



Multidisciplinary Approaches to Cancer Symposium

New Therapies in Non-Muscle Invasive Bladder Cancer: 2026 Updates

Paul Gellhaus, MD

Urologic Surgical Oncology
Director of Urology & Robotic Surgery
City of Hope - Arizona

Disclosures

I do not have any relevant financial relationships.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.



Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed Assembly Bill (AB) 1195, which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed AB 241, which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

The following CLC & IB components will be addressed in this presentation:

- *Socioeconomic status barrier to timely treatments.*
- *Do these cohort populations apply to the individuals in the practice.*



Therapies in Non-Muscle Invasive Bladder Cancer



The Current NMIBC Landscape & Challenges

- **The Status Quo:** Transurethral Resection of Bladder Tumor (TURBT) followed by intravesical Bacillus Calmette-Guérin (BCG) remains the standard of care for high-risk NMIBC.
- **The Problem:** High recurrence rates (up to 60–70%) and a critical demand for effective, alternative first-line therapies and salvage options for BCG-unresponsive disease.
- **Shortage Problem:** Chronic global manufacturing shortages of BCG continue to heavily restrict patient access in 2026.



BCG shortage

- Who do we give our limited supply BCG to?
 - CHAI Biomarker

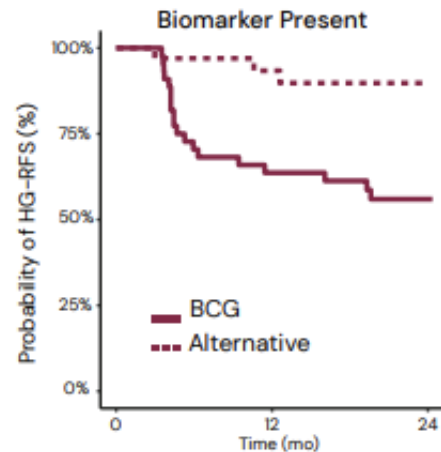
Vesta® Bladder BCGPredict

BIOMARKER ABSENT

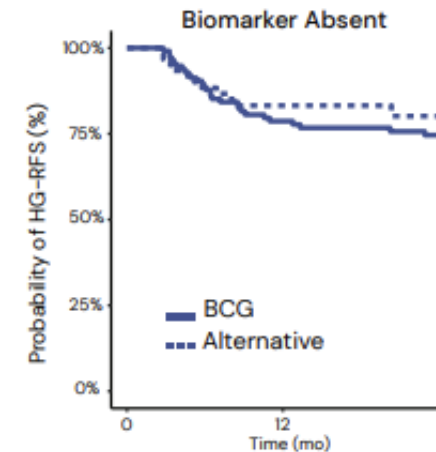
This patient does not have the Vesta® Bladder BCGPredict Biomarker and is likely to have a **typical response to BCG therapy** based on this result [1-4].

Supplemental Clinical Evidence

Clinical Outcomes on BCG vs Alternative Therapy, by Vesta® Bladder BCGPredict Biomarker Status



In a multicenter study, patients with the Vesta® Bladder BCGPredict Biomarker **present** demonstrated significantly higher recurrence rates when treated with BCG compared to treatment with an alternative (in this study, gemcitabine/docetaxel).



Patients for whom the Vesta® Bladder BCGPredict Biomarker was **absent** demonstrated no significant difference in recurrence rates when treated with BCG or an alternative (in this study, gemcitabine/docetaxel) [1].

