

Exploring Cretostimogene's Combination Potential in NMIBC Beyond Monotherapy



Attacking Bladder Cancer
for a Better Tomorrow™

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Albert Institute Symposium
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Agenda



CORE-008 CX



SWOG ARCIS



XCEED



Efficacy and Safety of Intravesical Cretostimogene Grenadenorepvec Plus Gemcitabine in High-Risk BCG-Exposed Or BCG- Unresponsive Non-Muscle- Invasive Bladder Cancer

CORE-008 Cohort CX

Rationale for Novel Intravesical Combination Strategies in HR-NMIBC

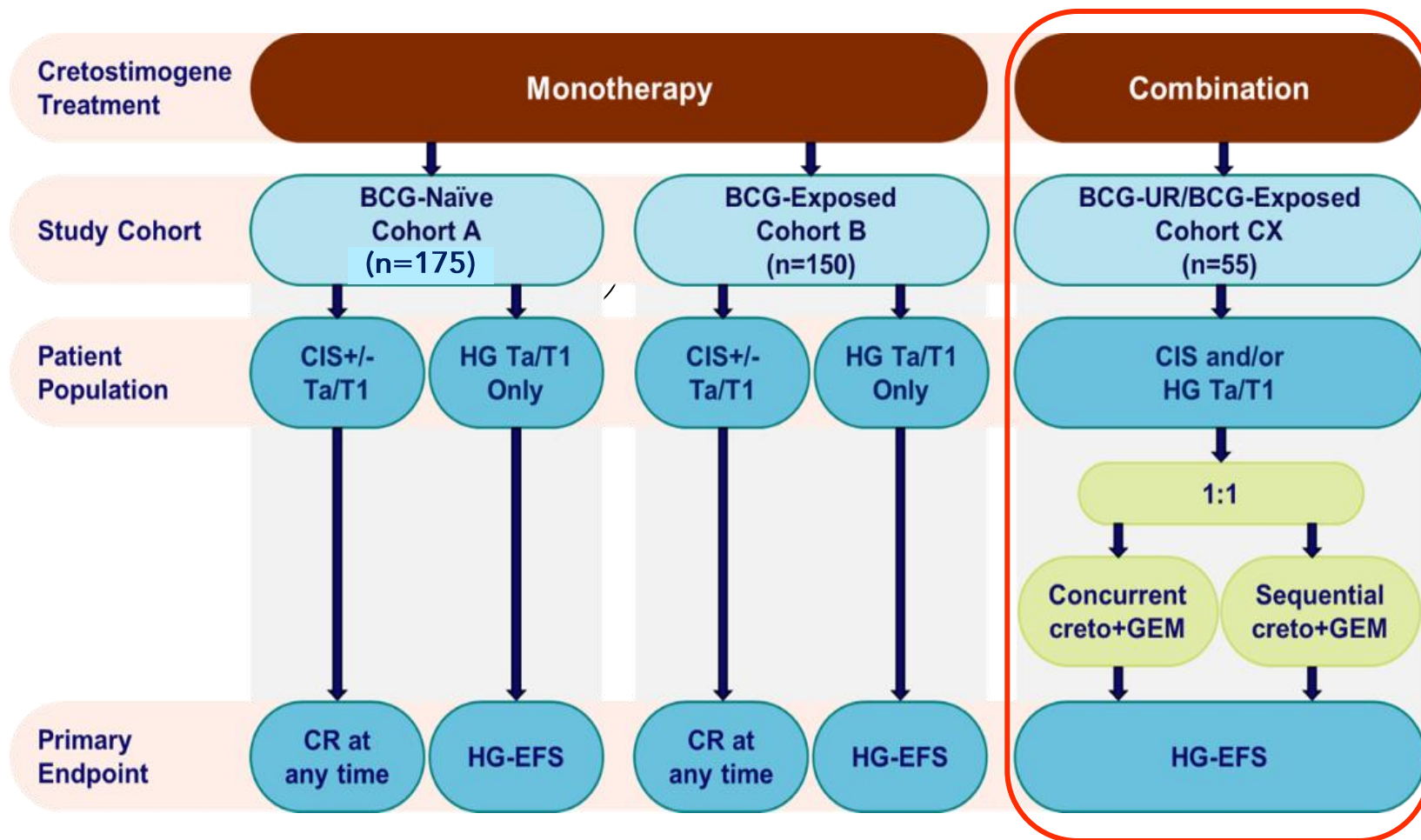
- Published evidence supports efficacy and safety of cretostimogene monotherapy and in combination with pembrolizumab for HR BCG-UR NMIBC and nivolumab for MIBC.¹⁻³
- Novel intravesical therapeutic approaches that leverage complementary mechanisms and immune-modulating synergy are still needed for HR NMIBC.
- Pre-clinical data supports mechanistic rationale for combining intravesical gemcitabine and cretostimogene.



