To innovate the future of cancer care to cure patients and preserve organ function





October 17, 2024

Legal disclosure

This presentation contains forward-looking statements, all of which are qualified in their entirety by this cautionary statement. Many of the forward-looking statements contained herein can be identified by the use of forward-looking words such as "may", "anticipate", "believe", "could', "expect", "should", "plan", "intend", "estimate", "will", "potential" and "ongoing", among others, although not all forward-looking statements contain these identifying words. These forward-looking statements include statements about the initiation, timing, progress, results and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available and our research and development programs; statements regarding our expectations for an improved quality of life of patients after treatment with bel-sar and changes to the treatment paradigm for patients; statements regarding our beliefs and expectations for the high unmet medical need for an effective local treatment in urologic oncology to preserve organ function; and the size and growth potential of the markets for our product candidates and our ability to serve those markets.

Except as otherwise noted, these forward-looking statements speak only as of the date of this presentation, and we undertake no obligation to update or revise any of such statements to reflect events or circumstances occurring after this presentation. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. For a discussion of these and other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC), as well as discussions of potential risks, uncertainties, and other important factors in our other subsequent filings with the SEC, which are available on the SEC's website at www.sec.gov. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. We caution you not to place undue reliance on the forward-looking statements contained in this presentation.

This presentation discusses product candidates that are under preclinical or clinical evaluation and that have not yet been approved for marketing by the U.S. Food and Drug Administration (FDA) or any other regulatory authority. Until finalized in a clinical study report, clinical trial data presented herein remain subject to adjustment as a result of clinical site audits and other review processes. No representation is made as to the safety or effectiveness of these product candidates for the use for which such product candidates are being studied.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

Urologic oncology key opinion leaders participating on today's call



Max Kates, MD Johns Hopkins



Joe Jacob, MD, MCR Syracuse University



Neal Shore, MD, FACS Carolina Urologic Research Center



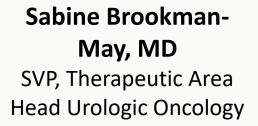
Gary Steinberg, MD, FACS RUSH University



Aura leadership participating on today's call







Elisabet de los Pinos, PhD Founder and CEO **Jill Hopkins, MD** Chief Medical Officer And President of R&D

Joseph McQuaid, MD Director, Clinical Development Urologic Oncology





Large increase in the number of early-stage cancers requiring treatment options with improved benefit-risk profile Growing need for functionpreserving, organ-sparing, local therapies that can intercept the course of disease

1. World Health Organization. Global cancer burden growing, amidst mounting need for services. 2024. Available at: Global cancer burden growing, amidst mounting need for services (who.int) [Accessed October 1, 2024].



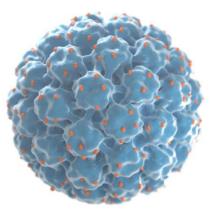
Virus-like drug conjugates have the potential to transform early cancer treatment

Unique tumor selectivity

Targets a key receptor molecule expressed in the early stages of malignant tumor transformation

Dual MOA

Targeted cytotoxicity and immune activation; potential to generate lasting anti-tumor T-cell memory



Tumor and mutation-agnostic

>100 cell lines >15 animal tumor models

High potency

~200 cytotoxic molecules per VLP; demonstrated picomolar efficacy in multiple animal tumor models

Positive clinical data in multiple early-stage local cancers

- Choroidal melanoma: Positive phase 2 data; phase 3 ongoing
- NMIBC: Positive early phase 1 data; phase 1 ongoing

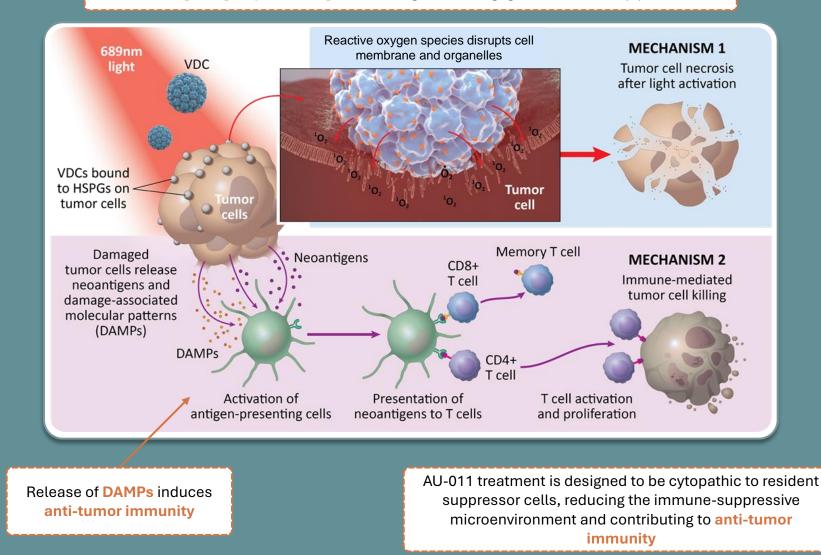
Favorable safety profile

No treatment-related SAEs and no DLTs reported in bel-sar Phase 2 choroidal melanoma trial

DLT, dose-limiting toxicity; MOA, mechanism of action; NMIBC, non-muscle-invasive bladder cancer; SAE, serious adverse event; VLP, virus-like particle.

AU-011 has a novel dual mechanism of action

Disruption of the tumor cell membrane and pro-immunogenic cell death by necrosis leads to T cell activation and immunemediated tumor cell killing VLPs bind to macrophages, B cells, dendritic cells and neutrophils and are capable of **stimulating antigen-presenting cells** through TLR-4 engagement and NFk-β production



Kines RC, et al. *Int J Cancer*. 2016;138(4):901–11. Kines RC, et al. *Mol Cancer Ther*. 2018;17(2):565–74. Kines RC, et al. *Cancer Immunol Res*. 2021;9:693–706. **DAMPs**, damage-associated molecular patterns; **HSPG**, heparan sulfate proteoglycan; **VDC**, virus-like drug conjugate; **VLP**, virus-like particle.



Bladder cancer: High unmet medical need for function-preserving organ-sparing therapies





614,298 diagnosed in 2022¹ (>7% increase from 2020)^{1,2}

Ranked 13th for mortality¹

One of the highest lifetime treatment costs of all cancers

>\$6 billion Annual cost of treatment in US⁵

Conventional bladder cancer treatments are suboptimal

- Short- and long-term side effects
- Considerable impact on QoL
- Inadequate efficacy
- Multiple TURBT surgeries
- Disease progression/metastasis
- Loss of bladder/cystectomy



