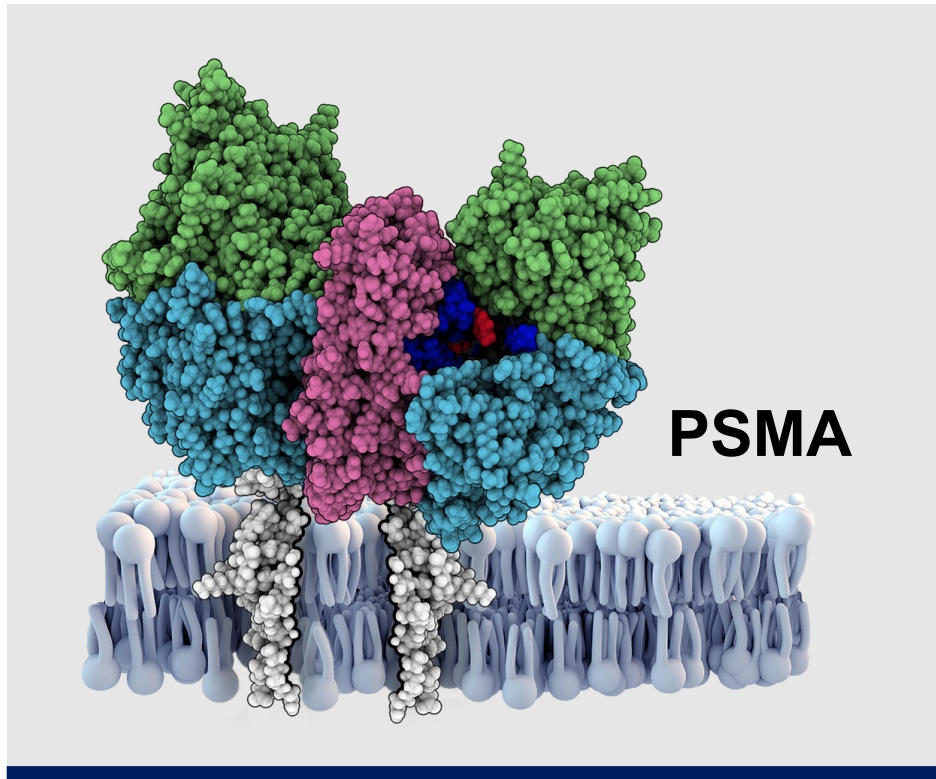
**2**

**Clinically-manageable hematologic toxicity. No nephrotoxicity or high-grade xerostomia**

**3**

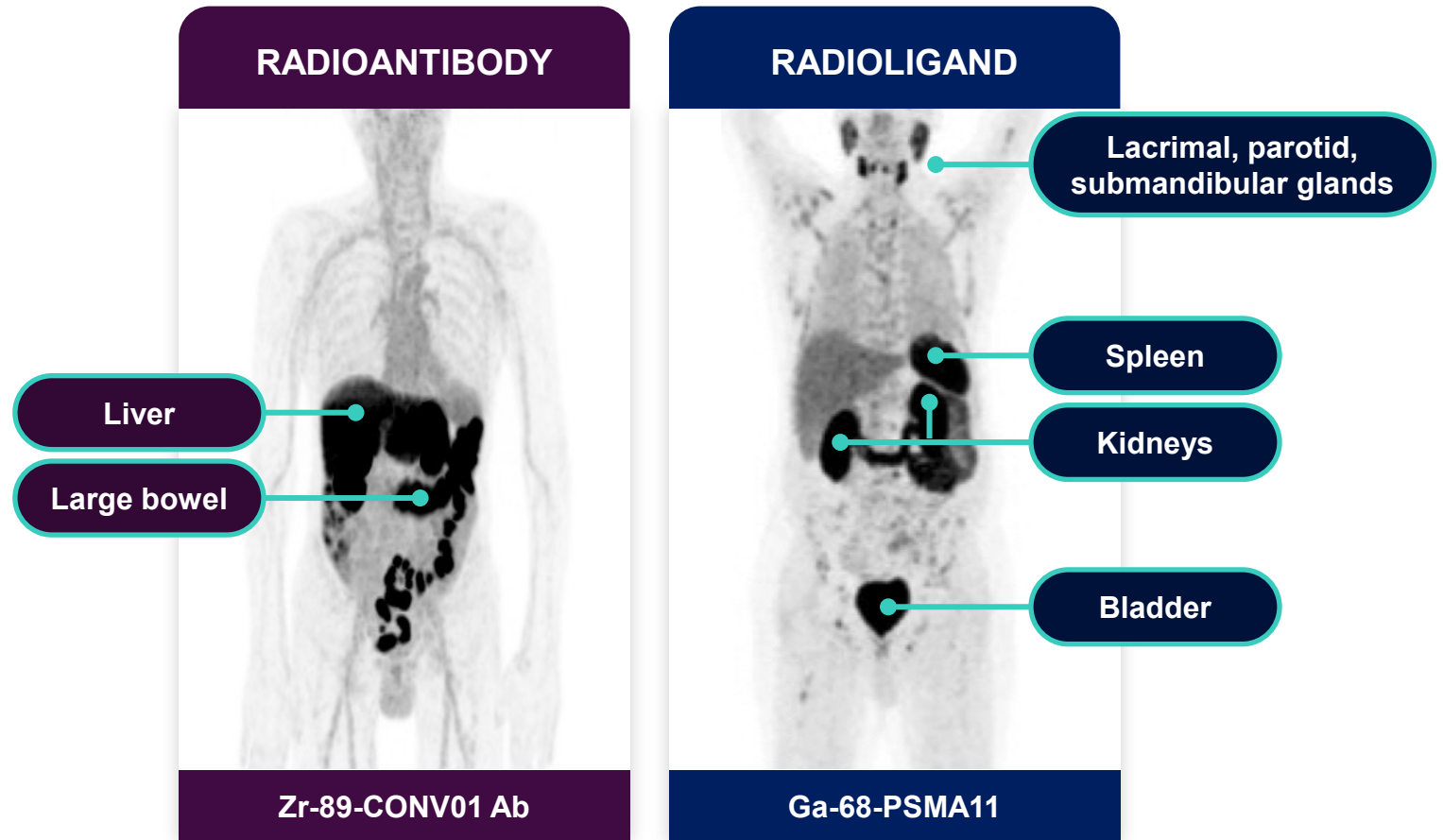
**CONV01- $\alpha$  has promising activity and durability in patients previously treated with Lu-PSMA**