THE LANCET Oncology

Intravesical cretostimogene grenadenorepvec oncolytic immunotherapy in high-risk, BCG-unresponsive, non-muscle-invasive bladder cancer with carcinoma in situ (BOND-003 Cohort C): a single-arm, phase 3 trial

Mark D Tyson II, Jong-Kil Nam, Shreyas S Joshi, Edward M Uchio, Seung Il Jung, Trinity J Bivalacqua, Gary D Steinberg, Neal D Shore, James M Burke, Hiroshi Kitamura, Ben Tran, Roger Li



BCG-Exposed

Patients who had prior BCG and either presented with CIS/HGTa recurrence at first evaluation (BCG-resistant), recurred outside of the BCG-unresponsive window following adequate BCG, or recurred within 24 months after inadequate BCG

BCG-Unresponsive

Participants who received adequate BCG (5+2) and present with:

- HG T1 at first evaluation following induction course
- HG Ta/T1 within 6 mo
- CIS within 12 mo

CIS= Carcinoma in Situ; CR=Complete Response; GEM= Intravesical Gemcitabine; HG-EFS= High-Grade Event-Free Survival
 HG-EFS defined as High-grade recurrence/persistence, progression to T1, progression to T2+ and death from any cause
 Concurrent: Same-day administration of cretostimogene (first) followed by gemcitabine throughout induction and maintenance.
 Sequential: Two weekly cretostimogene instillations followed by one gemcitabine instillation (Weeks 1, 2, 4, 5 vs Weeks 3, 6), continued in maintenance.

CORE-008 Cohort CX Treatment and Assessment Schedule

	Induction	Maintenance/Follow-up							Ext. Maintenance/ Long-Term Follow-up	
Month	0	3	6	9	12	15	18	21	24	30/36
Concurrent	 1 2 3 4 5 6	 1 2 3	 1 2 3	 1 2 3	 1 2 3		 1 2 3		 1 2 3	 (1 2 3)
Sequential	 1 2 3 4 5 6	 1 2 3	 1 2 3	 1 2 3	 1 2 3		 1 2 3		 1 2 3	 (1 2 3)

Legend

IVE creto

IVE GEM

Concurrent creto+GEM

- Re-induction allowed for patients with HG Ta and/or CIS at Month 3
- Assessments include: Cystoscopy & Cytology every 3 months; CT/MRU every 6 months
- Clinic-based instillation with flexibility to void at home after instillation during maintenance

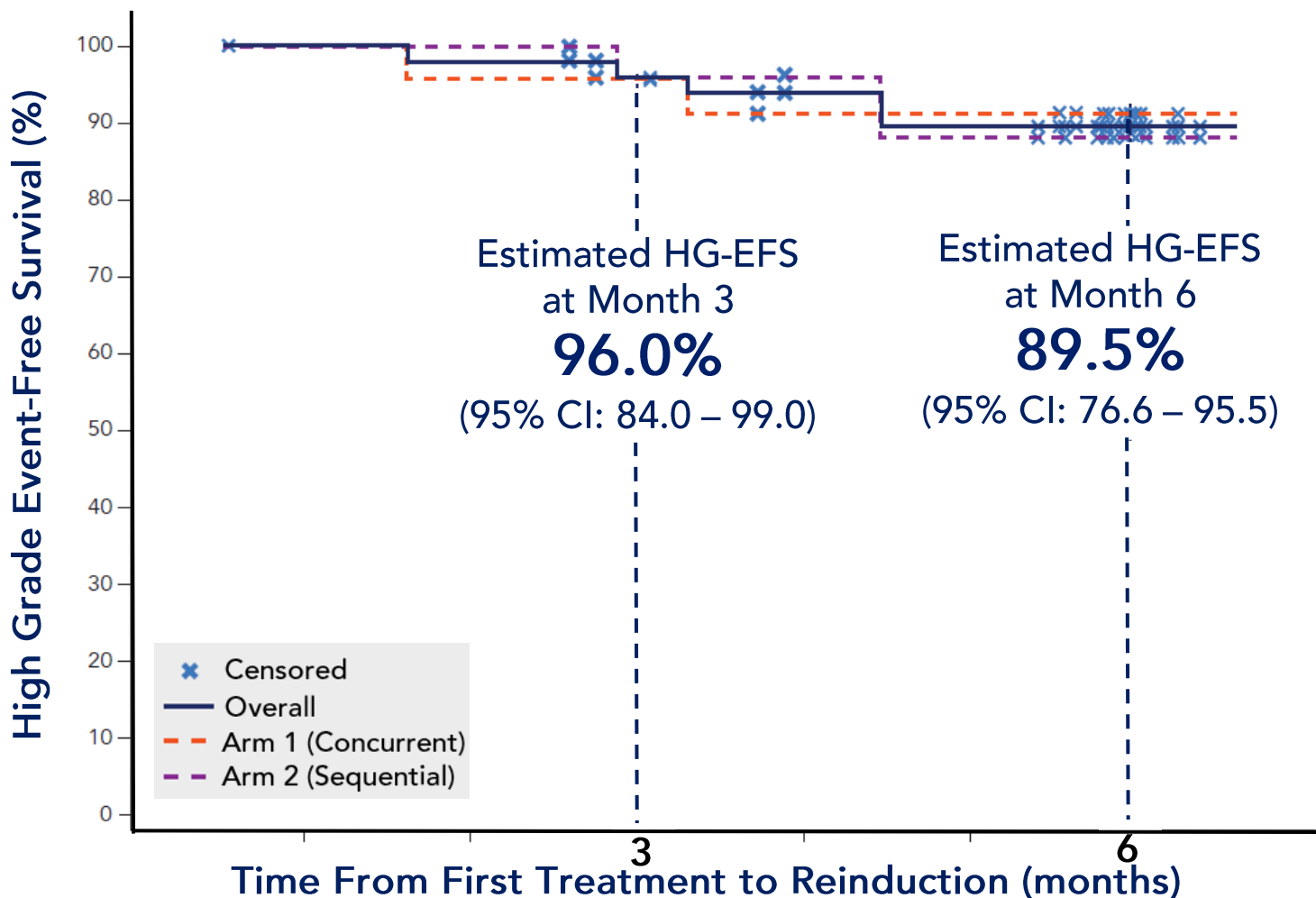
Concurrent: Same-day administration of cretostimogene (first) followed by gemcitabine throughout induction and maintenance.
 Sequential: Two weekly cretostimogene instillations followed by one gemcitabine instillation (Weeks 1, 2, 4, 5 vs Weeks 3, 6), continued in maintenance.
 Efficacy assessments based on local pathology review.