of patients do not complete a full course of BCG treatment⁶

Patients are receiving fewer courses of BCG due to global shortage $^{\rm 7}$

MIBC

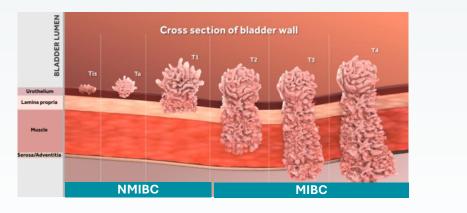
25%

NMIBC 75%

The majority of bladder

cancer patients present with

NMIBC³

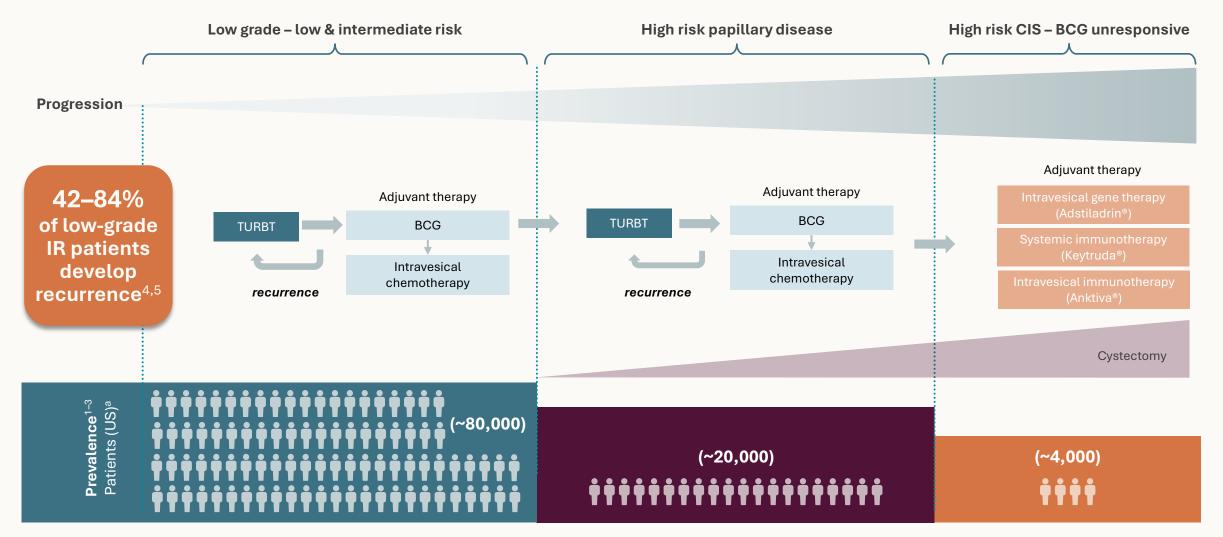


~70-80% of patients with NMIBC develop recurrence after treatment⁸

1. GLOBOCAN 2022. Bladder. Available at: https://gco.iarc.who.int/media/globocan/factsheets/cancers/30-bladder-fact-sheet.pdf. [Accessed October 1, 2024]. 2. Sung H, et al. *CA Cancer J Clin*. 2021;71(3):209–49. 3. Burger M, et al. *Eur Urol*. 2013;63(2):234–41. 4. Flaig TW, et al. *J Natl Compr Canc Netw*. 2018;16(9):1041–53. 5. Clark O, et al. *Pharmacoecon Open*. 2024 Aug 18. doi: 10.1007/s41669-024-00512-8. [Online ahead of print]. 6. Lamm DL, et al. *J Urol*. 2000;163(4):1124-9. 7. Shore ND, et al. *Urol Oncol*. 39(10):642–63. 8. Shalata AT, et al. *Cancers (Basel)*. 2022;14(20):5019. BCG, Bacillus Calmette-Guerin; MIBC, muscle-invasive bladder cancer. QoL, quality of life; TURBT, transurethral resection of bladder tumor.



High risk of recurrence and progression with current treatments for NMIBC



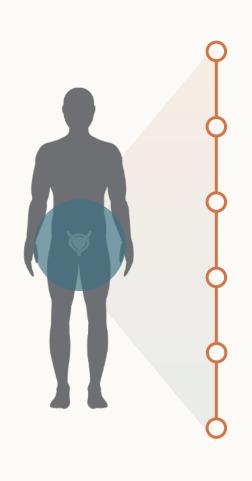
^aEach figure represents 1000 persons.

1. Holzbeierlein JM et al. J Urol. 2024;212(1):3–10. 2. Holzbeierlein JM et al. J Urol. 2024 Apr;211(4):533-538. 3. Internal Aura epidemiology of market size; data on file. 4. Shalata AT, et al. Cancers (Basel). 2022;14(20):5019. 5. van Rhijn BWG, et al. Eur Urol. 2009;56(3):430–42.

BCG, Bacillus Calmette-Guérin; CIS, carcinoma in situ; IR, intermediate risk; NMIBC, non-muscle-invasive bladder cancer; TURBT, transurethral resection of bladder tumor.

AU-011 as a potential front-line immune ablative therapy in NMIBC

AU-011 has a dual mechanism of action and can potentially reduce the treatment burden



Treatment goals

Focal treatment with direct tumor cell killing

Stimulate broad anti-tumor T cell response

Front-line early intervention for local disease

Decreased treatment burden with favorable safety profile

Reduce risk of recurrence and progression

Avoid TURBT/operating room

AU-011 administration and activation may be optimized for the urology clinic

Local administration of AU-011 is aligned with current practice in urology offices

In-office procedure



<5 minutes

Laser light activation

<10 minutes total laser time

<15 minutes total procedure time



Familiar procedures for urologists

Bladder injections (e.g. botox) and laser application are commonly used

No general anesthesia

AU-011 treatment may be feasible for patients with contraindications for general anesthesia/TURBT (e.g., comorbidities)



No requirement for additional safety precautions in drug handling No viral replication or shedding



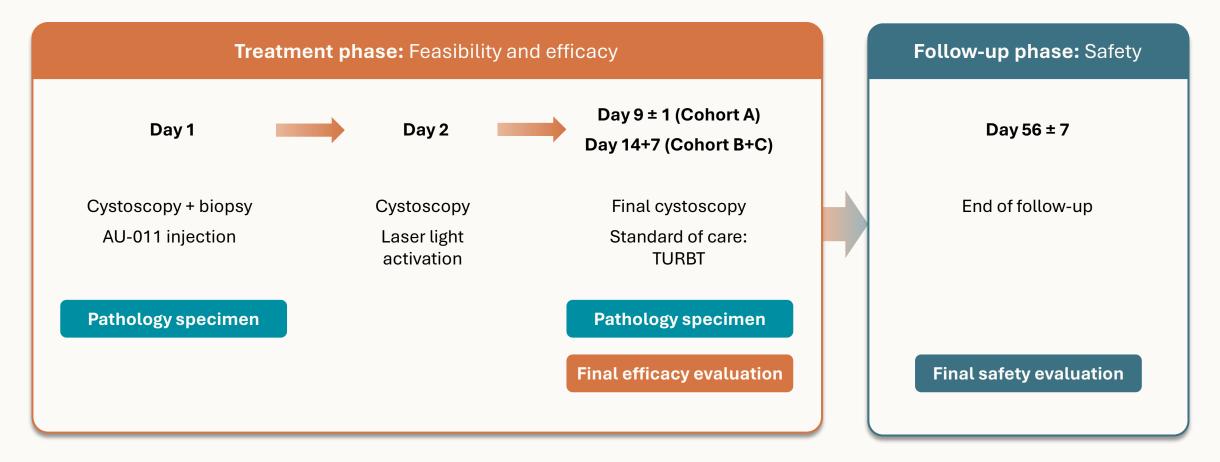
Phase 1 trial of AU-011 in bladder cancer