# Next Generation PSMA-directed Radiopharmaceuticals Have Emerged



# Biodistribution of Antibodies versus Small Molecules

- Reduced uptake in salivary glands and kidneys
- Uptake in liver without clinical impact
- Longer elimination half-life with a potential hematologic impact
- Superior uptake and retention in tumor cells



Tagawa S, Bander N et al. Weill Cornell Medicine (Data on File).

# Advantages of Ac-225 as an Alpha-emitting Payload



10-day half-life well-complements the antibody targeting moiety



No need for restrictive lifestyle modification  
Decay daughters (Bi-213, Fr-221) are rapidly cleared without toxicity



Accelerator-derived production facilitates adequate supply of radioisotope



High purity production methodology eliminates complicated waste disposal/handling, long-term decay concerns

# CONV01- $\alpha$ Combines an Alpha-emitting Isotope (Ac-225) with the PSMA-directed Antibody (rosopatamab)

## Background of Dosing Regimen

- Over 100 patients treated with Ac-225 rosopatamab tetraxetan at Weill Cornell Medicine<sup>1,2</sup>
  - Total administered activity was fractionated across two doses, administered on Day 1 and Day 15
  - This regimen demonstrated safety and efficacy and proved to be superior to the other dosing schedules evaluated
  - Activity demonstrated in Lu-PSMA-exposed population

<sup>1</sup>Tagawa ST, et al. JCO 2023; <sup>2</sup>Nauseef JT, et al. AACR 2023.

# CONVERGE-01 is Evaluating Safety and Efficacy of CONV01- $\alpha$ in a Lu-PSMA-exposed Population

## Key eligibility

- Progressive mAPMR
- $\geq 1$  PSMA PET (+) metastatic lesion and no PSMA PET (-) lesions
- Prior  $\geq 1$  ARPI
- $\leq 1$  prior taxane chemotherapy regimen
- Prior Lu-PSMA (1-6 doses of Pluvicto or Lu-177-PSMA-I&T)
- No prior PARPi, Ra-223, or platinum chemotherapy

## Biodistribution Lead-in

In-111-CONV01  
 $148 \pm 37$  MBq on Day 1

## Lu-PSMA-exposed Dose Escalation & Expansion

CONV01- $\alpha$  on Days 1 & 15  
at 45 kBq/kg and 55 kBq/kg  
BOIN design

## Study Objectives

Safety and efficacy  
Establish Target Dose in Lu-PSMA-exposed

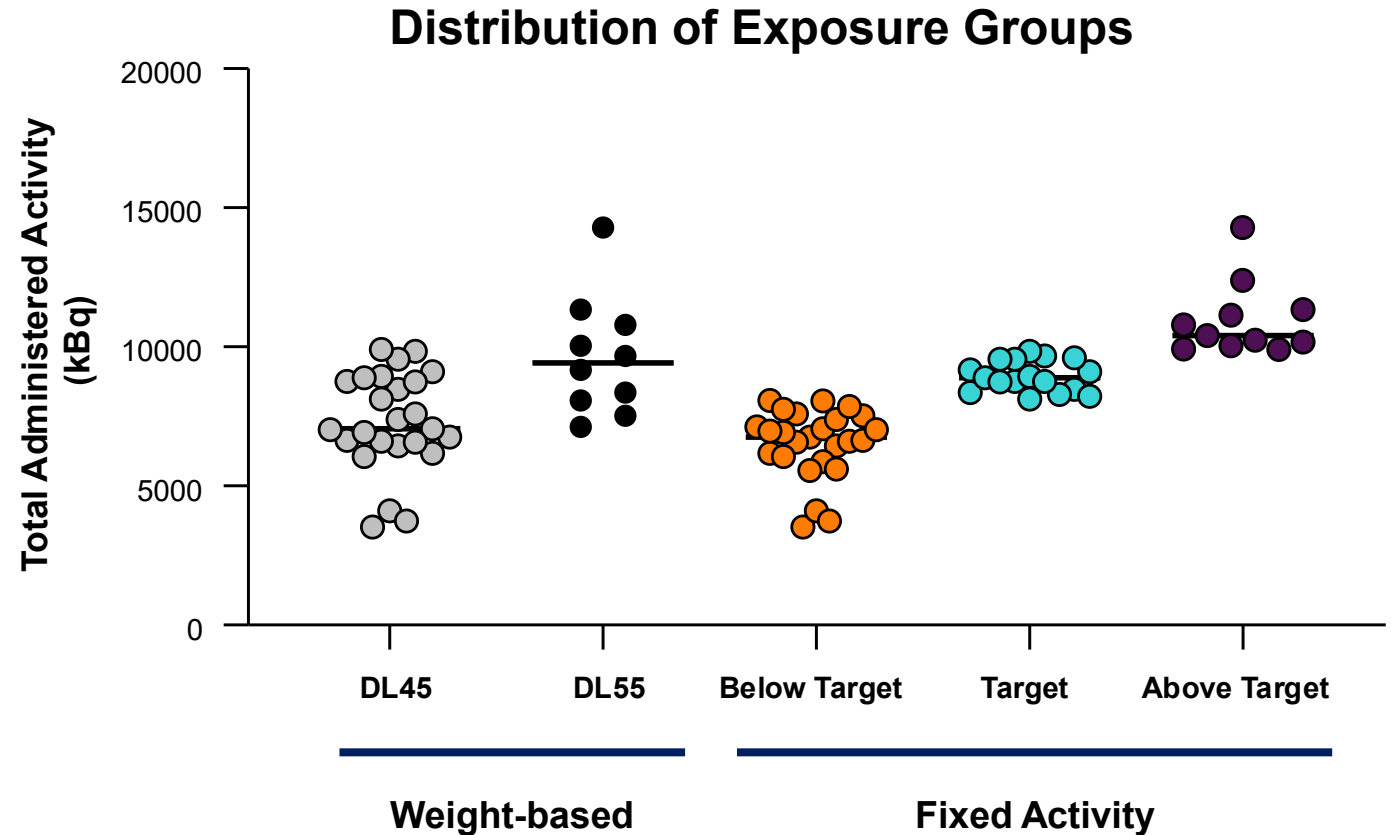
BOIN = Bayesian optimal interval, DLs = dose levels, PARPi = PARP inhibitor