Patient Demographics & Baseline Characteristics

Patients in Safety Dataset	N=55	%
Gender		
Male	43	78.2
Female	12	21.8
Age (Years)		
Mean (Range)	73.1 (54-88)	
Median (IQR)	75 (66-79)	
Age (Categories)		
< 65	10	18.2
≥ 65 and < 75	17	30.9
≥75	28	50.9
ECOG PS		
0	48	87.3
1	6	10.9
2	1	1.8
HR NMIBC T-Stage at Study Entry		
CIS +/- HG Ta/T1	28	50.9
HG Ta/T1	27	49.1
BCG History, n (%)		
Median BCG doses (IQR)	7.0 (6-13)	
BCG-Exposed	36	65.5
BCG-Unresponsive	19	34.5

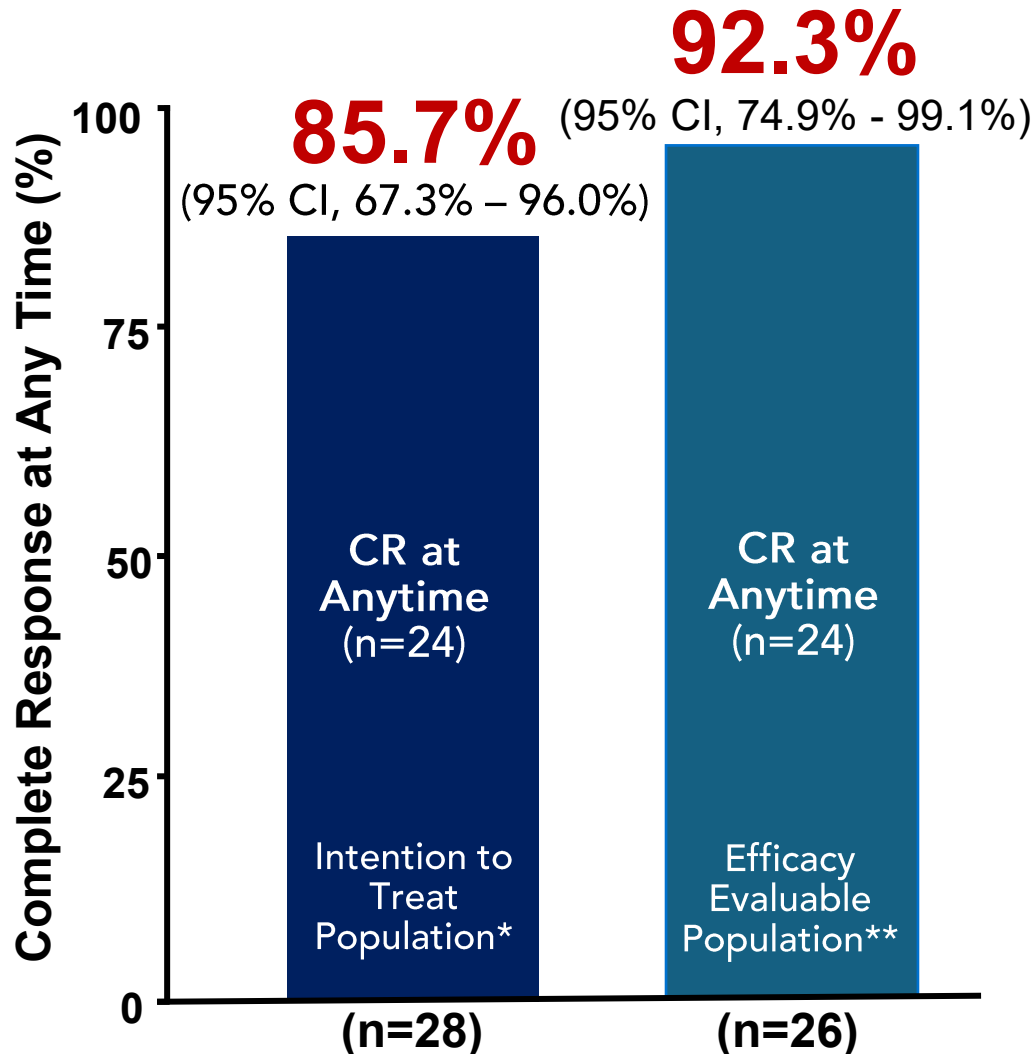
- All patients enrolled from the U.S. across multiple sites of care
 - 80.0% community
 - 20.0% academic
- **Majority of patients are:**
 - Male (78.2%)
 - White (92.7%)
 - > 65 years (81.8%)
- Cohort generally well-balanced across concurrent and sequential treatment arms

