

PRIMARY CHEMOABLATION OF RECURRENT LOW-GRADE INTERMEDIATE-RISK NON-MUSCLE INVASIVE BLADDER CANCER WITH UGN-102: A SINGLE-ARM, OPEN-LABEL, PHASE 3 TRIAL (ENVISION)



Sandip M. Prasad¹, Dimitar Shishkov², Nikola V. Mihaylov², Alexandre Kuskivadze³, Pencho Genov⁴, Vasyi Terzi⁵, Max Kates^{6*}, William C. Huang⁷, Michael J. Louie⁸, Sunil Raju⁸, Brent Burger⁸, Andrew Meads⁸, Mark Schoenberg^{8,9}; on behalf of The ENVISION Study Group

¹Morristown Medical Center/Atlantic Health System and Garden State Urology, Morristown, NJ, USA; ²Department of Urology, University Multiprofile Hospital for Active Treatment, Plovdiv, Bulgaria; ³Urology Department, Georgia Israel Joint Clinic Gidmedi, Tbilisi, Georgia; ⁴Department of Urology, University Multiprofile Hospital for Active Treatment Kanev, Ruse, Bulgaria; ⁵Multiprofile Hospital for Active Treatment, Varna, Bulgaria; ⁶The Johns Hopkins Medical Institutions, Baltimore, MD, USA; ⁷NYU Langone Urology Associates, New York, NY, USA; ⁸UroGen Pharma, Princeton, NJ, USA; ⁹The Department of Urology, Montefiore Medical Center: Einstein Campus, Bronx, NY, USA. *Presenting author.

INTRODUCTION

- Low-grade intermediate-risk non-muscle invasive bladder cancer (LG-IR-NMIBC) is persistent and recurrent, and is inadequately controlled by the current standard of care, trans-urethral resection of bladder tumor (TURBT) under general anesthesia^{1,2}
- Recent studies have shown that many patients with LG-IR-NMIBC can be successfully treated with **UGN-102**, a reverse thermal gel containing mitomycin administered via intravesical instillation in the outpatient setting, removing the need for surgery^{3,4}
- ENVISION** is an ongoing, prospective, phase 3, multinational, single-arm open-label study evaluating the efficacy and safety of **UGN-102** as a treatment for patients with recurrent LG-IR-NMIBC requiring TURBT
- Here we report the results of an interim analysis (cutoff date April 4, 2024)

KEY INCLUSION CRITERIA

- History of ≥1 prior episode of LG-NMIBC requiring treatment with TURBT
- LG-NMIBC (Ta) confirmed by cystoscopy and cold-cup biopsy of the visualized tumor at screening or within 8 weeks before screening
- Negative voiding cytology for high-grade (HG) disease at screening or within 8 weeks before screening
- IR disease, defined as 1 or 2 of the following: multiple tumors; longest tumor diameter >3 cm; early or frequent recurrence (i.e. ≥1 episode within the previous year)

KEY EXCLUSION CRITERIA

- All three IR features, defined as 1 or 2 of the following: multiple tumors; longest tumor diameter >3 cm; early or frequent recurrence (i.e. ≥1 episode within the previous year)
- History of muscle invasive or metastatic disease, or history of HG-NMIBC (within the past 2 years)
- Bacillus Calmette–Guérin treatment for urothelial carcinoma (within the past year)
- Treatment with an intravesical chemotherapeutic agent, except for a single dose immediately after any previous TURBT (within the past 2 years)