# Weight-based Administration in CONVERGE-01 Facilitated Fixed Activity Dose Selection

All patients treated by weight-based dosing in CONVERGE-01 were regrouped by total administered activity for analysis

## Total Administered Activity

- Above Target
- On Target (9.0 MBq)
- Below Target



# CONVERGE-01: Baseline Characteristics

Baseline Characteristics	n=35
Age, median (range)	72 (58, 83)
ECOG status, n (%)	
0	19 (54%)
1	16 (46%)
Sites of disease, n (%)	
Bone	31 (89%)
Lymph Node – Regional	11 (31%)
Lymph Node – Distant	11 (31%)
Lung	2 (6%)
Liver	1 (3%)
Other	2 (6%)
PSA – ng/mL	
C1D1, median (range)	40.12 (4.16, 1910)
PSADT, median (range) - months	1.77 (-6.85, 17.36)
LDH – U/L	
<260	26 (74%)
≥260	6 (17%)
Not Done	3 (9%)

Baseline Characteristics	n=35
Platelet Count – 1000/uL	
C1D1, median (range)	230 (103, 453)
Hemoglobin - g/dL	
C1D1, median (range)	11.5 (9.1, 14.8)
History of xerostomia <sup>#</sup>	48.6%
Prior Therapies	n=35
ARPI Exposure, n (%)	35 (100%)
1	14 (40%)
2	19 (54%)
>2	2 (6%)
Taxane Exposure*	28 (80%)
Docetaxel	27 (77%)
Cabazitaxel	2 (6%)
None	7 (20%)
Lu-PSMA cycles, median (range)	6 (2-6)
<4	n=8 (23%)
≥4	n=27 (77%)

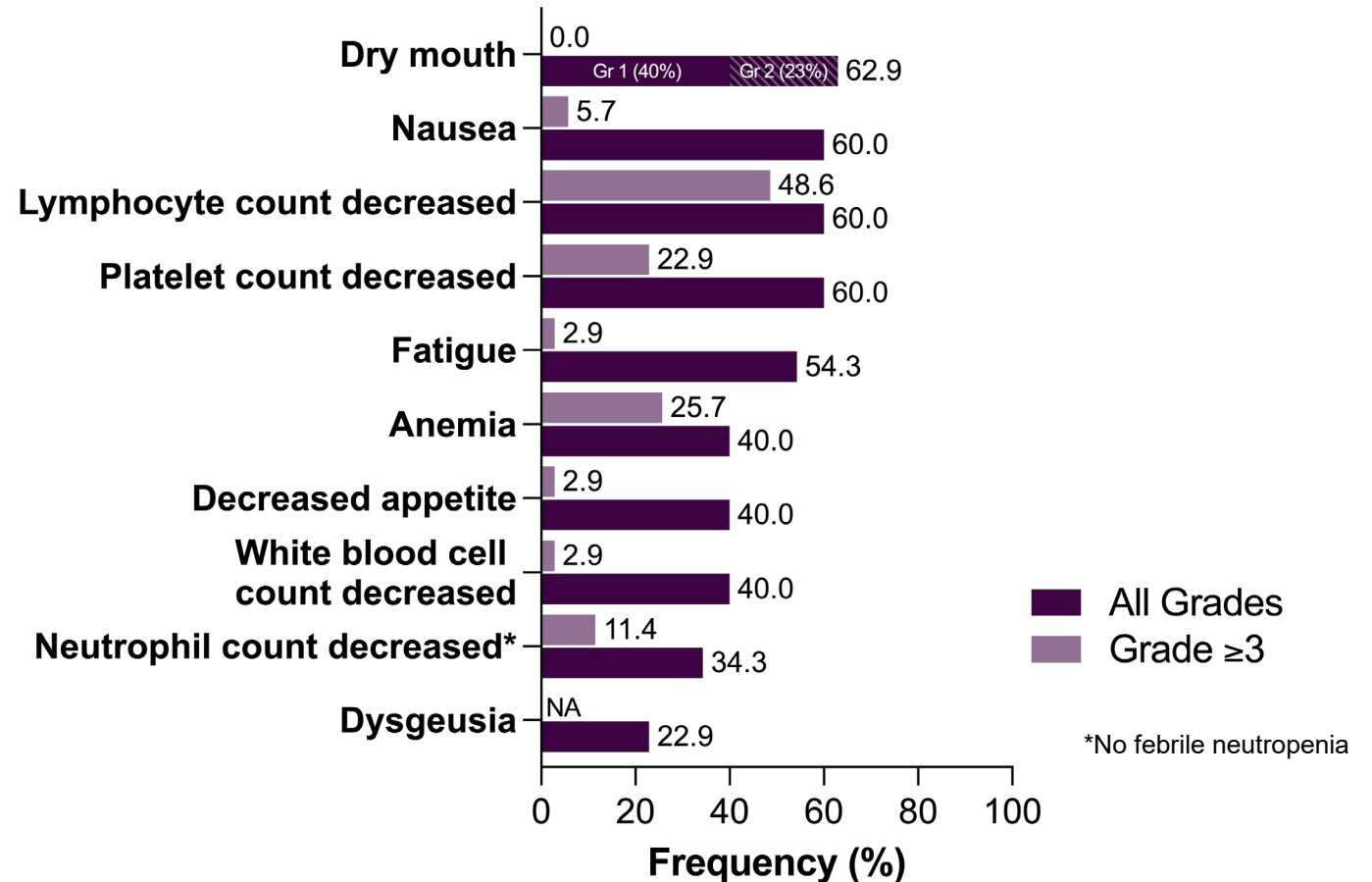
<sup>#</sup>Patient report of xerostomia with Lu-PSMA and/or active xerostomia during screening.