High-Grade Event-Free Survival at 3 and 6-Months From CORE-008 Cohort CX (ITT Population)



- Median follow-up: 6.6 months
- No significant differences in HG-EFS by arm
- Consistent response among BCG-UR and BCG-exposed subgroups
- No treatment-related progression to MIBC or mUC
 - 2 patients experienced NMIBC stage reclassification

High Complete Response Rates Within CIS-Containing Population



CR Rate	% (n/N)	95% Confidence Interval
Concurrent	83.3% 10 out of 12 patients	(51.6, 97.9)
Sequential	87.5% 14 out of 16 patients	(61.7, 98.5)

- Includes BCG-Exposed and BCG-Unresponsive patients
- High CR rates were achieved in both concurrent and sequential arms, with overlapping confidence intervals
- CR outcomes were directionally consistent with primary endpoint findings (HG-EFS)

CIS= Carcinoma in Situ; CR=Complete Response

CR defined as having negative cystoscopy, urine cytology, and biopsy (as indicated).

Efficacy data cutoff as of 13MAR2026. Efficacy assessments based on local pathology review.

* Intention to treatment (ITT) population includes all participants who are randomized in Cohort CX (Arm 1/Concurrent; Arm 2/Sequential).

** Efficacy evaluable population includes patients who have received at least four doses of cretostimogene, meet the definition of BCG-Unresponsive/BCG-Exposed and have completed a protocol-defined efficacy assessment at Month 3

Favorable and Well-Tolerated Safety Profile

Preferred Term (MedDRA v.26.1)	Overall (n=55)	
	Grade 1-2 n (%)	Grade ≥ 3 n (%)
Patients with ≥ 1 TRAE	36 (65.5 %)	0 (0)
Treatment-Related AE reported in ≥ 10% patients		
Bladder Spasm	26 (47.3)	0 (0)
Dysuria	19 (34.5)	0 (0)
Pollakuria	14 (25.5)	0 (0)
Fatigue	10 (18.2)	0 (0)
Micturition Urgency	8 (14.5)	0 (0)
Hematuria	6 (10.9)	0 (0)

- **0% Grade ≥ 3 TRAEs, SAEs or deaths**
- 85.5% (47/55) completed all protocol-defined treatments
 - Arm 1 (Concurrent)- 71.4% (20/28)
 - Arm 2 (Sequential)- 100% (27/27)
- **No patients discontinued on Arm 2 (sequential) due to TRAE**
- 4 patients withdrew from Arm 1 (concurrent) for persistent grade 1-2 localized TRAEs
- No difference in the proportion of patients with AEs between arms

AE= adverse events; SAE= Serious adverse events; TRAE=treatment-related adverse events

Safety Data Cutoff Date 13MAR2026

Concurrent: Same-day administration of cretostimogene (first) followed by gemcitabine throughout induction and maintenance.

Sequential: Two weekly cretostimogene instillations followed by one gemcitabine instillation (Weeks 1, 2, 4, 5 vs Weeks 3, 6), continued in maintenance.

CORE-008 Cohort CX: Summary and Conclusions

- The combination of cretostimogene and gemcitabine demonstrates **robust clinical efficacy and safety** in BCG-exposed and BCG-unresponsive NMIBC
- **Comparable efficacy** observed in both concurrent and sequential arms
- Sequential administration of intravesical cretostimogene and gemcitabine was **well-tolerated** and supports the feasibility of intravesical-only treatment strategies
- **Continued follow-up is underway** to further characterize longer-term outcomes

A circular inset image on the left side of the slide shows a doctor with a beard and stethoscope examining the shoulder of an elderly man with a white beard and glasses. The background of the entire slide is a solid blue color.