BCG shortage

- If no BCG, then what?
- Recombinant BCG (on going phase 3 trial)
- rBCG:
 - specific gene modifications to heighten immunogenicity,
 - maintain a safety profile
- Expanded Access Program (EAP): FDA authorized

Study Design & Key Population



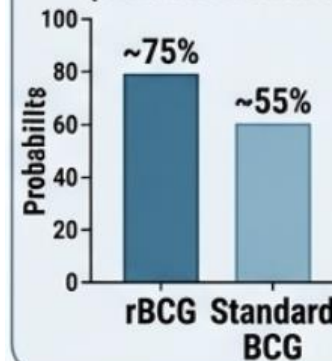
Study: Phase 1/2 Trial
(NCT06800963)



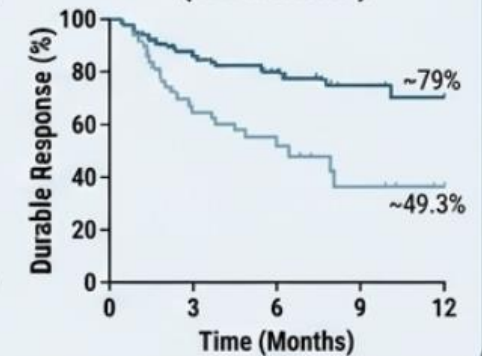
Population: BCG-naïve high-risk NMIBC patients. (Cohort: 250)

Key Outcomes & Conclusions

**Response Rate
(CR at 3 Months)**



**Recurrence-Free Survival
(12 Months)**



CONCLUSION: Evaluates rBCG as potentially superior non-surgical disease control option for high-risk NMIBC.