Review of early data from non-light activated and light-activated NMIBC cohorts



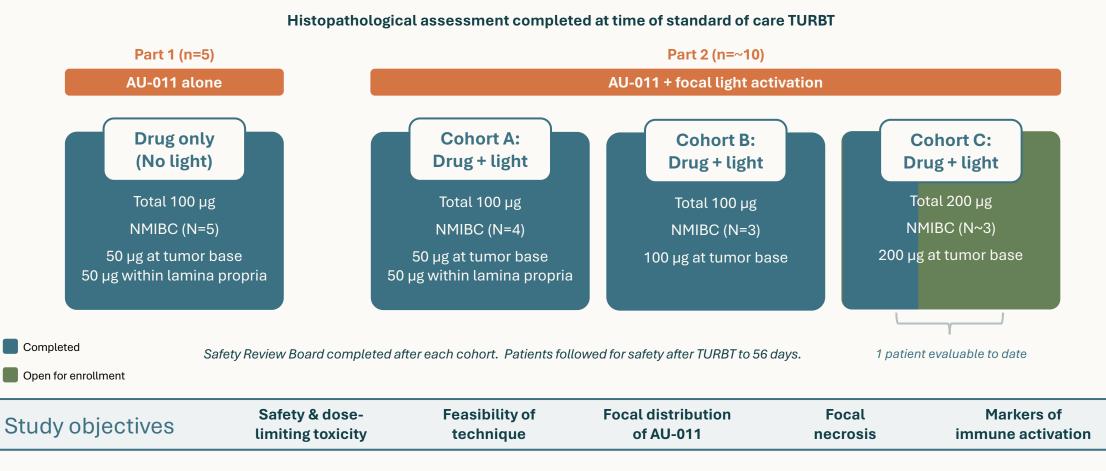
Window of opportunity study: AU-011 administered between scheduled biopsy and standard TURBT

Clinical response data up to 21 days; safety data up to 56 days



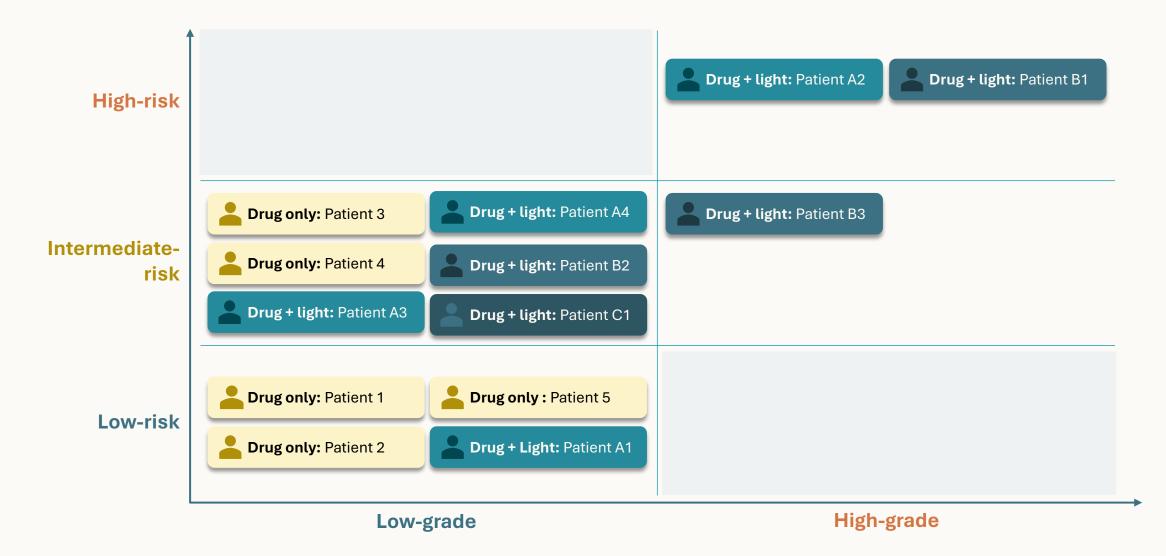
Phase 1 trial of AU-011 for bladder cancer designed to evaluate safety, feasibility, and mechanism of action

Single dose window of opportunity study in NMIBC all-comers



NMIBC, non-muscle-invasive bladder cancer; MoA, mechanism of action; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

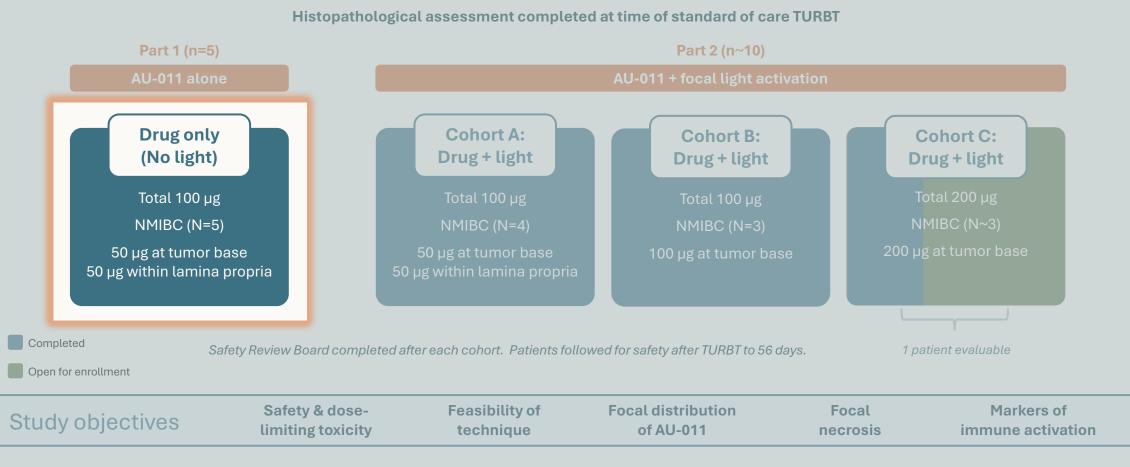
Patient population: AUA risk classification and grade at screening





Phase 1 trial of AU-011 for bladder cancer designed to evaluate safety, feasibility, and mechanism of action

Single dose window of opportunity study in NMIBC all-comers



NMIBC, non-muscle-invasive bladder cancer; MoA, mechanism of action; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Drug only: Treatment schedule

Total dose: 100 µg

- 50 μg into base of tumor
- 50 μg into lamina propria

TURBT **BLADDER LUMEN** AU-011 binds to Injection of AU-011 the tumor Urothelium Lamina propria Muscle Pathology Day 2 Day 1 • Evidence of non-invasive Urologist performs TURBT to urothelial carcinoma include injected lesion • Injection of AU-011 performed Sample sent to central pathology within tumor (50 µg) and below for H&E and AU-011 staining tumor (lamina propria; 50 µg)

Drug only without light activation (n=5)

H&E, hematoxylin and eosin; **TURBT**, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Drug only: Safety data

First in human in bladder – safety cohort as required by FDA

Drug only without light activation (n=5)