SWOG Trial S2611

A Randomized Comparison of Intravesical Therapies (ARCIS)

A Phase 3 RCT evaluating GEM-DOCE versus
CRETO-GEM for the treatment of
High-Risk BCG-unresponsive NMIBC

Mark Tyson, Scott Delacroix, Sia Daneshmand, Seth Lerner,
Cathy Tangen, Josh Meeks, Roger Li, Darrell Nakagawa

Rationale for ARCIS

- BCG unresponsive NMIBC
 - Durable bladder-sparing options needed
 - Gem-Doce: community standard, not randomized¹
 - Creto-Gem: biologically rational combination²
 - CORE-008 Cohort CX data
 - NCI CTPM called for head-to-head evidence⁴
 - ARCIS: FDA-aligned Ph3 RCT

CORE-008 Cohort CX³

Endpoint	Estimate for BCG-Unresponsive CIS and Papillary-only
6 month EFS	89.5% (95% CI: 76.6 – 95.5)
CR Rate at Any Time (ITT)	85.7% (95% CI, 67.3 – 96.0)
Grade 3 TEAEs	0%
Discontinuation	0%

1. Steinberg 2020; 2. Dinney, et al., unpublished; 3. Bivalacqua et al., 2026; 4. Apolo et al., 2025

ARCIS: A Randomized Comparison of Intravesical TherapieS; BCG: Bacillus Calmette-Guérin; BCGu: BCG-unresponsive; NMIBC: non-muscle invasive bladder cancer; GEM-DOCE: gemcitabine + docetaxel; CRETO-GEM: cretostimogene + gemcitabine; NCI: National Cancer Institute; CTPM: Clinical Trials Planning Meeting; FDA: Food and Drug Administration; Ph3: Phase 3; RCT: randomized controlled trial; CIS: carcinoma in situ; Pap: papillary; CR: complete response; ITT: intent-to-treat; EFS: event-free survival; TEAE: treatment-emergent adverse event; CI: confidence interval

ARCIS: A Randomized Comparison of Intravesical Therapies (SWOG 2611)

Pre-treatment



FFPE Urine AI Path

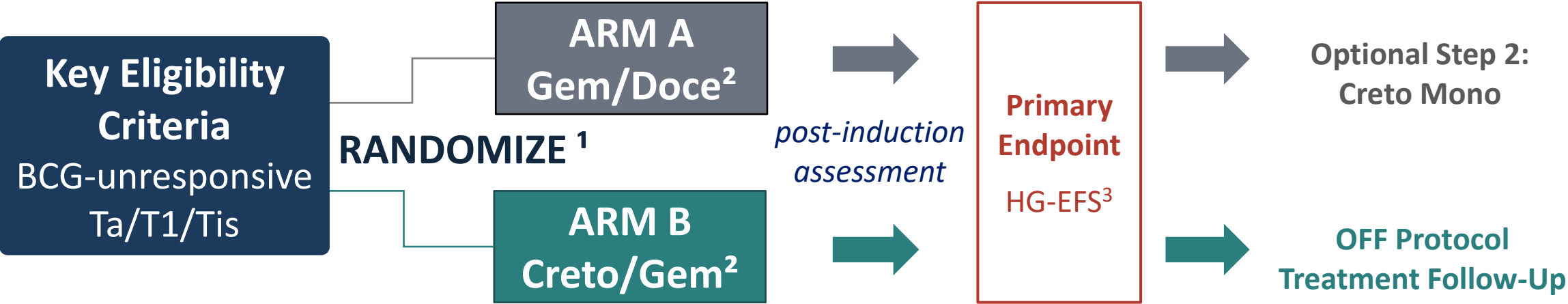
Two-drug sequential instillation (G, D)

Induction						Maintenance	
D1	D8	D15	D22	D29	D35	Mo 3–9	Mo 12–24
G-D	G-D	G-D	G-D	G-D	G-D	Monthly maintenance	Monthly maintenance

Post-treatment
12 mo or at recurrence



FFPE Urine AI Path



Single drug instillation cycling C, C, G

Induction						Maintenance	
D1	D8	D15	D22	D29	D35	Mo 3–9	Mo 12–24
Creto	Creto	Gem	Creto	Creto	Gem	CCG Every 3 mo	CCG Every 3 mo

1. Stratified: CIS ± HG Ta/T1 vs. HG Ta/T1 alone

2. Mandatory biopsy at 12 months for patients with CIS on the qualifying biopsy entering the trial (not merely history of CIS)

3. Primary endpoint: High-grade event defined as HG recurrence, progression (including metastatic disease), or death

AI: artificial intelligence; BCG: Bacillus Calmette-Guérin; C/Creto: cretostimogene grenadenorepvec; CCG: Creto-Creto-Gem; CIS/Tis: carcinoma in situ; D/Doce: docetaxel; EFS: event-free survival; FFPE: formalin-fixed paraffin-embedded; G/Gem: gemcitabine; HG: high grade; mo: months; Ta/T1/Tis: non-muscle invasive tumor stages.

xCEED
(CORE-008 Cohort E):
Phase 3 Randomized Trial of
Cretostimogene +
Gemcitabine vs Gemcitabine
Monotherapy in BCG-Exposed
HR NMIBC

xCEED: Phase 3 Randomized Trial of Cretostimogene + Gemcitabine vs Gemcitabine Monotherapy in HR BCG-Exposed NMIBC

■ Rationale

- Large, clinically relevant BCG-exposed population with limited randomized evidence
- Designed to answer whether sequential intravesical cretostimogene + gemcitabine improves EFS vs gemcitabine monotherapy
- Builds directly on CORE-008 Cohort CX feasibility, safety and early efficacy signal
- Gemcitabine monotherapy
 - Ongoing BCG shortage
 - Real world USA evidence points to use of gemcitabine monotherapy¹
 - Poor uptake of gem/doce in community practice²
 - Efficacy, safety and tolerability of gemcitabine demonstrated in HR NMIBC including in patients with BCG-exposed NMIBC^{3,4}
 - Other studies in BCG-exposed NMIBC using chemotherapy monotherapy as control⁵