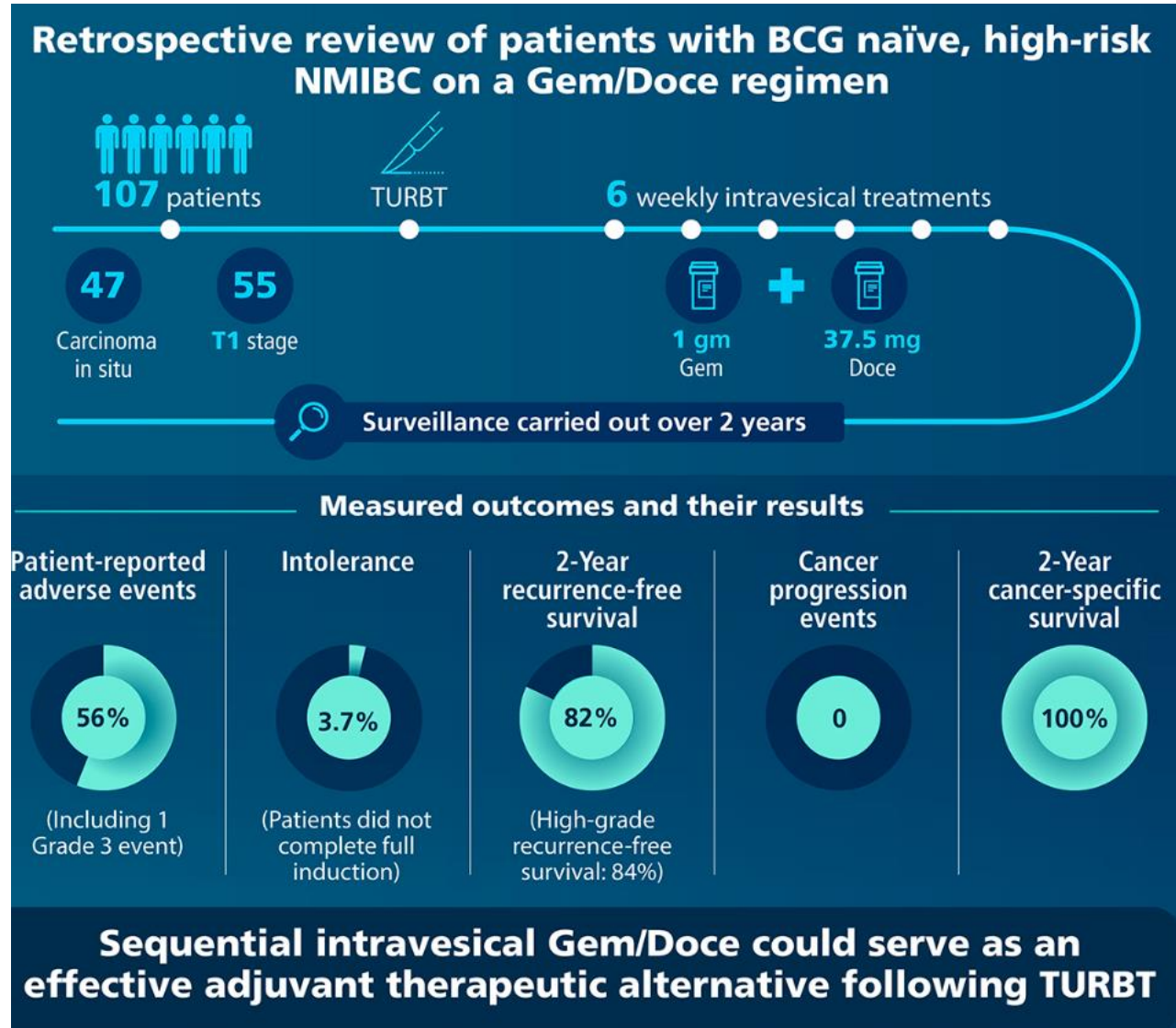


Safety Profile: Manageable AEs, no unexpected safety signals.