Safety Data

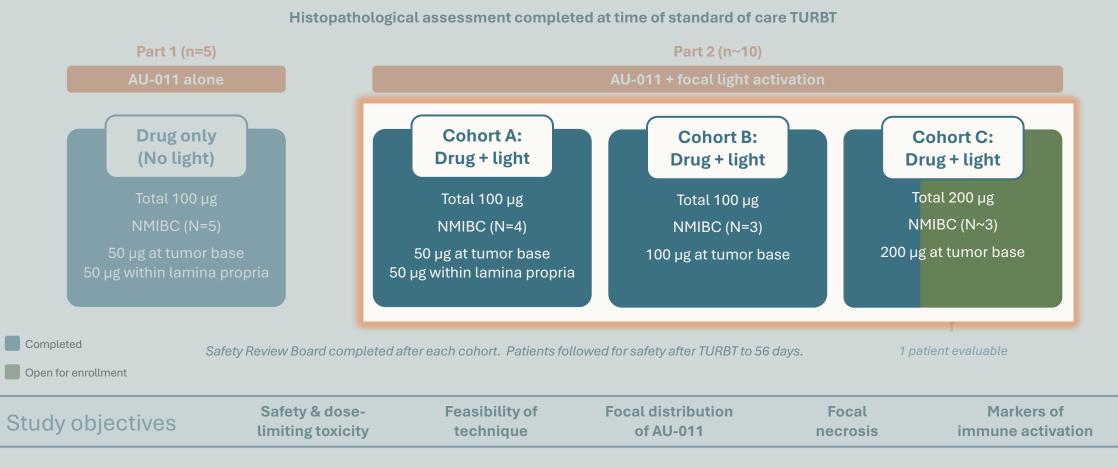
Event	Grade	Number of patients				
Adverse events (related to study drug)						
None	None	0/5				
Adverse events (related to injection or laser procedure)						
Hematuria	1	1/5				

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- No treatment emergent adverse events related to study drug
- No serious adverse events
- No dose limiting toxicities

Phase 1 trial of AU-011 for bladder cancer designed to evaluate safety, feasibility, and mechanism of action

Single dose window of opportunity study in NMIBC all-comers



NMIBC, non-muscle-invasive bladder cancer; MoA, mechanism of action; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Cohorts A–C: Single-dose drug with light activation

Treatment schedule

Cohort A:

- 50 µg into base of tumor
- 50 µg into lamina propria

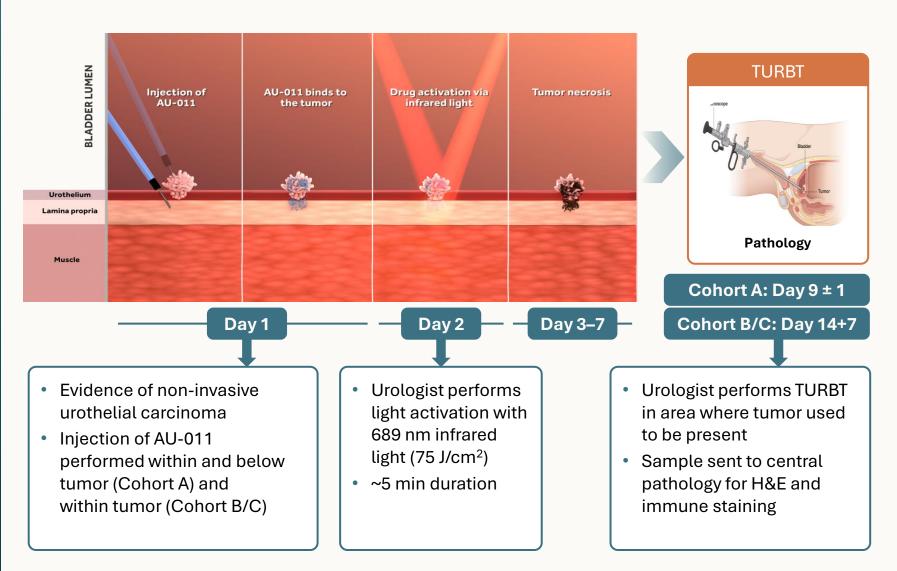
Cohort B:

• 100 µg into base of tumor

Cohort C:

200 µg into base of tumor

Cohort A-C: Single-dose drug with light activation (n=~10)



H&E, hematoxylin and eosin; **TURBT**, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Cohort A + B: Single-dose drug with light activation

Safety data

- No serious adverse events
- No dose limiting toxicities

Cohort A + B: Single-dose drug with light activation (n=7)^a

Event	Grade	Number of patients					
Adverse events (related to study drug)							
Nocturia	1	1/7					
Urinary urgency	1	1/7					
Adverse events (related to injection or laser procedure)							
Hematuria	1	1/7					
Urinary blood clots	1	1/7					
Nocturia	1	1/7					
Urinary urgency	1	1/7					

Favorable safety profile:

<10% of patients experienced Grade 1 TEAEs related to study drug; no Grade 2/3 adverse events related to study drug (n=12)

^ACompiled safety data includes all completed light-activated cohorts (A and B). Data cutoff date of September 9, 2024. **TEAE**, treatment-emergent adverse event. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Efficacy data: Ta low-grade

4/5 low-grade target tumors demonstrate complete response to AU-011

	Patient A1	Patient A3	Patient A4 ^c	Patient B2	Patient C1 ^d
Screening diagnosis	Single (Multiple at TURBT) Ta low-grade	Multiple Ta low-grade	Multiple Ta low-grade (2024) Ta high-grade (2023)	Multiple Ta low-grade	Multiple Ta low-grade
Screening AUA risk classification	Low	Intermediate	Intermediate	Intermediate	Intermediate
AU-011 dose/delivery	100 μg IT/IM	100 µg IT/IM	100 µg IT/IM	100 µg IT	200 μg IT
Clinical complete response: Target tumor ^a	\checkmark	~	\checkmark	-	\checkmark
Clinical complete response: Non-target tumor ^a (bladder urothelial field effect ^b)	2/2	1/2	1/1	-	-
Immune response ^e : Target tumor	~	~	~	~	pending
Immune response ^e : Non-target tumor	~	~	~	\checkmark	pending
Necrosis	\checkmark	\checkmark	~	-	pending
Visual changes on cystoscopy	\checkmark	~	-	\checkmark	\checkmark

Cohorts A–C: Single-dose drug with light activation ^aFor purposes of this analysis, Clinical complete response defined as absence of tumor cells on histopathologic evaluation. ^bBladder urothelial field effect: absence of tumor cells in non-target lesions. ^cPreviously treated tumor demonstrated high-grade disease but pathology at time of treatment revealed low-grade disease in non-target tumor. ^dComplete response (target tumor) based upon local pathology with central review ongoing; immune response and necrosis evaluations pending central review. ^e Immune response is defined by immunocyte infiltration on post-treatment histopathology. **AUA**, American Urological Association; **IM**, intramural; **TURBT**, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

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Light-activated cohorts (A + B):

Strong evidence of immune-mediated mechanism of action

- 100% (7/7) of target tumors showed infiltration of effector CD8+ T and CD4+ cells, as early as 7 days after laser activation
- 100% (7/7) of non-target tumors^a (in the five patients with available immune staining) showed T cell infiltration, supportive of a bladder urothelial field effect
- Focal eosinophilic infiltration was observed in 57% (4/7) target tumors and in 14% (1/7) non-target tumors, supportive of a local innate immune response to tumor necrosis
- Generation of lymphoid follicles^b was observed in 71% (5/7) target tumors, supportive of a local adaptive immune response

AU-011 showed evidence of producing pro-immunogenic changes in situ that have the potential to bridge, activate, and enhance adaptive immunity, consistent with its expected MOA

^aPatients for which biopsies were available. ^bOrganized aggregates of immune cells. **MOA**, mechanism of action Clinicaltrials.gov identifier: NCT05483868; AU-011-102.