¹Kulkarni, G.S., Cote, S., Kelleher, M., Yin, X., Lin, D. and Williams, S.B., 2025. IP02-26 REAL-WORLD TREATMENT PATTERNS IN PATIENTS WITH BCG-EXPOSED PAPILLARY ONLY HIGH-RISK NON-MUSCLE INVASIVE BLADDER CANCER. *Journal of Urology*, 213(5S), p.e109

²FDA Public Workshop: Contemporary Issues in Non-Muscle Invasive Bladder Cancer (NMIBC) Trial Design and Interpretation. 18 May 2026.

³Di Lorenzo G, Perdonà S, Damiano R, et al. Gemcitabine versus bacille Calmette-Guérin after initial bacille Calmette-Guérin failure in non-muscle-invasive bladder cancer: a multicenter prospective randomized trial. *Cancer*. 2010;116(8):1893-1900.

⁴Moyer, J.A., Ashraf, M., Mi, L., Zganjar, A.J., Lyon, T.D., Shah, P.H., Boorjian, S.A. and Tyson, M.D., 2026. Comparative effectiveness of intravesical gemcitabine versus sequential gemcitabine and docetaxel for high-risk non-muscle-invasive bladder cancer. *Urologic Oncology*, published online 13 July 2026

⁵Porten, S., Bhanvadia, S., Najmi, S., Sweiti, H., Maffeo, J., Stromberg, K., Gale, J. and Pradere, B., 2025, March. SunRISe-5: a phase 3, randomized, open-label study of TAR-200 compared with intravesical chemotherapy after bacillus Calmette-Guérin in recurrent high-risk non-muscle-invasive bladder cancer. In *Urologic Oncology: Seminars and Original Investigations* (Vol. 43, No. 3, pp. 54-55). Elsevier.

xCEED (CORE-008 Cohort E): Phase 3 Randomized Trial of Cretostimogene + Gemcitabine vs Gemcitabine Monotherapy in BCG-Exposed HR NMIBC

Key Eligibility Criteria

- HR BCG-Exposed NMIBC
 - CIS +/- Ta/T1 or HG T1/Ta
 - BCG-resistant
 - Delayed relapse after *adequate* BCG
 - Delayed relapse after *inadequate* BCG
- No history of BCG-unresponsive NMIBC
- ECOG PS 0-2

Stratification Factors

- Presence of CIS at baseline
- Time since last BCG dose

Disease Assessments

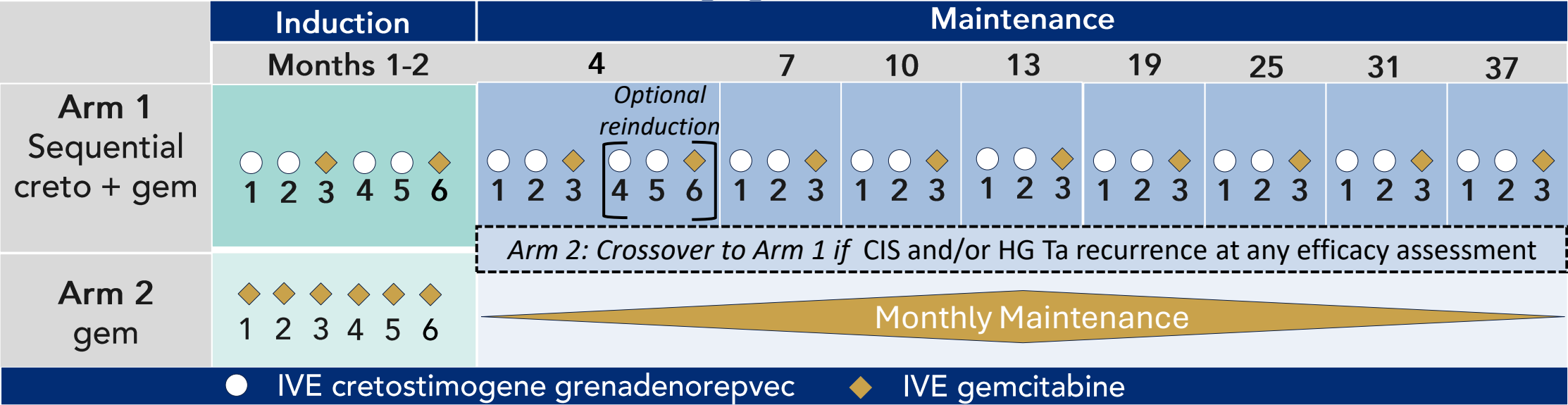
- Cystoscopy
- Urine cytology
- Biopsy for cause
- Imaging

Primary Endpoint

- EFS

Key Secondary Endpoints

- PFS
- CFS
- OS
- Safety
- DoR
- PROs



Reinduction is permitted in Arm 1 for biopsy-confirmed persistent high-grade Ta or CIS at the Month 3 efficacy assessment