BCG shortage

- If no BCG or rBCG, then what?
- Gemcitabine/Docetaxel

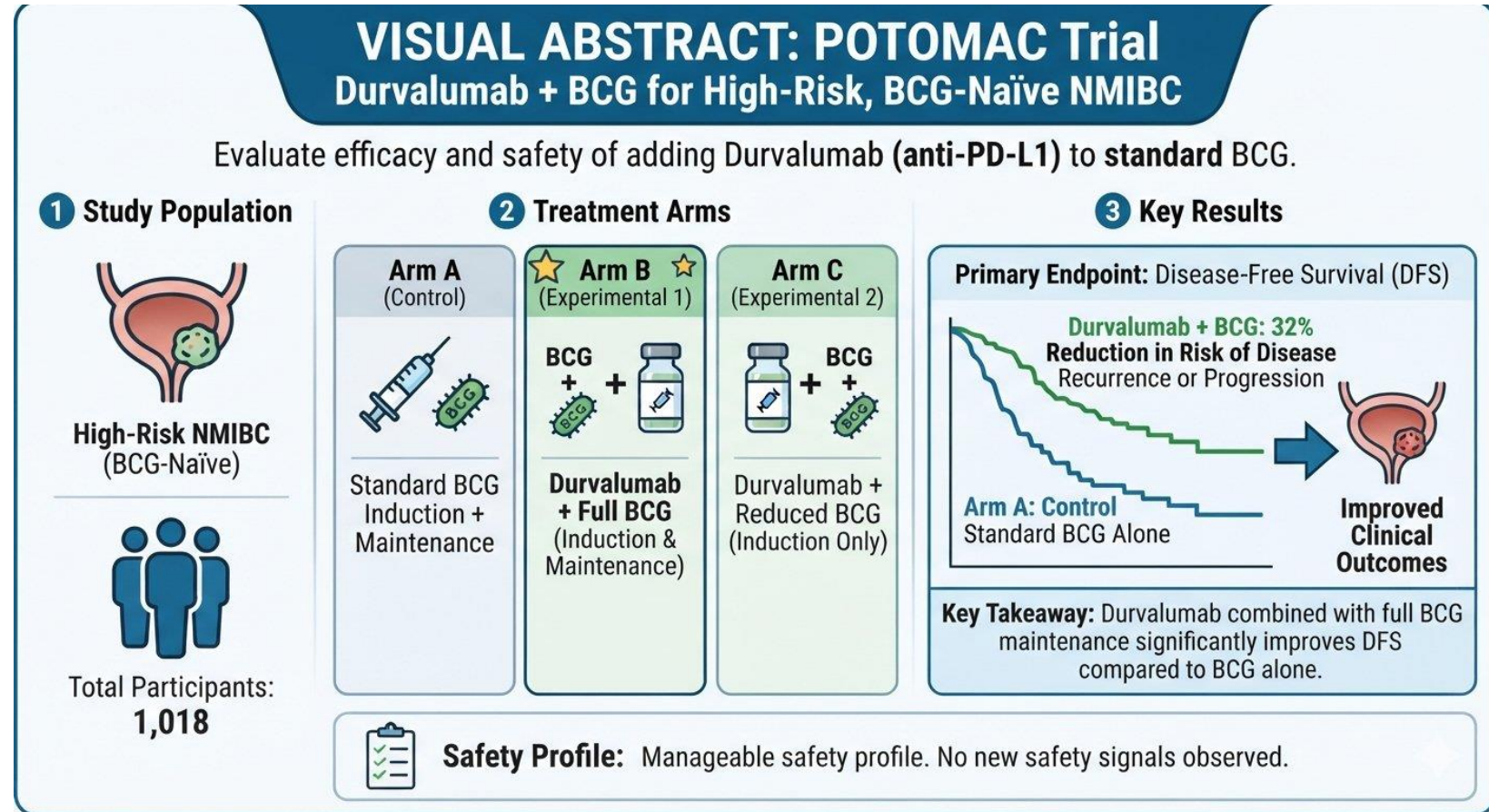
- BRIDGE Trial on-going



We have BCG!

How to make it work better?

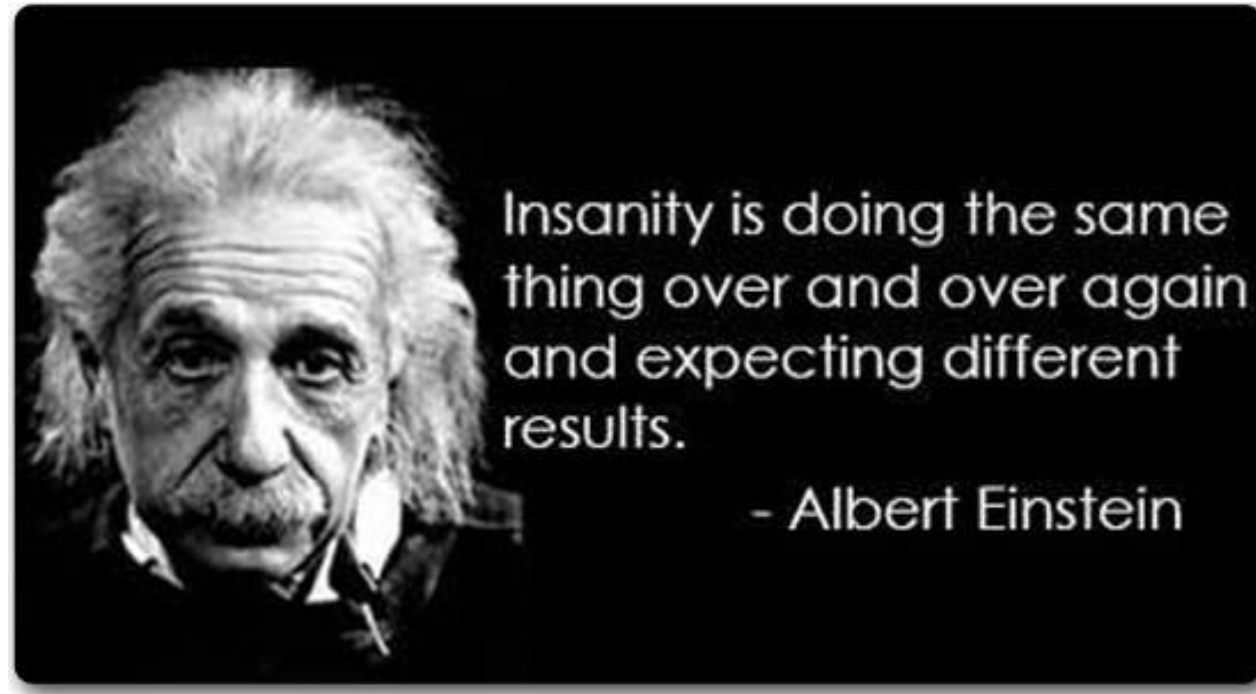
BCG + durvalumab



- **Better Survival:** Disease-free survival event (recurrence or progression) by 32% compared to BCG alone.
- **Maintenance Matters:** Durvalumab combined with only an initial induction of BCG did not improve results, proving that ongoing BCG maintenance remains essential.



