TREATMENT OF LOW-GRADE INTERMEDIATE-RISK NON-MUSCLE INVASIVE BLADDER CANCER WITH UGN-102: RESULTS OF THE PHASE 3 ENVISION AND ATLAS STUDIES

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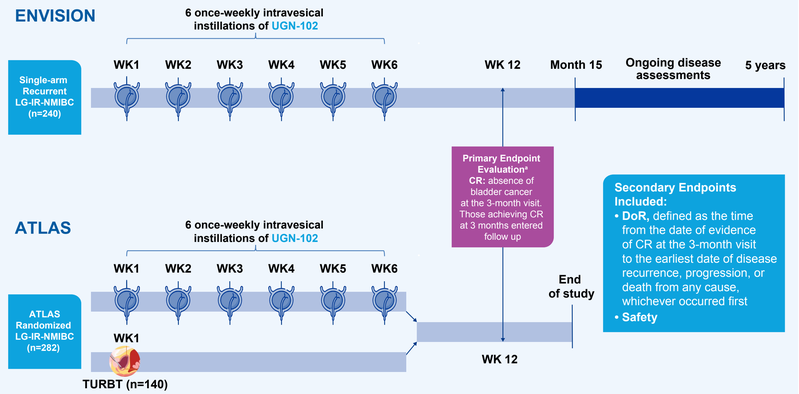
INTRODUCTION

- Low-grade intermediate-risk non-muscle invasive bladder cancer (LG-IR-NMIBC) is a persistent, recurrent cancer inadequately controlled by transurethral resection of bladder tumor (TURBT), the current standard of care (SoC); patients often require multiple TURBTs under general anesthesia, which can be associated with complications, particularly in an elderly population
- The ENVISION and ATLAS phase 3 studies (NCT05243550/ NCT04688931) treated patients with LG-IR-NMIBC intravesically with **UGN-102**, a reverse thermal hydrogel containing mitomycin
- Primary efficacy and safety results were previously reported for the individual studies; here we present further data from both studies[1,2]

METHODS

- In both studies, patients were age ≥18 years with LG-NMIBC (Ta) diagnosed using cold cup biopsy (with visible tumor left in situ) and negative voiding cytology for high-grade disease (**Figure**)
- Intermediate risk disease was defined per the IBCG as having 1 or 2 of the following: presence of multiple tumors, solitary tumor >3 cm, and/or recurrence of LG-NMIBC within 1 year of the current diagnosis
- In both studies, patients treated with UGN-102 received at least one instillation of 75 mg via a urinary catheter
- ENVISION study (single-arm): patients with recurrent LG-IR-NMIBC received intravesical UGN-102 (n=240)
  - In ENVISION, patients with a noncomplete response at 3 months received SoC treatment and entered follow-up
- ATLAS study, patients with newly diagnosed or recurrent LG-IR-NMIBC were randomized to intravesical UGN-102 (n=142) or TURBT (n=140)
  - In the ATLAS study patients confirmed to have noncomplete response with residual LG disease were treated by TURBT and then entered the follow-up period
- All patients were examined for recurrence of bladder cancer using cystoscopy, urine cytology, and for-cause biopsy at 3 months, and at regular intervals thereafter

Figure. Study Design



[a]The primary endpoint in ENVISION was CR at 3 months; the primary endpoint in ATLAS, was disease-free survival.

Abbreviations: CR, complete response; DoR, duration of response; LG-IR-NMIBC, low grade intermediate-risk non-muscle invasive bladder cancer; TURBT, transurethral resection of bladder tumor; WK, week.

RESULTS

- In both studies (ENVISION, ATLAS) patients were mostly aged ≥65 years (68%, 60%, respectively), white (98%, 99%, respectively), and male (61%, 70%, respectively)
- In the ENVISION study, 191 patients (79.6%) had a complete response (CR) at 3 months and the probability of remaining in response 12 months later was 82.3% (95% CI 75.9, 87.1), **Table**
- In the ATLAS study, 92 patients (64.8%) in the UGN-102 arm and 89 patients (63.6%) in the TURBT arm had a CR at 3 months
- In ATLAS, the 12-month post CR probability of remaining in response (recurrence, progression, or death) by Kaplan–Meier estimate was 79.7% (95% CI 69.3, 86.9) in the UGN-102 ± TURBT arm vs 67.7% (95% CI 55.8, 77.1) in the TURBT arm
- The between-arms hazard ratio for duration of response in ATLAS was 0.46 (95% CI 0.24, 0.86) favoring the UGN-102 arm
- Median duration of response was not estimable in any arm due to low recurrence rates; the most common adverse event with UGN-102 in both studies was dysuria, occurring in 22.5% in ENVISION and 30.4% in ATLAS

Table. ENVISION and ATLAS results

	ENVISION	ATLAS	
	UGN-102	UGN-102[a]	TURBT
3-month CR rate, % (95% CI)	79.6 (73.9, 84.5)	64.8 (56.3, 72.6)	63.6 (55.0, 71.5)
12-month DoR,[b] % (95% CI)	82.3 (75.9, 87.1)	79.7 (69.3, 86.9)	67.7 (55.8, 77.1)
Median DoR,[b] (95% CI)	NE	NE	NE
Median follow-up time for DoR,[b] months (95% CI)	13.86 (12.19, 14.52)	12.45 (12.02, 14.13)	12.16 (11.89, 12.75)
Any recurrence,[c] n/N (%)	33/191 (17.3)	18/92 (19.6)	24/89 (27.0)
LG disease, n/N (%)	27/191 (14.1)	15/92 (16.3)	17/89 (19.1)
HG disease, n/N (%)	4/191 (2.1)	3/92 (3.3)	6/89 (6.7)
Death, n/N (%)	2/191 (1.0)	0	1/89 (1.1)

[a]Patients with a noncomplete response at 3 months or later also underwent TURBT. [b]DoR was calculated using the Kaplan–Meier method.
[c]Actual event rates.
Abbreviations: CI, confidence interval; CR, complete response; DoR, duration of response; HG, high-grade; LG, low-grade, NE, not estimable; TURBT, transurethral resection of bladder tumor.

CONCLUSIONS

- In both studies, the CR rate in patients initially treated with **UGN-102** was robust, with the majority of patients remaining event-free at 12 months follow-up
- The 3-month CR rate and probability of remaining in response by KM estimate later achieved with **UGN-102** was consistent between both studies
- In the ATLAS study, UGN-102 was associated with a 54% reduction in the risk of recurrence, progression or death compared to TURBT
- These results demonstrate that treatment with **UGN-102** results in a high and clinically meaningful durable CR rate in patients with newly diagnosed or recurrent LG-IR-NMIBC
- **UGN-102 may represent an efficacious and well-tolerated treatment option for patients with LG-IR-NMIBC**

Reference

1. Prasad SM, et al. J Urol. 2025. 213:205–216.
2. Prasad SM, et al. J Urol. 2024;210:619-29.

Funding

UroGen Pharma

Editorial support was provided by Jaqui Hodgkinson, DPhil, MBA of Excerpta Medica, funded by UroGen Pharma.

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M-US-ZUS-00026

Presented at the 2025 American Society of Clinical Oncology Genitourinary Cancers Symposium (ASCO-GU 2025); San Francisco, CA, USA; February 13 –15, 2025.