Patient A1 64-year-old Caucasian male

Screening diagnosis: (2023)

Single **Ta low-grade <3 cm** No CIS

Screening AUA risk classification: Low

Initial diagnosis: (2010)

- Single
- Ta low-grade <3 cm
- No CIS
- Low risk

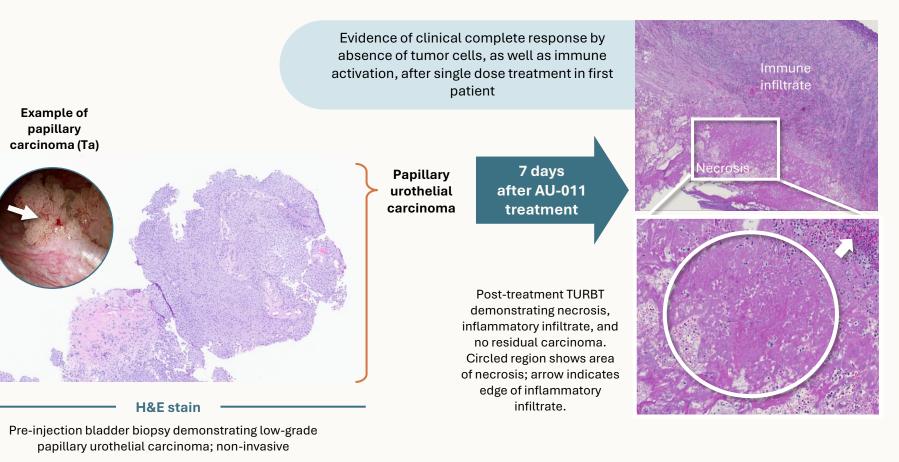
Prior TURBT: 2011; 2012; 2018

Prior adjuvant therapies:

- MMC (2011)
- Tamoxifen (2016)
- Gemcitabine (2018)

Cohort A: Single-dose drug with light activation

Complete clinical response visualized at time of TURBT confirmed with histopathologic evaluation



CIS, carcinoma in situ; H&E, hematoxylin and eosin; MMC, mitomycin C; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Patient A1 64-year-old Caucasian male

Screening diagnosis: (2023) Single Ta low-grade <3 cm

No CIS

Screening AUA risk classification: Low

Initial diagnosis: (2010)

Single

Ta low-grade <3 cm

No CIS

Low risk

Prior TURBT:

2011; 2012; 2018

Prior adjuvant therapies:

- MMC (2011)
- Tamoxifen (2016)
- Gemcitabine (2018)

Cohort A:
Single-dose drug with light activation

Summary of pre-and-post treatment pathology: Single low-grade target lesion and two non-target lesions

Pre-treatment pathology	Post-treatment pathology						
Target lesion: Clinical complete response							
 Local pathology: Papillary urothelial carcinoma, non-invasive, low-grade Muscularis propria not identified Note – no central pathology 	 Central pathology: Negative for urothelial carcinoma Chronic inflammation 						
Non-target lesion A & B: Abse	ence of tumor cells (2/2 lesions)						
Not applicable: No pre-treatment specimen obtained 	Central pathology:Negative for urothelial carcinomaChronic inflammation						

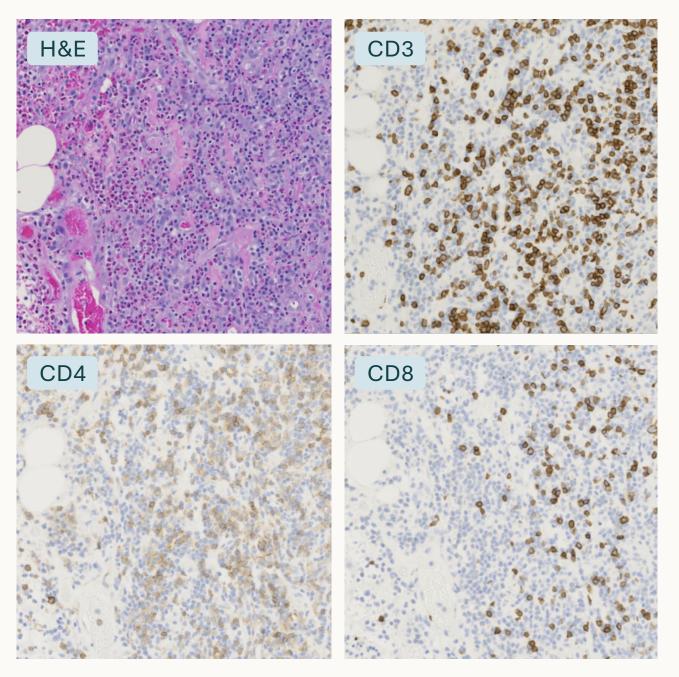
Clinical complete response (target lesion)^a

Bladder urothelial field effect^b

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^aClinical complete response identified on histopathologic evaluation. ^bBladder urothelial field effect: absence of tumor in non-target lesions. **AUA**, American Urological Association; **CIS**, carcinoma in situ; **MMC**, mitomycin C; **TURBT**, transurethral resection of bladder tumor. ClinicalTrials.gov Identifier: NCT06007690; AU-011-301. Patient A1: AU-011 focal distribution, necrosis, and positive immune staining (target lesion)

Post-treatment



No central pathology read available for pre-treatment; block lost at site. H&E, hematoxylin and eosin.Clinicaltrials.gov identifier: NCT05483868; AU-011-102



Patient A3 72-year-old Hispanic male

Screening diagnosis: (2024) Multiple Ta low-grade (<3 cm) No CIS

Screening AUA risk classification: Intermediate

Initial diagnosis: (2019)

- Ta high-grade <3 cm
- No CIS
- Intermediate risk

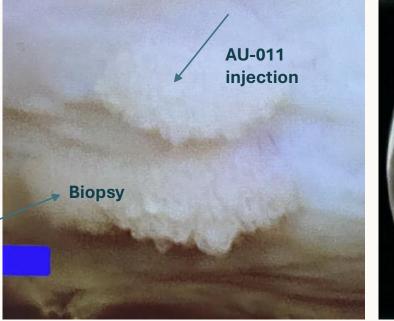
Prior TURBT:

2019, 2020 (x2), 2021 (x2), 2023

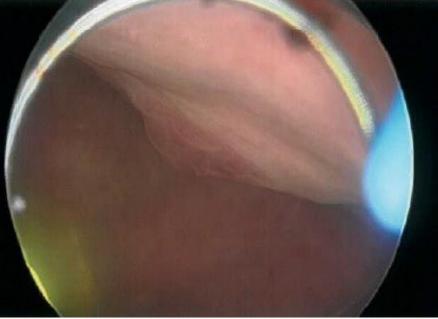
Prior adjuvant therapies:

BCG induction and maintenance (2020-2021)

Complete clinical response visualized at time of TURBT confirmed with histopathologic evaluation



Pre-injection/pre-biopsy appearance of tumor on office cystoscopy



Post-injection edema and ecchymosis at injection site

AUA, American Urological Association; BCG, Bacillus Calmette-Guerin; CIS, carcinoma in situ; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.