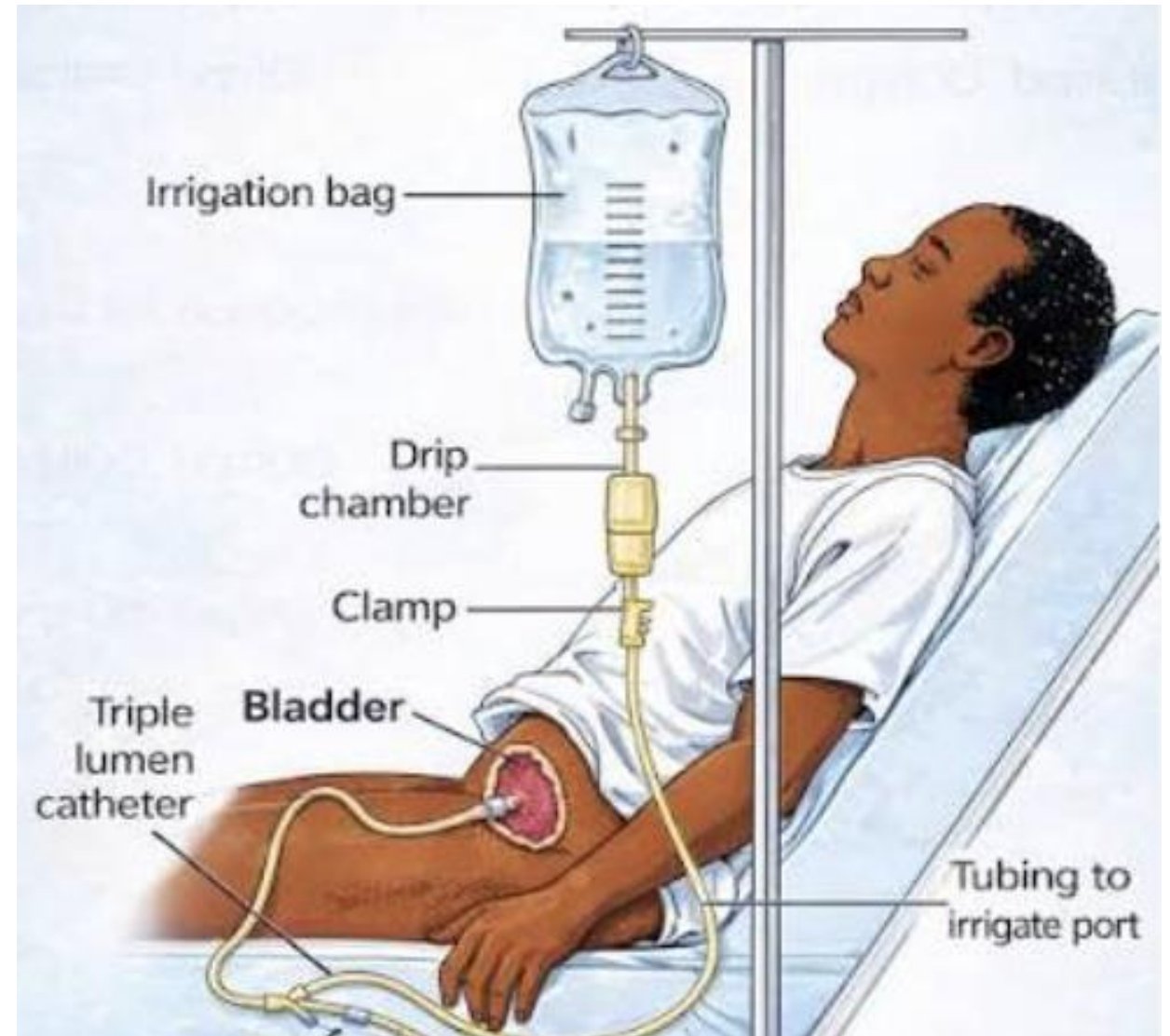
We have BCG. But it recurred!