BCG: bacillus Calmette-Guérin; CFS: cystectomy free survival; CIS: carcinoma in situ; creto: cretostimogene; DoR: duration of response; ECOG PS: Eastern Cooperative Oncology Group performance status; EFS: event free survival; gem: gemcitabine; HG: high grade; HR: high risk; NMIBC: non-muscle invasive bladder cancer; OS: overall survival; PFS: progression free survival; PROs: patient reported outcomes

Conclusions and Next Steps

- CORE-008 Cohort CX: cretostimogene plus gemcitabine showed robust efficacy and safety in BCG-exposed and BCG-unresponsive NMIBC, with comparable results in the concurrent and sequential arms
- Sequential intravesical dosing was well tolerated, supporting intravesical-only treatment strategies; follow-up continues
- ARCIS (SWOG Phase 3) will provide the randomized head-to-head evidence of GEM-DOCE versus CRETO-GEM in BCG-unresponsive disease
- Focus now turns to xCEED (Cohort E): Phase 3 randomized trial of sequential cretostimogene + gemcitabine vs gemcitabine monotherapy in BCG-exposed HR NMIBC (N~314; primary endpoint EFS)
- Exciting TM plan ahead
- Future work with Dr Li on cretostimogene combination therapy in MIBC
 - SPARE-001



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Thank You

Bladder Cancer Patients and Their Families Key Investigators, Study Coordinators, Nurses

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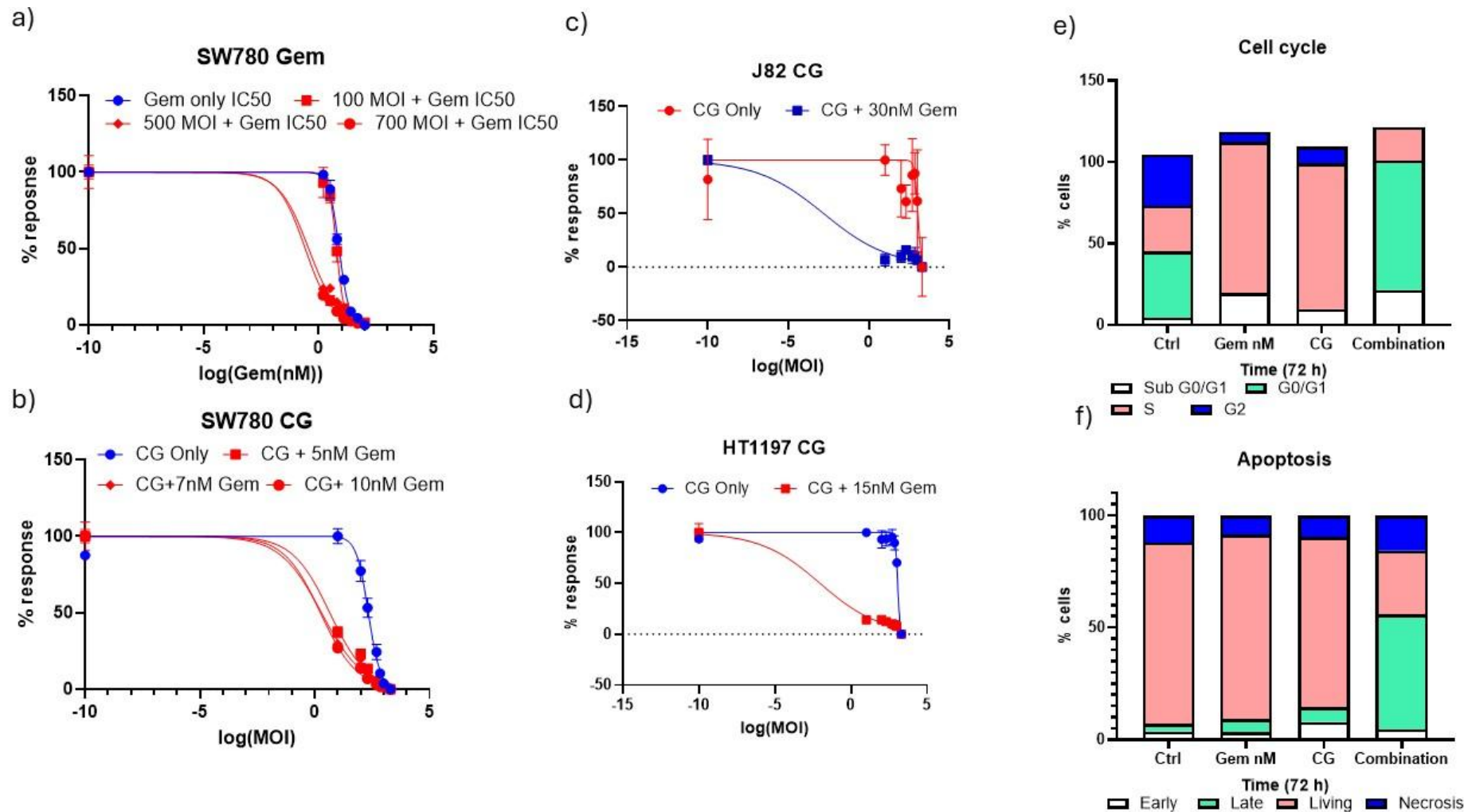
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Gemcitabine Enhances the Anti-Tumor Activity of Cretostimogene



- Enhanced in-vitro response to cretostimogene when combined with gemcitabine.
- Increased G0/G1 cell-cycle arrest and apoptosis.