Cohort A: Single-dose drug with light activation

Patient A3 72-year-old Hispanic male

Screening diagnosis: (2024) Multiple Ta low-grade (<3 cm) No CIS

Screening AUA risk classification: Intermediate

Initial diagnosis: (2019)

- Ta high-grade <3 cm
- No CIS
- Intermediate risk

Prior TURBT:

2019, 2020 (x2), 2021 (x2), 2023

Prior adjuvant therapies:

BCG induction and maintenance (2020-2021)

Summary of pre-and-post treatment pathology: Single low-grade target lesion and two non-target lesions

Pre-treatment pathology	Post-treatment pathology						
Target lesion: Clinical complete response							
Central pathology: Low-grade papillary urothelial carcinoma, non-invasive 	Central pathology:Negative for urothelial carcinomaAcute and Chronic inflammation						
Non-target lesion A and B: absence of tumor cells (A) / immune cell infiltration (B)							
LESION A Not applicable: Pre-treatment biopsy not completed	 LESION A Central pathology: Negative for urothelial carcinoma Chronic inflammation 						
LESION B Not applicable: Pre-treatment biopsy not completed	 LESION B Central pathology: Papillary urothelial carcinoma; non-invasive Low-grade Additional findings: Cystitis cystica et glandularis 						

Clinical complete response (target lesion)^a

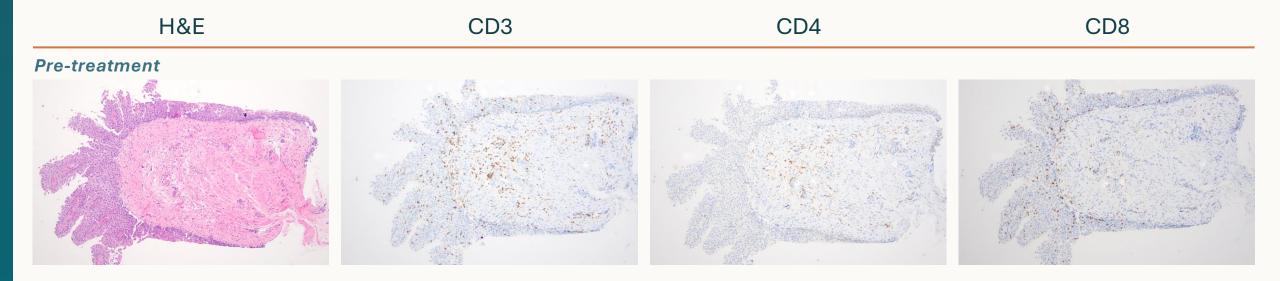
Bladder urothelial field effect^b

^aClinical complete response identified on histopathologic evaluation. ^bBladder urothelial field effect: absence of tumor in non-target lesions. **AUA**, American Urological Association; **BCG**, Bacillus Calmette-Guerin; **CIS**, carcinoma in situ; **TURBT**, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

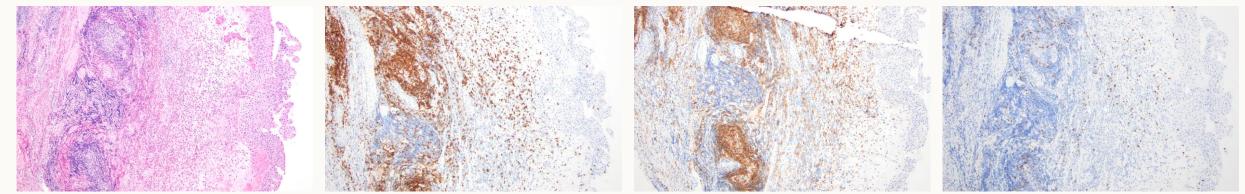
Cohort A: Single-dose drug with light activation

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Patient A3: AU-011 focal distribution, necrosis, and positive immune staining (target lesion)



Post-treatment



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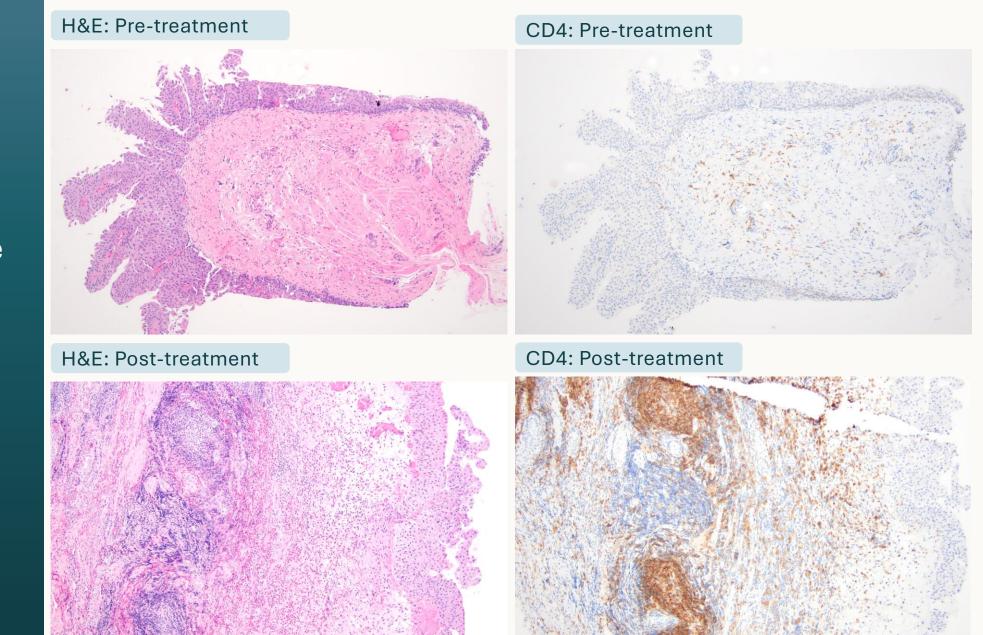
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Cohort A: Single-dose drug with light activation

H&E, hematoxylin and eosin. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Patient A3:

Post-treatment generation of secondary lymphoid follicles and increase in CD3, CD4, and CD8 infiltration



H&E, hematoxylin and eosin. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.



Efficacy data: Ta high-grade

3/3 high-grade tumors demonstrated immune response to AU-011

	Patient A2	Patient B1	Patient B3
Screening diagnosis	Single Ta high-grade	Multiple Ta high-grade	Single Ta high-grade
Screening AUA risk classification	High	High	Intermediate
AU-011 dose/ delivery	100 µg IT/IM	100 µg IT	100 µg IT
Clinical complete response: Target tumor ^a	-	-	-
Clinical complete response: Non-target tumor ^a (bladder urothelial field effect ^b)	NA	-	NA
Immune response ^c : Target tumor	\checkmark	✓	\checkmark
Immune response ^c : Non-target tumor	NA	\checkmark	NA
Necrosis	-	-	-
Visual changes on cystoscopy	Tumor Visually Smaller	Tumor Visually Smaller	-

^aClinical complete response defined as absence of tumor cells on histopathologic evaluation. ^bBladder urothelial field effect: absence of tumor cells in non-target lesions. ^cImmune response is defined by immunocyte infiltration on post-treatment histopathology

AUA, American Urological Association; BCG, Bacillus Calmette-Guerin; CIS, carcinoma in situ; IM, intramural; IT, intratumoral; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.