BCG 2nd induction: 50-80% durable response at 2 and 5 years

Patient cannot hold treatment!

- Optimize oral anti-spasmodic
- IV pole method



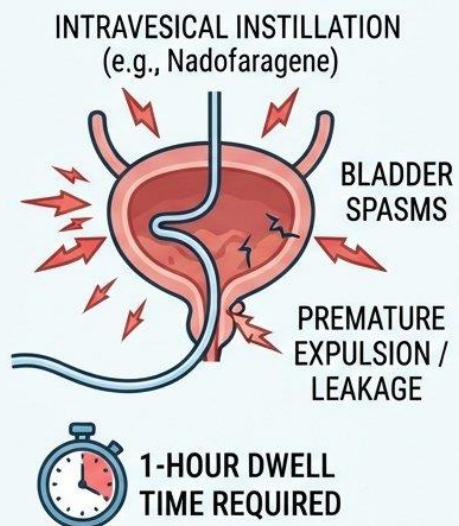
Patient cannot hold treatment!

- Rectum valium
- Off-label oral formulation
- Diastat (rectal gel for seizure patients)

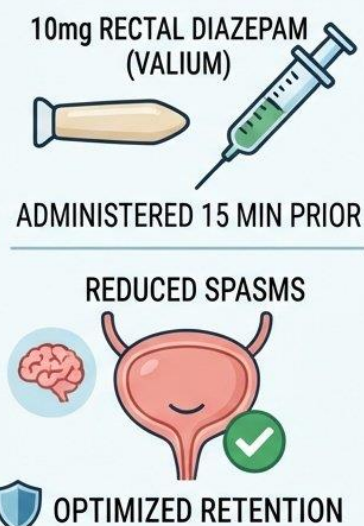
IMPROVING INTRAVESICAL THERAPY: RECTAL DIAZEPAM FOR NMIBC

A Single-Image Summary of the Tyson et al. Study on Bladder Spasm Reduction

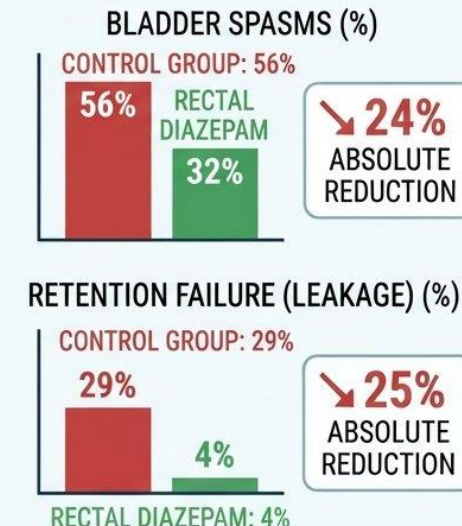
THE CLINICAL CHALLENGE



THE INTERVENTION



PRIMARY OUTCOMES



CONCLUSION: Rectal diazepam is a safe and effective pretreatment to significantly decrease bladder spasms and improve medication retention during intravesical therapy for BCG-unresponsive NMIBC.

Patient cannot hold treatment!