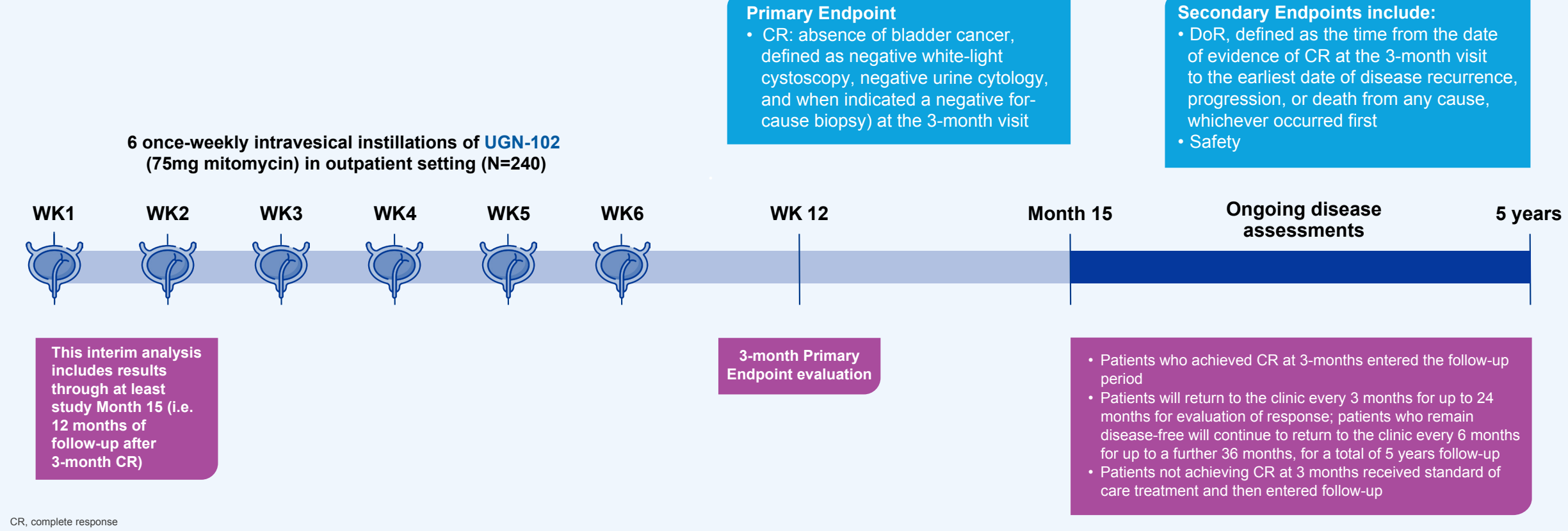
RESULTS

- All 240 enrolled patients received at least one dose of **UGN-102**; 95% (228) received all 6 weekly doses

EFFICACY OUTCOMES

- The primary endpoint** of CR at 3 months was achieved by 191 patients (79.6%; 95% confidence interval [CI] 73.9, 84.5)

ENVISION STUDY DESIGN



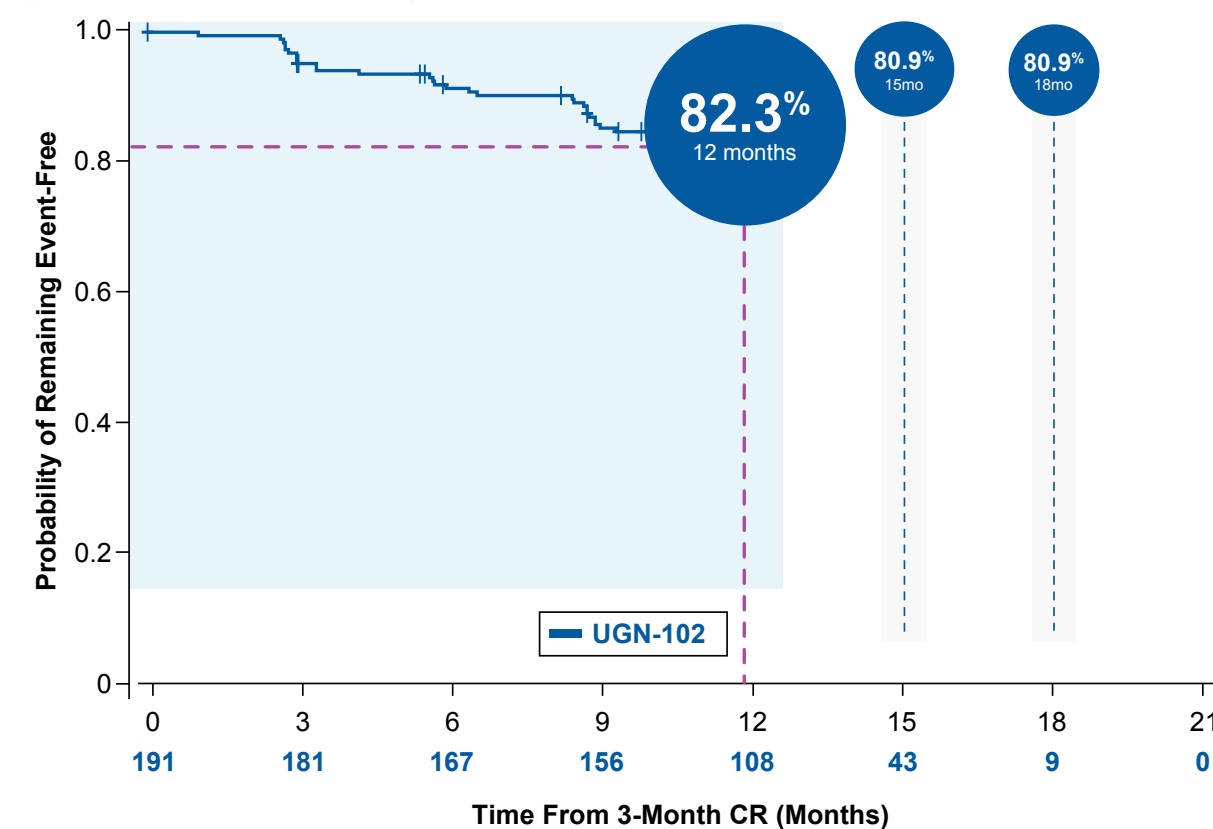
BASELINE DEMOGRAPHICS AND DISEASE CHARACTERISTICS

Characteristic	UGN-102 (N=240)
Mean age, years (SD)	68.8 (12)
Sex, n (%)	
Male	147 (61)
Female	93 (39)
Race, n (%)	
Asian	2 (0.8)
Black or African American	3 (1.3)
White	234 (98)
Mean weight, kg (SD)	79.7 (16)
Tumor longest diameter pre-biopsy (cm)	
≤3	216 (92)
>3	19 (8.1)
Missing	5 (2.1)
Tumor burden pre-biopsy, aggregate (cm)	
≤3	180 (81)
>3	41 (19)
Missing	19 (7.9)
Tumor count	
Single	41 (17)
Multiple	198 (83)
Missing	1 (0.41)

SD, standard deviation.