\*One participant's medical history included exposure to two taxanes due to switching to cabazitaxel after experiencing toxicity on docetaxel.

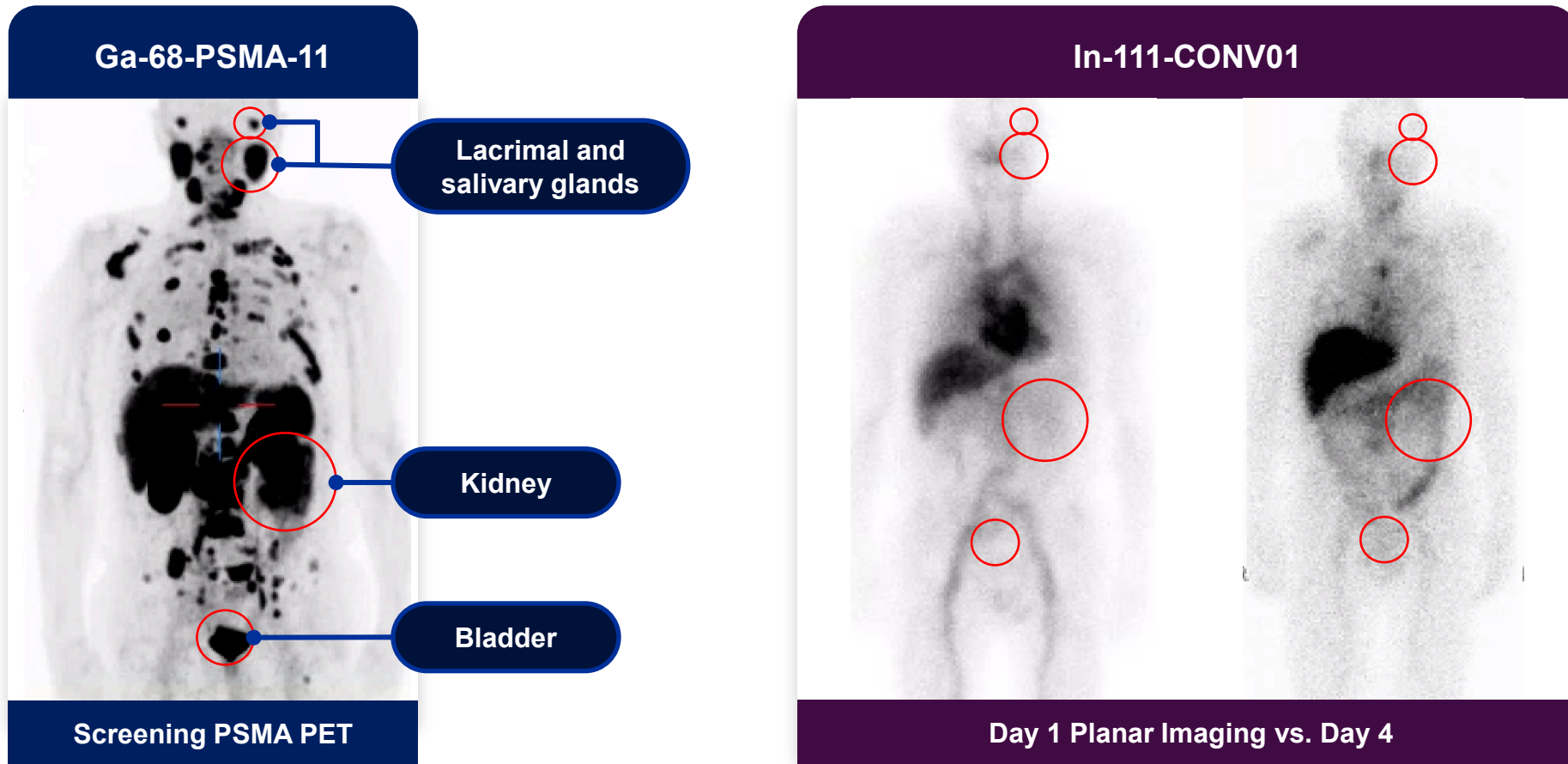
# CONV01- $\alpha$ was Well-tolerated with No Dose Limiting Toxicities