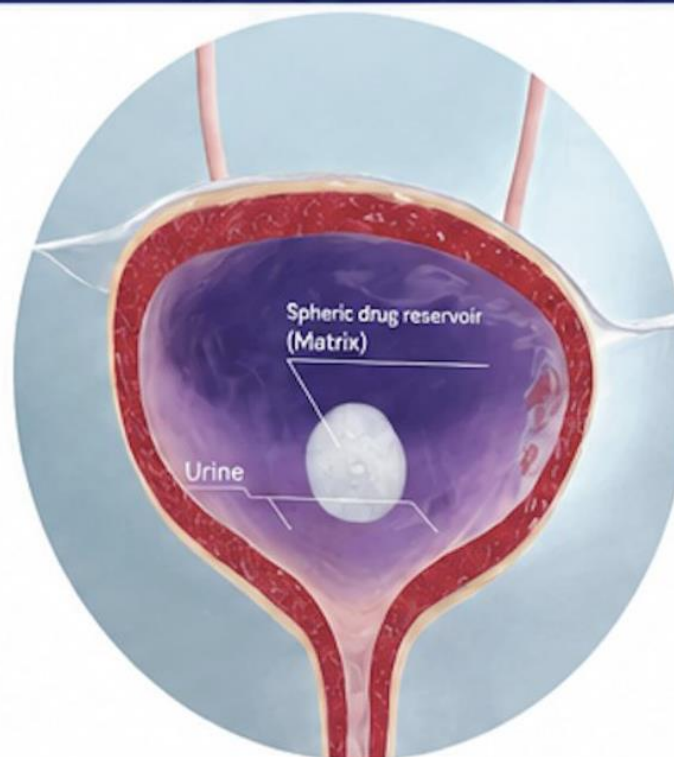
- **The Innovation:** TAR-200 is an intravesical drug-delivery system—a mini, flexible “pretzel-like” device placed in the bladder during a simple office procedure.
- **Mechanism:** Continuously releases gemcitabine locally over several weeks, bypassing the standard 2-hour retention limit of liquid chemotherapy.
- **2026 Clinical Impact:** Exceptional Complete Response (CR) rates in BCG-unresponsive high-risk NMIBC, establishing it as a primary alternative to radical cystectomy.



Gem/doce is great but...

NDV-01 - Sustained-Release Intravesical Gem/Doce JOHNS HOPKINS MEDICINE

- It takes 2-3 hours of clinic space!
- It's inexpensive to patients, but practice reimbursement inadequate
- Solution: Gem/doce gel



Bladder-targeted matrix enables prolonged tumor exposure to the cytotoxic drug combination via multiple delivery modalities



Diffusion through pores



Diffusion through the polymer



Osmotic pumping



Erosion

- Phase 2 clinical trials for high-grade NMIBC have shown high complete response rates (such as 87% at 3 months and 76% to 80% at 12 months) including BCG-unresponsive
- On-going clinical trial

In the (near) Future...

- **Problem: Too many options! How am I suppose to choose?**
- **Solution: AI path insights**
- **Review the path slide, predict which will respond**

Name of the antimicrobial agents	Sensitivity
Amoxycillin	R
Nitofurantoin	S
Cephotaxime	I
Enrofloxacin	R
Ceftriaxone	S
Streptomycin	S
Amikacin	I
Tetramycin	R
Chloramphenicol	S
Ciprofloxacin	R
Penicillin	R
Nalidixic Acid	R
Ampicillin	R

In the (near) Future...

- **Problem: Too many options! How am I suppose to choose?**
- **Solution: AI path insights**
- **Review the path slide, predict which will respond,**

Therapy:	Sensitivity
BCG	I
Gem/doce	S
Gemzar implant	S
BCG + durvalumab	S
Nadofaragene firadenovec	R
Val/doce	S
Nogapendekin alfa inbakicept + BCG	S

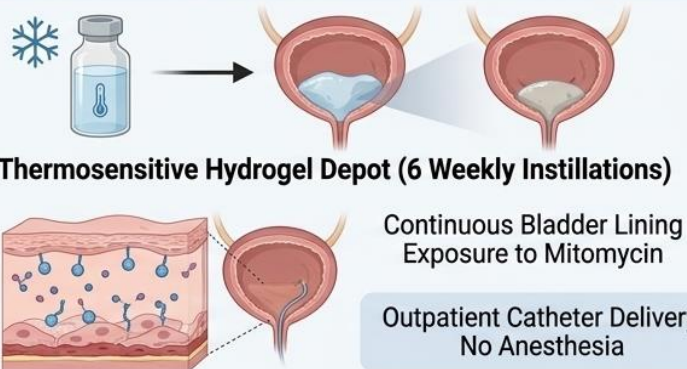
Patient too frail for TURBT recurrent low grade tumors