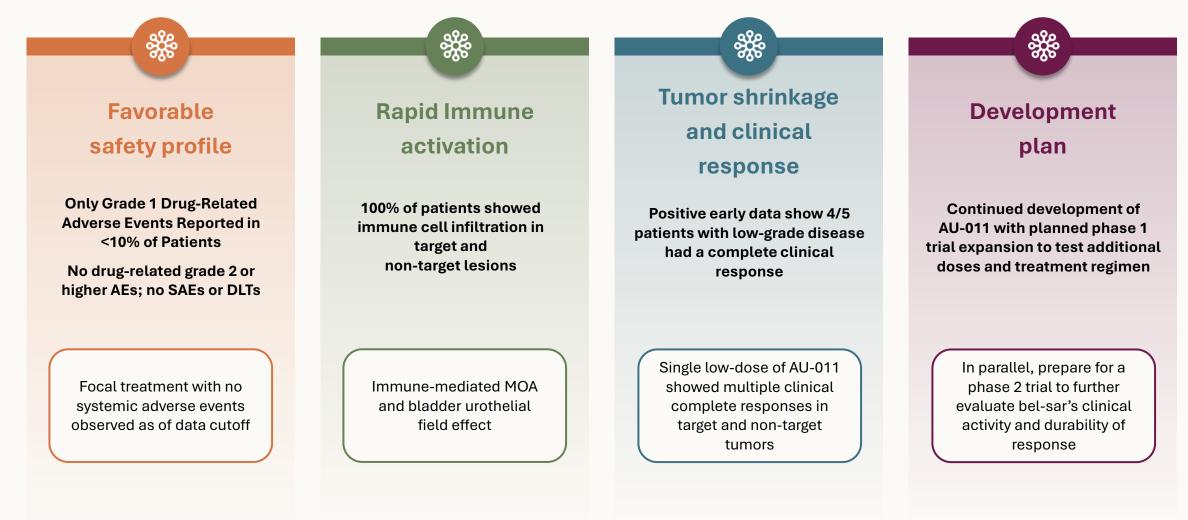
Cohorts A + B: Single-dose drug with light activation







AU-011 demonstrated a favorable safety profile with robust clinical and immunological response in early data readout of 'all-comers' NMIBC patients









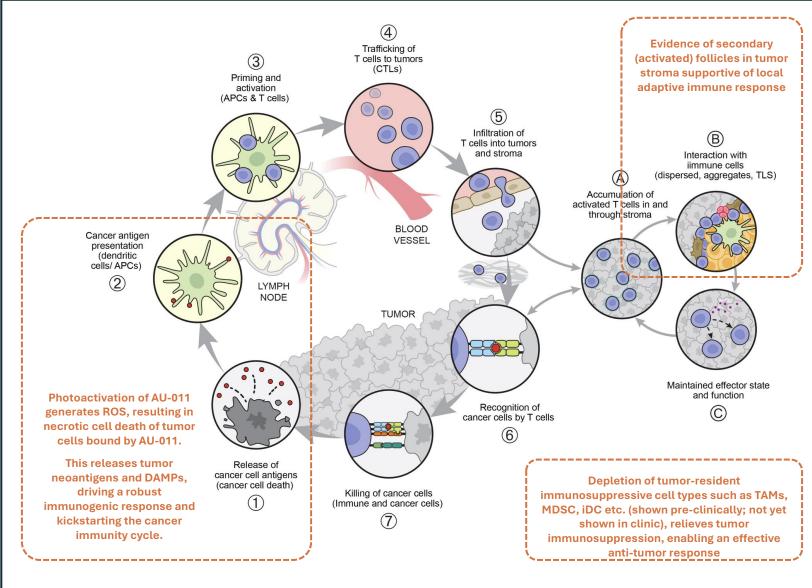
Anti-tumor immunity: Treating beyond the target



Preclinical development



Where does AU-011 fit in the cancer immunity cycle and the TME sub-cycle?

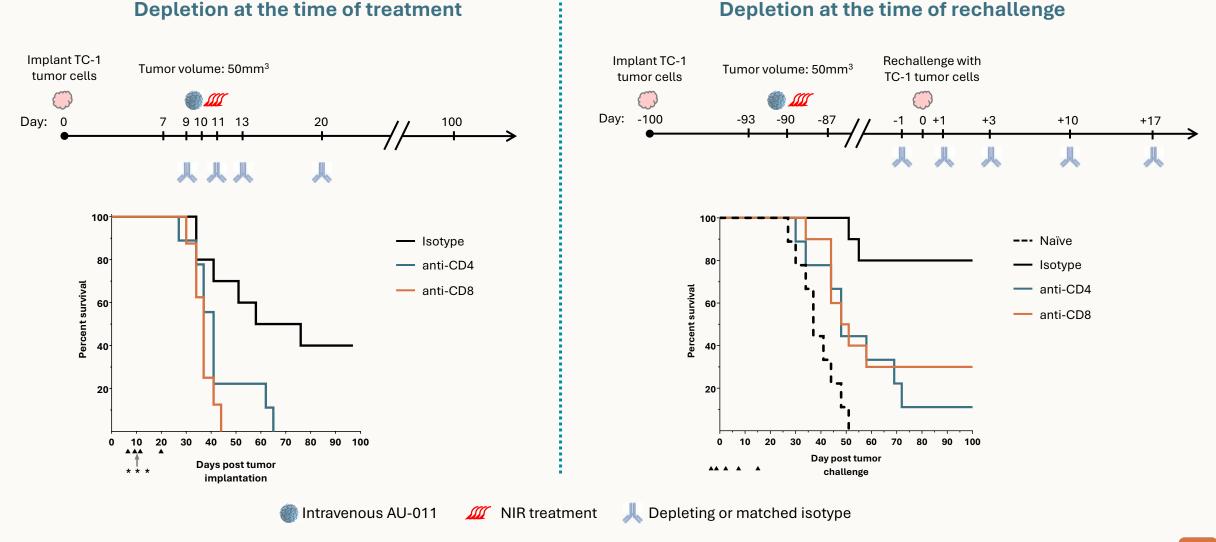


Modified from: Mellman I, et al. Immunity. 2023;56(10):2188-205.

APC, antigen-presenting cell; CTL, cytotoxic T lymphocyte; DAMPs, damage-associated molecular patterns; iDC, immature dendritic cell; MDSC, myeloid-derived suppressor cell; ROS, reactive oxygen species; TAM, tumor-associated macrophage; TLS, tertiary lymphoid structures; TME, tumor microenvironment.