- Most common treatment-emergent adverse events (TEAEs) are hematologic, digestive, and constitutional events
- Grade  $\geq 3$  TEAEs are clinically-manageable, generally transient
- No treatment-related events led to treatment discontinuation
- 48.6% of patients had xerostomia with Lu-PSMA or at screening
- All high-grade anemia was Gr 3, no transfusion-dependence

Treatment-Emergent Adverse Events – 10 Most Common



# CONV01 is Not Visualized in the Salivary Glands or Urinary System

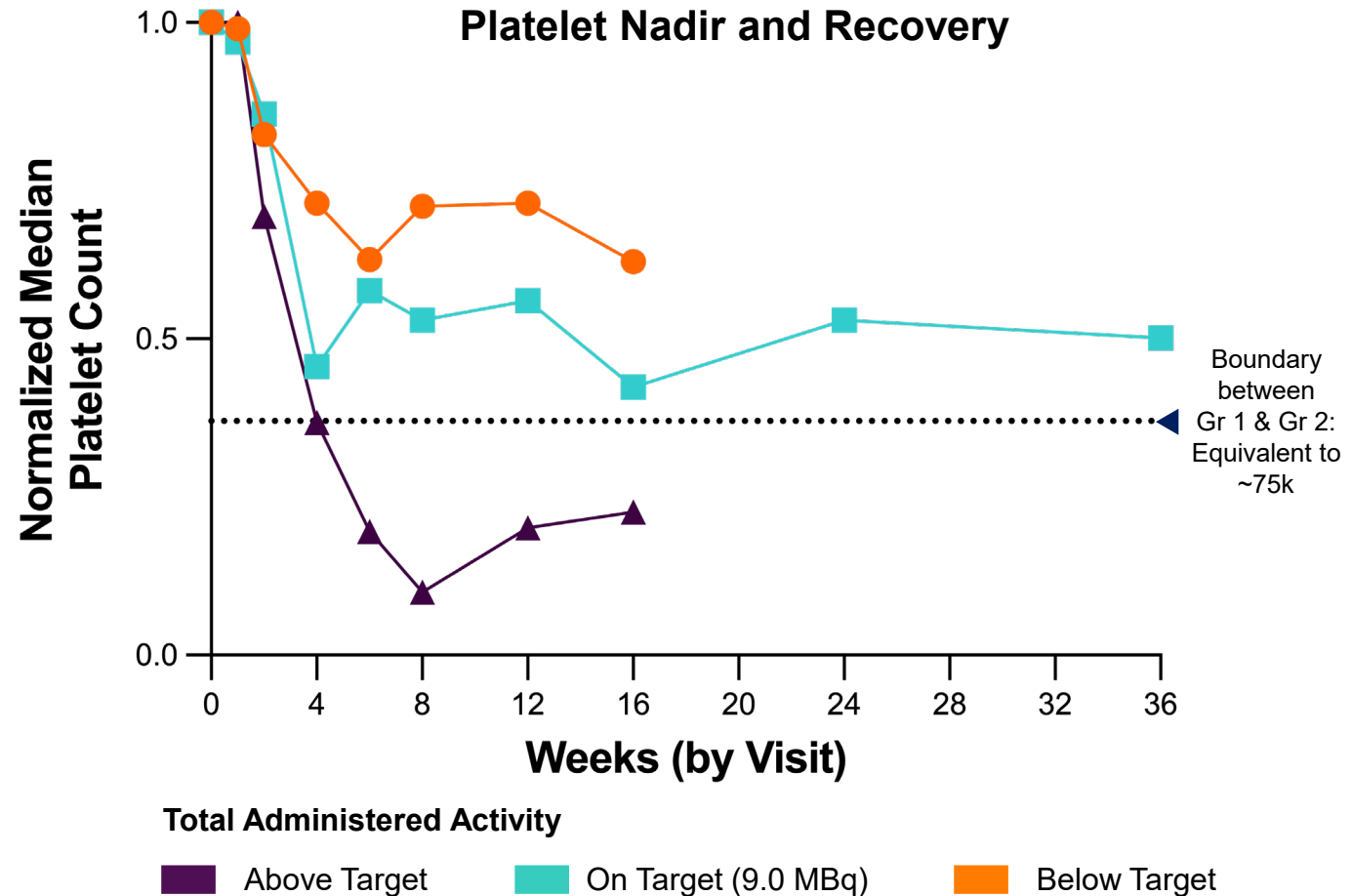


# Thrombocytopenia is Predictable, Dose-related, and Clinically-Manageable

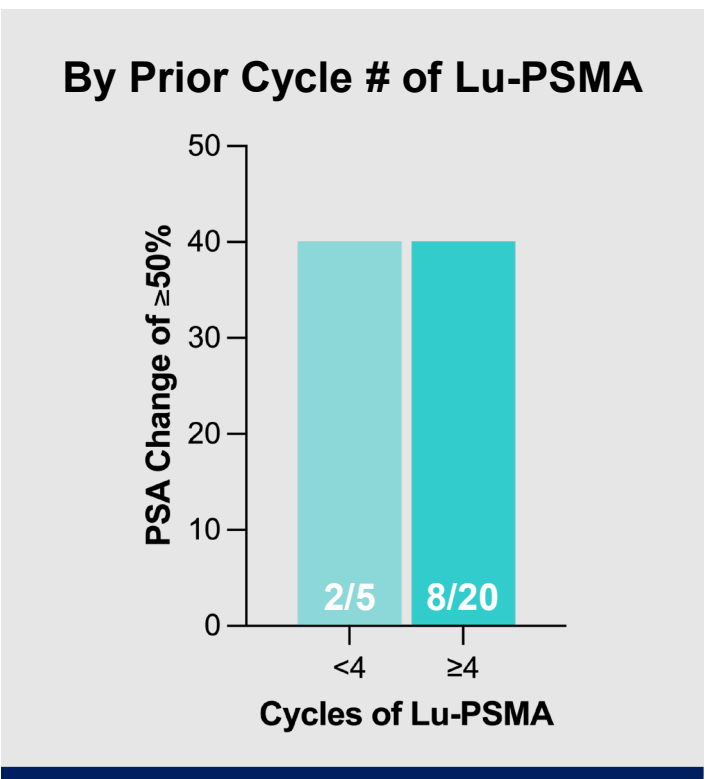
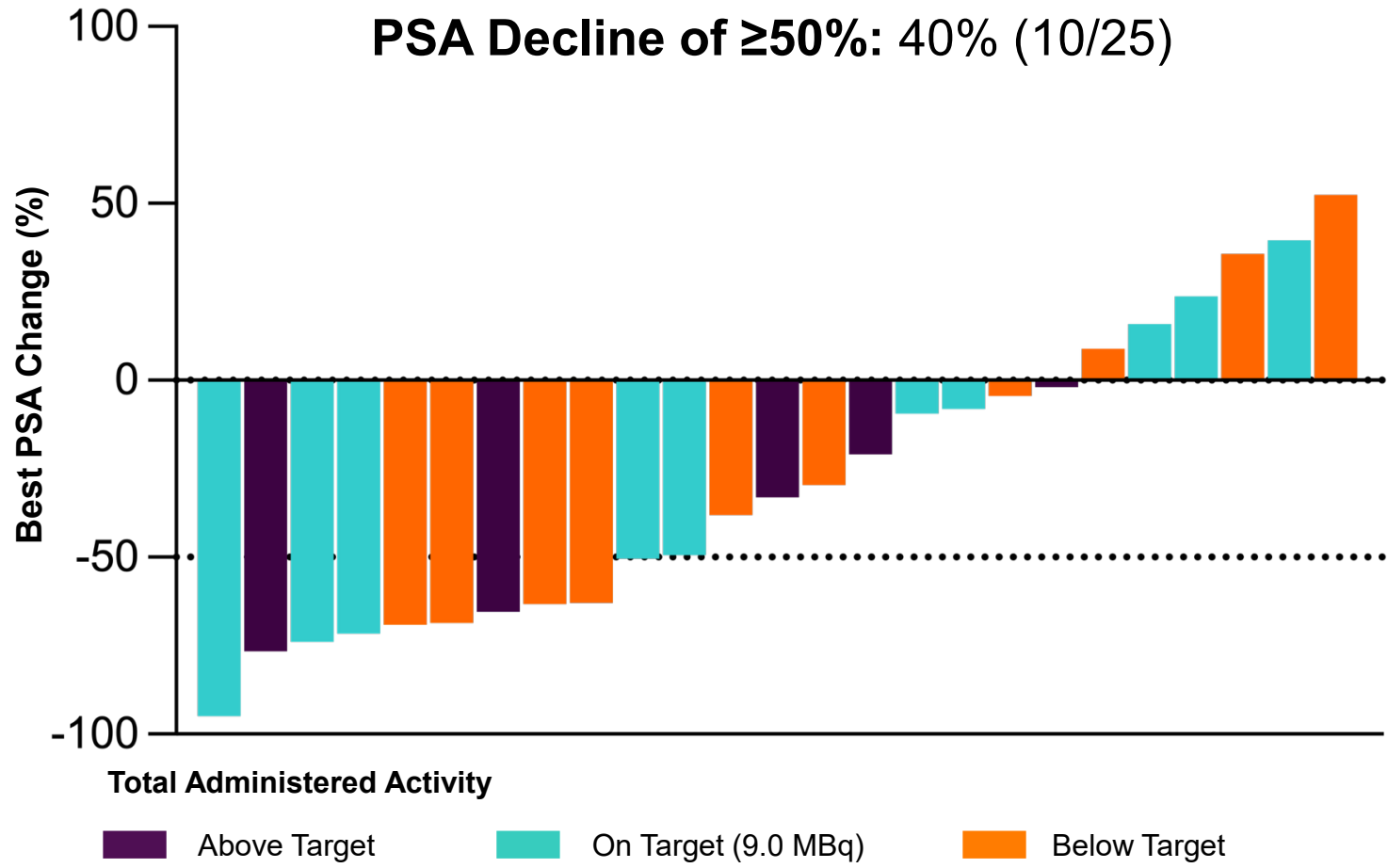
## Across exposure groups, the populations:

- Experience an early nadir
- Evidence of recovery
- Little evidence of clinical risk
- Support for Target Dose range

Patients evaluable in each group: Above Target (n=5), On Target (n=12), Below Target (n=17)