ARCIS Questions / Discussion

Statistics & Funding

- Parameters
 - GEM/DOCE
 - EFS at 2 yrs = 40 %
 - CRETO/GEM
 - EFS at 2 years = 55 %
 - One-sided alpha = 0.023
 - Power = 0.87
 - HR = 0.65
- Sample size
 - 308 total
 - 140 per arm
 - 10% cushion
- Interim Analysis
 - 25%, 50%, and 75% of expected EFS events
- Funding:
 - Drug & logistics support: CG Oncology (cretostimogene)

Q1: Clarify CORE-008 evaluable denominators and CIS responder counts

Overall Cohort Cx

- 55 enrolled
- 50 efficacy evaluable
- 24/26 efficacy evaluable CIS achieved CR at any time

Q5. BCG Unresponsive CIS / Pap

- Efficacy evaluable = 15
- 6 month CR = 14/15 (93.3%)

Q2: Role of Step 2 Cretostimogene Monotherapy Cohort

- Committee questioned value/statistical role of CRETO monotherapy cohort
- Not part of primary phase III comparison
- Nested phase II estimation cohort
 - Evaluates cretostimogene after recurrence on GEM-DOCE
 - Primary objective: estimate 12-month EFS
 - Secondary: CIS CR rate, DoR, safety
- Anticipated $n \approx 70$ provides $\sim \pm 12\%$ precision for 12-month EFS
- Generates prospective sequence-specific efficacy/safety data

Q3: Step 2 Cretostimogene Cohort: Eligibility and Bias Mitigation

- Committee concern: Step 2 eligibility may be heterogeneous and bias GEM-DOCE conduct
- Step 2 is not available before a primary EFS event
 - Patients cannot stop GEM-DOCE simply to receive cretostimogene
 - Step 2 occurs only after pathologically confirmed HG recurrence/persistence
- Primary phase III endpoint remains unaffected
- Eligibility will be tightened
 - Completion of induction, unless stopped for treatment-limiting toxicity
- Not a separate trial: designed to answer a prospective sequencing question

Q4: Quantitative Rationale for 2-Year EFS Assumption

- Committee asked for added support for assumed 2-year EFS of 55% with CRETO-GEM
- Assumption is not based on CORE-008 6-month data alone
- CORE-008 BCG-unresponsive CIS subset:
 - 6-month HG event-free: $10/11 = 90.9\%$
- GEM-DOCE benchmark in BCG-unresponsive CIS:
 - 6-month HG recurrence-free: $\sim 75\%$ (95% CI, 63–84)
- Durability support:
 - BOND-003 and CORE-001: $\sim 90\%$ of 12-month CRs remain in CR at 24 months
- Cross-study comparison limitations acknowledged

Q6: Maintenance Treatment Intensity and EFS Interpretation

- Committee asked whether maintenance schedule differences could affect EFS interpretation
- Clarification: no intended residual difference in maintenance intensity
 - Both arms: 9 maintenance treatments after induction in year 1
 - Both arms: 12 maintenance treatments in year 2

Q7: Rb-E2F Pathway Analyses

- Committee asked whether Rb-E2F analyses can be prespecified
- Not proposed as a formal named exploratory efficacy objective at this time
- Rationale:
 - No validated, commercially available Rb-E2F assay for this setting
 - Expected stratum sizes cannot be reliably estimated

Q8: Operational Role of Interim Analyses

- Committee asked about late interim analyses when accrual is 88–100% complete
- Interim analyses are not primarily accrual-stopping tools
- Primary value: potential earlier answer to the phase III question
 - Efficacy or futility result could emerge more than 2 years before final analysis
- DSMC/CTEP recommendations would depend on data maturity and result

Q9: Access and Scalability Considerations

- Committee asked about payer, access, and scalability if CRETO-GEM is superior
- ARCIS is not designed as a formal cost-effectiveness study
- Trial will generate implementation-relevant data
- GEM-DOCE implementation barriers are acknowledged
- CRETO-GEM may reduce some operational barriers, but still requires intravesical treatment infrastructure
- Future access will depend on regulatory status, guidelines, reimbursement, acquisition cost, and total value of care

Q10: CG Oncology Drug Supply Agreement

- Committee asked whether drug supply support is finalized
- CG Oncology has confirmed readiness to proceed to final agreement
- Final drug supply agreement will be executed with SWOG

Q11: Interim Analysis and Futility Rule

- Committee requested more detail on interim analyses and futility stopping
- Interim analyses planned at approximately:
 - 25%, 50%, and 75% of expected EFS events
- First interim: futility only
- Second and third interim: futility and efficacy
- EFS analyzed using Cox regression
- Futility target: alternative hypothesis $HR=0.65$