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Role of CD4+ and CD8+ T-cells at time of treatment and time of tumor rechallenge in the TC-1 syngeneic murine tumor model



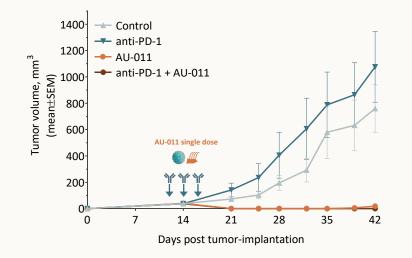
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Robust pre-clinical activity in bladder cancer both as a single agent and in combination with checkpoint inhibitors

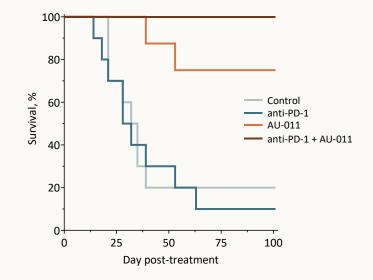
AU-011 treatment impacts primary and distant tumors, overall survival, and induction of durable immunological memory

- Treatment resulted in complete response and prevented tumor growth after rechallenge
- Data supports potential prevention of metastatic disease

Tumor growth



Survival



Syngeneic mouse tumor bladder model

- MB49 model in C57BL/6 mice
- N = 8–10/group

Anti-PD-1

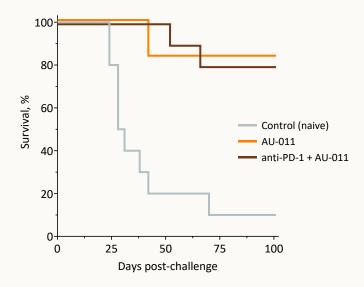
- · Mouse equivalent of pembrolizumab
- 100 µg administered 3 times every 3 days (IP)

AU-011

- 100 µg as a single dose (IV)
- All groups treated with NIR (50 J/cm²)

All animals that survived the first treatment were rechallenged and survival was evaluated up to 100 days after rechallenge

Survival after rechallenge



Patient A1: Single-dose drug with light activation Immunohistochemistry

		Targe	et lesion	Non-targ	et lesion A	Non-target lesion B		
Stain		Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	Pre-treatment	Post-treatment	
AU-011		NA	Absent	NA	Absent	NA	Absent	
Necrosi	s	NA	Present	NA	Absent	NA	Absent	
	Intratumoral	NA	NA	NA	NA	NA	NA	
CD3	Stromal	NA	Moderate	NA	Moderate	NA	Moderate	
CD3	Benign urothelial	NA	NA	NA	Mild	NA	Mild	
	Lymphoid follicle	NA	Marked	NA	Marked	NA	Marked	
CD4	Intratumoral	NA	NA	NA	NA	NA	NA	
	Stromal	NA	Moderate	NA	Moderate	NA	Moderate	
	Benign urothelial	NA	NA	NA	Absent	NA	Absent	
	Lymphoid follicle	NA	Marked	NA	Marked	NA	Marked	
	Intratumoral	NA	NA	NA	NA	NA	NA	
0.00	Stromal	NA	Mild	NA	Mild	NA	Mild	
CD8	Benign urothelial	NA	NA	NA	Mild	NA	Mild	
	Lymphoid follicle	NA	Moderate	NA	Moderate	NA	Moderate	
CD45	Intratumoral	NA	NA	NA	NA	NA	NA	
	Stromal	NA	Marked	NA	Moderate	NA	Moderate	
	Benign urothelial	NA	NA	NA	Mild	NA	Mild	
	Lymphoid follicle	NA	Marked	NA	Marked	NA	Marked	

Patient A3: Single-dose drug with light activation Immunohistochemistry

		Target lesio	lesion (biopsy) Target lesion (TURBT)		Non-targe	Non-target lesion A		Non-target lesion B	
Stain		Pre-treatment	Post- treatment	Pre-treatment	Post- treatment	Pre-treatment	Post- treatment	Pre-treatment	Post- treatment
AU-011		Absent	Present	Absent	Absent	NA	Absent	NA	Absent
Necrosi	s	Absent	Absent	Absent	Present	NA	Absent	NA	Absent
	Intratumoral	Mild	NA	Mild	NA	NA	NA	NA	Mild
000	Stromal	Mild	Moderate	Mild	Moderate	NA	Mild	NA	Mild
CD3	Benign urothelial	Mild	Mild	Mild	Mild	NA	Mild	NA	Mild
	Lymphoid follicle	NA	Marked	NA	Marked	NA	NA	NA	NA
	Intratumoral	Absent	NA	Absent	NA	NA	NA	NA	Absent
004	Stromal	Mild	Moderate	Mild	Moderate	NA	Mild	NA	Mild
CD4	Benign urothelial	Absent	Mild	Absent	Mild	NA	Absent	NA	Mild
	Lymphoid follicle	NA	Marked	NA	Marked	NA	NA	NA	NA
	Intratumoral	Mild	NA	Mild	NA	NA	NA	NA	Mild
	Stromal	Mild	Mild	Mild	Mild	NA	Mild	NA	Mild
CD8	Benign urothelial	Mild	Mild	Mild	Mild	NA	Mild	NA	Mild
	Lymphoid follicle	NA	Mild	NA	Mild	NA	NA	NA	NA
CD45	Intratumoral	Mild	NA	Mild	NA	NA	NA	NA	Mild
	Stromal	Mild	Moderate	Mild	Moderate	NA	Moderate	NA	Moderate
	Benign urothelial	Mild	Mild	Mild	Mild	NA	Mild	NA	Mild
	Lymphoid follicle	NA	Marked	NA	Marked	NA	NA	NA	NA

NA, not applicable; **TURBT**, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

Patient A3 72-year-old Hispanic male

Screening diagnosis: (2024)

Multiple **Ta low-grade (<3 cm)** No CIS

Screening AUA risk classification: Intermediate

Initial diagnosis: (2019)

Ta high-grade <3 cm

No CIS

Intermediate risk

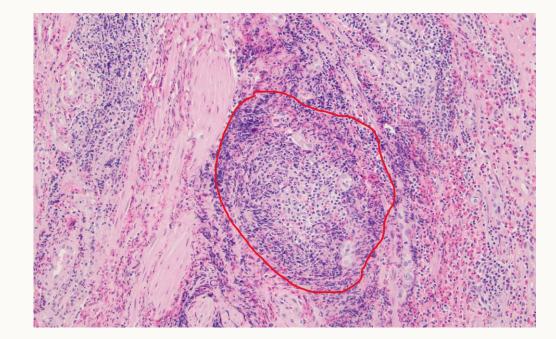
Prior TURBT:

2019, 2020 (x2), 2021 (x2), 2023

Prior adjuvant therapies:

BCG induction and maintenance (2020-2021)

Secondary (activated) lymphoid follicle: Capable of generating tissue-specific, adaptive immune responses



- Secondary lymphoid follicles form ectopically at sites of chronic inflammation and antigenic stimulation
- Lymphoid follicles are widely reported in colorectal and ovarian carcinoma, suggestive of ongoing B-cell expansion and a favorable prognosis

AUA, American Urological Association; BCG, Bacillus Calmette-Guerin; CIS, carcinoma in situ; TURBT, transurethral resection of bladder tumor. Clinicaltrials.gov identifier: NCT05483868; AU-011-102.