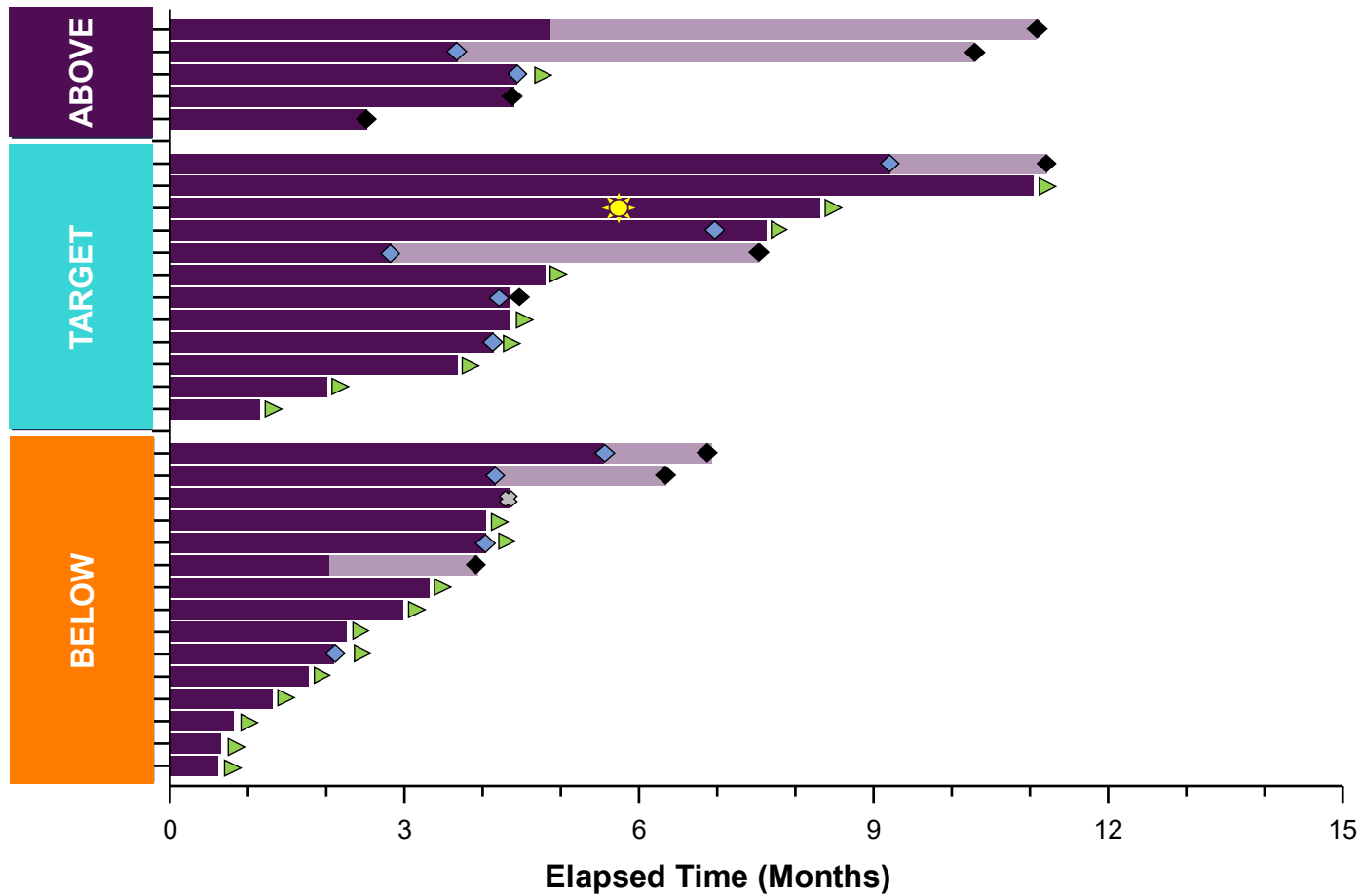


# CONV01- $\alpha$ Demonstrates Promising Activity in Lu-PSMA-exposed Patients



*\*Participants were considered evaluable if they had  $\geq 12$  weeks of follow up, clinical/radiographic progression before 12 weeks, or PSA decline of  $\geq 50\%$  at any time.*

# PSA50 Rates are Similar Across Dose Groups, the Target Dose Group Demonstrates Greater Durability



Short-term Follow-up\*      Radiographic PR  
 Long-term Follow-up      Radiographic PD  
 Remains on Study      Death  
 Withdrawn

**Total Administered Activity**

- Above Target
- On Target (9.0 MBq)
- Below Target

\*Following completion of treatment, patients enter short-term follow-up and are monitored until disease progression per RECIST v1.1 and/or PCWG3, initiation of new therapy, unacceptable toxicity, or withdrawal. After progression, patients enter long-term follow-up to be monitored for survival