- For patients with CR, the probability of remaining event-free at 12 months following the 3-month visit was 82.3% (95% CI 75.9, 87.1); the DoR estimates at 15 months (n=43) and 18 months (n=9) months after 3-month CR were both 80.9% (95% CI 73.9, 86.2)
- The key secondary endpoint** of median DoR was not estimable over a median follow-up of 13.9 months due to the paucity of disease recurrence

DURATION OF RESPONSE IN PATIENTS WITH A CR AT 3 MONTHS (KAPLAN-MEIER PLOT)



*Time from 3-month CR. CR, complete response.

SAFETY OUTCOMES

- The most common adverse events (AEs) (≥5% of patients), were dysuria, hematuria, urinary tract infection, pollakiuria, fatigue, and urinary retention; AEs were generally mild-to-moderate in severity and resolved or resolving
- Serious AEs occurred in 12% of patients (29/240); 2 of these were considered treatment-related (urinary retention and urethral stenosis, both of which resolved)^a

PRIMARY ENDPOINT: COMPLETE RESPONSE RATE AT 3 MONTHS

	UGN-102 (N=240)	
	n (%)	CRR (95% CI)
Complete response^a	191 (80)	79.6 (73.9, 84.5)
Noncomplete response	49 (20)	
Residual disease	35 (15)	
Progression	7 (2.9)	
Indeterminate	2 (0.83)	
Missing	5 (2.1)	

^aResponse is imputed as CR for 7 patients who had indeterminate response evaluations at 3 months, but who did not receive active intervention and had CR response evaluation at 6 months. CI, confidence interval; CR, complete response; CRR, complete response rate; HG, high-grade.

TREATMENT-EMERGENT ADVERSE EVENTS

	UGN-102 (N=240)
Patients with any TEAE(s), n (%)	137 (57)
Patients with any serious TEAE(s), n (%) ^a	29 (12)
TEAEs occurring in ≥5% of patients, n (%)	
Dysuria	54 (23)
Hematuria	20 (8.3)
Urinary tract infection	17 (7.1)
Pollakiuria	16 (6.7)
Fatigue	13 (5.4)
Urinary retention	12 (5)

^aCOVID-19 (2 patients), atrial fibrillation (2 patients), urinary retention (2 patients), and 1 event each of angina pectoris, second-degree atrioventricular block, cardiac failure, acute cardiac failure, congestive cardiac failure, sinus node dysfunction, Fournier's gangrene, pneumonia, urosepsis, carotid artery disease, carpal tunnel syndrome, cerebrovascular accident, transient ischemic attack, pancreatic adenocarcinoma, lip/and/or oral cavity cancer, metastatic lung cancer, urethral stenosis, chronic obstructive pulmonary disease, dyspnea, pulmonary embolism, hemorrhoids, incarcerated inguinal hernia, nausea, gallbladder polyp, cholestatic jaundice, acetabulum fracture, femur fracture, glaucoma, death, blood creatine increased, hyponatremia, intervertebral disc protrusion, hypertensive crisis. TEAE, treatment-emergent adverse event.

CONCLUSIONS

- Results from **ENVISION** demonstrate that treatment using **UGN-102** results in a high and clinically meaningful CR rate in patients with recurrent LG-IR-NMIBC
- Furthermore, the durability of effect is robust, with trial participants who achieved an initial CR at 3 months having a high probability of remaining disease-free 12 months later
- These observations provide further evidence that **UGN-102** may represent a well-tolerated and valuable alternative to TURBT for patients with LG-IR-NMIBC

^aThere were three Grade 4 (life-threatening) adverse events all unrelated to treatment. They consisted of metastatic lung cancer, a cerebrovascular event, and adenocarcinoma of the pancreas. There were three Grade 5 (death) adverse events all unrelated to treatment. They consisted of a cardiac event, pneumonia, and unknown.

References:

- Kamat AM, et al. J Urol. 2014;192:305-15.
- Tan WS, et al. Eur Urol Oncol. 2022;5:505-16.
- Prasad SM, et al. J Urol 2023;210:619-29.
- Prasad SM, et al. Primary chemoablation of recurrent low-grade intermediate-risk nonmuscle-invasive bladder cancer with UGN-102: a single-arm, open-label, phase 3 trial (ENVISION). In press.

Disclosures: Funded by UroGen Pharma.



Full poster download