Solution: Thermo-Hydrogels: UGN-102 (Zusduri™)

VISUAL ABSTRACT: UGN-102 (Zusduri™) in LG-IR-NMIBC

Comparison of Non-Surgical Chemoablation vs. Standard of Care Surgery (TURBT)

Mechanism of Action: Non-Surgical Chemoablation



Clinical Trial: ENVISION (Phase 3)

Target Population: Recurrent LG, Intermediate-Risk NMIBC Tumors (N=240)

EXPERIMENTAL: UGN-102 (Zusduri™)

1. Weekly instillation (Outpatient Clinic)
2. Deposition & Sustained Release
3. Non-Surgical Primary Chemoablation

CONTROL: Standard Surgery (TURBT)

1. Operating Room Admission
2. General/Spinal Anesthesia
3. Transurethral Surgical Resection

Safety Profile: ☒ Completing marta cisis ☒ Repeated Safety Profile

Key Trial Outcomes: UGN-102 vs. TURBT

Primary Endpoint: Complete Response (CR) at 3 Months

79.6% CR
(Non-Surgical)

Standard Surgical CR

UGN-102

TURBT

12-Month Durability of Response (Among Responders)

82.3% of UGN-102 patients remained CR at 12 months

Key Takeaway: UGN-102 (Zusduri™) provides durable Complete Response rates, offering a transformative, non-surgical alternative to repeated surgery (TURBT) for recurrent LG-IR-NMIBC.



Atypical cytology. Patients hate cystoscopy.

- **Solution: Urinary tDNA ?**

Test	Specimen / technology	Intended bladder-cancer use
UroAmp MRD — Convergent Genomics	Urine DNA; NGS of 60 urothelial-cancer genes plus broad genome-wide chromosomal analysis	Detection, surveillance, recurrence-risk prediction, molecular residual disease, and therapy-response monitoring



Atypical cytology. Patients hate cystoscopy.

Test / platform	Sensitivity	Specificity	PPV	NPV
UroAmp MRD (Convergent Genomics)	65% overall; 76% high-grade; 58% low-grade	89%	59%	91%
Xpert Bladder Cancer Monitor (Cepheid)	52.4% overall; 80.9% high-grade; 42.9% low-grade	78.4%	32.5%	89.2%
UroVysion FISH (Abbott)	62.2%	86.2%	59.2%	87.7%

- **Solution ≠ Urinary tDNA
= FISH**



Expensive option that doesn't work well

Adstiladrin <i>(Nadofaragene firadenovec)</i>	FDA Approved <i>(Approved Dec 2022)</i>	Adenoviral gene therapy: Forces the bladder lining to produce massive amounts of interferon alfa- 2b.	High-risk, BCG- unresponsive NMIBC with CIS ± papillary disease.	51% to 60% CR <i>(51% at 3 months; up to 60% anytime CR in registries)</i>	~\$60,000 per unit dose (administered once every 3 months).
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- **Recurrence-Free Rates:** For patients who originally cleared their tumors at Month 3, at 57 months
- **13.2% for CIS**
- **32.7% for the Papillary**



Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

- ***Socioeconomic status barrier to timely treatments.***
 - *Problem: multiple provider/infusion visits*
 - *New therapies = EXPENSIVE*
- ***Do these cohort population apply this the individuals in the practice.***
 - *New therapy = Trial patients*
 - *Trial patient cohort are not diverse patient cohort*



Summary: Solution finders

- **Improved formulation optimize use:**
 - gem/doce gel
 - Gemzar implant
 - rBCG
 - MMC Thermo-Hydrogel
- **CHAI Biomarkers: Guide therapy**

Thank You

cityofhope.org