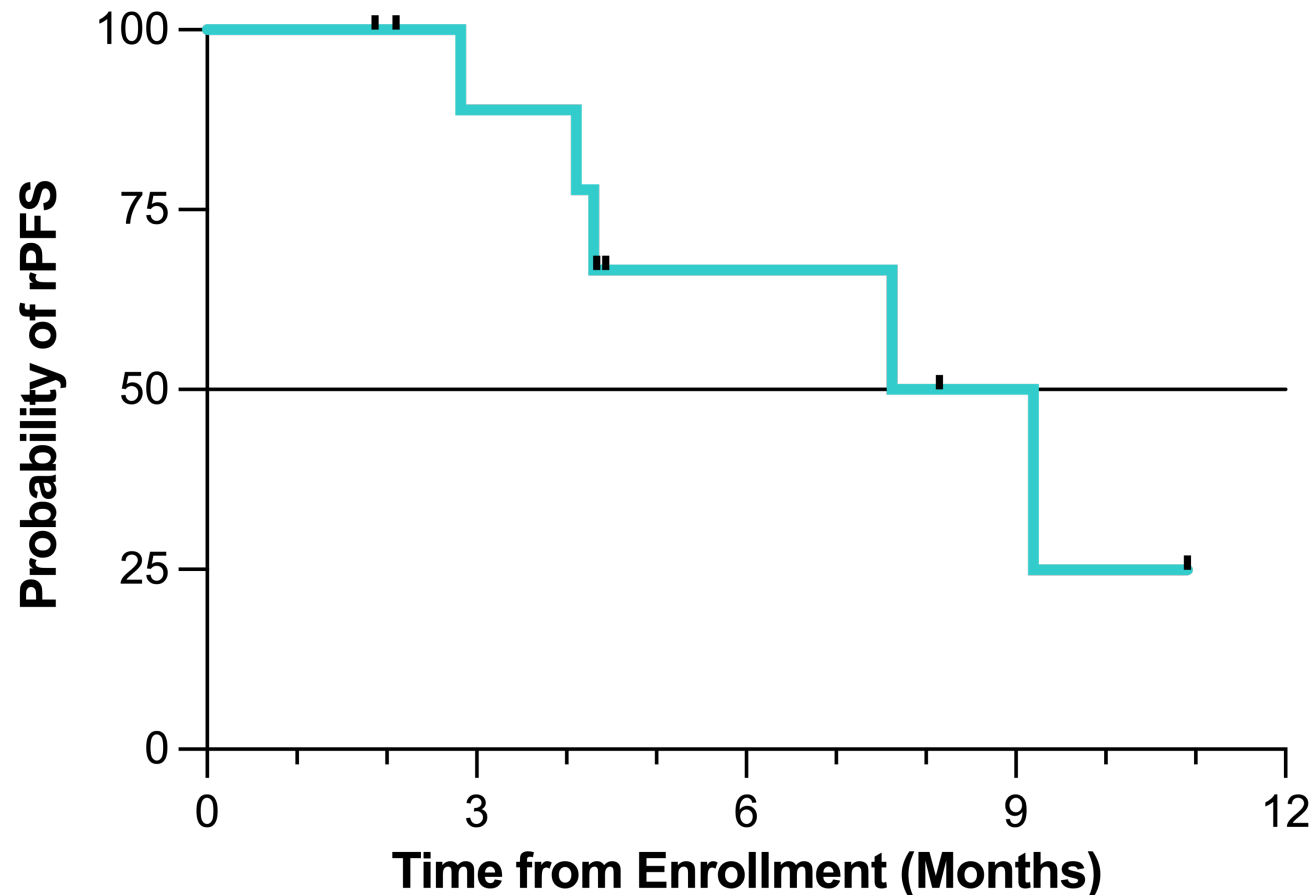
# Preliminary Radiographic PFS (rPFS) Supports Clinical Benefit in a High Unmet Need Population

- **Median rPFS is 8.41 months** (95% CI 2.83-inf) among 11 participants in the Target dose range (9.0 MBq)
- Median follow-up 8.14 months (2.10-inf)

## Total Administered Activity

On Target (9.0 MBq)

Efficacy Subset at Target Dose



# Key Takeaway Points

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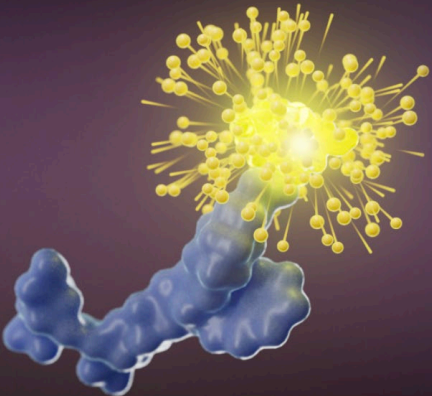
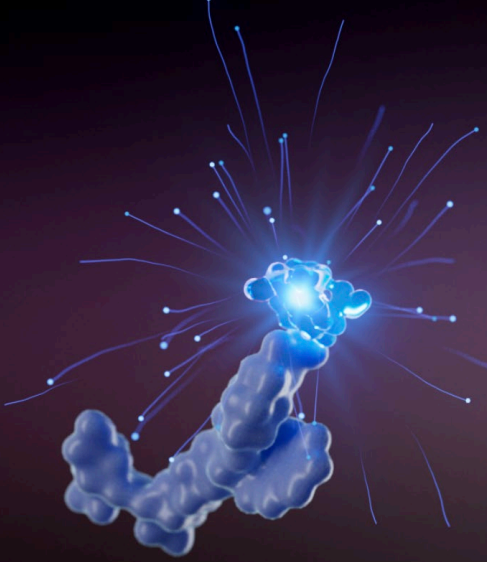
- ***CONVERGE-01 continues in taxane- and Lu-PSMA-naïve patients***
- ***A pivotal phase 3 study is in preparation in Lu-PSMA-exposed patients***

# Acknowledgements

- Deep gratitude to the patients and their families for their participation in CONVERGE-01
- Thank you to the Investigators and their staff at all trial sites

# Backup Slides

# Alpha ( $\alpha$ ) particles are significantly more potent and precise than beta ( $\beta$ ) particles

 <p><b>ALPHA EMITTER</b></p>	<p><b><math>\alpha</math> (Ac-225)</b></p> <p>7,300</p> <p>50 <math>\mu\text{m}</math></p> <p>100 keV/<math>\mu\text{m}</math></p> <p>Double strand breaks</p> <p>1</p>	<p><b>Relative particle mass</b></p> <p><b>Max range in tissue</b></p> <p><b>Linear energy transfer</b></p> <p><b>Type of DNA damage generated</b></p> <p><b>DNA hits required for cell death</b></p>	<p><b><math>\beta</math> (Lu-177)</b></p> <p>1</p> <p>1,700 <math>\mu\text{m}</math></p> <p>0.2 keV/mm</p> <p>Single strand breaks</p> <p>1,000</p>	 <p><b>BETA EMITTER</b></p>
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1. Henriksen G et al. *J Nucl Med.* 2003;44(2):252-259. 2. Kozempel J et al. *Molecules.* 2018;23(3):581. 3. Hosono M et al. *Ann Nucl Med.* 2018;32(3):217-235. 4. Kassis A. *Semin Nucl Med.* 2008;38:358-366. 5. Nayak T et al. *Cancer Biother Radiopharm.* 2005;20(1):52-57. 6. Wadas TJ et al. *AJR Am J Roentgenol.* 2014;203(2):253-260.