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TARGETING CANCER WITH
POWER AND PRECISION

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August 9, 2018

NASDAQ: SESN



FORWARD-LOOKING STATEMENTS

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LATE-STAGE COMPANY DEVELOPING TREATMENTS FOR CANCER



Phase 3 registration trial for
VICINIUM™
for high-grade non-muscle invasive
bladder cancer (NMIBC);
ENROLLMENT COMPLETE



**POSITIVE 3-MONTH
PHASE 3 DATA** in NMIBC*

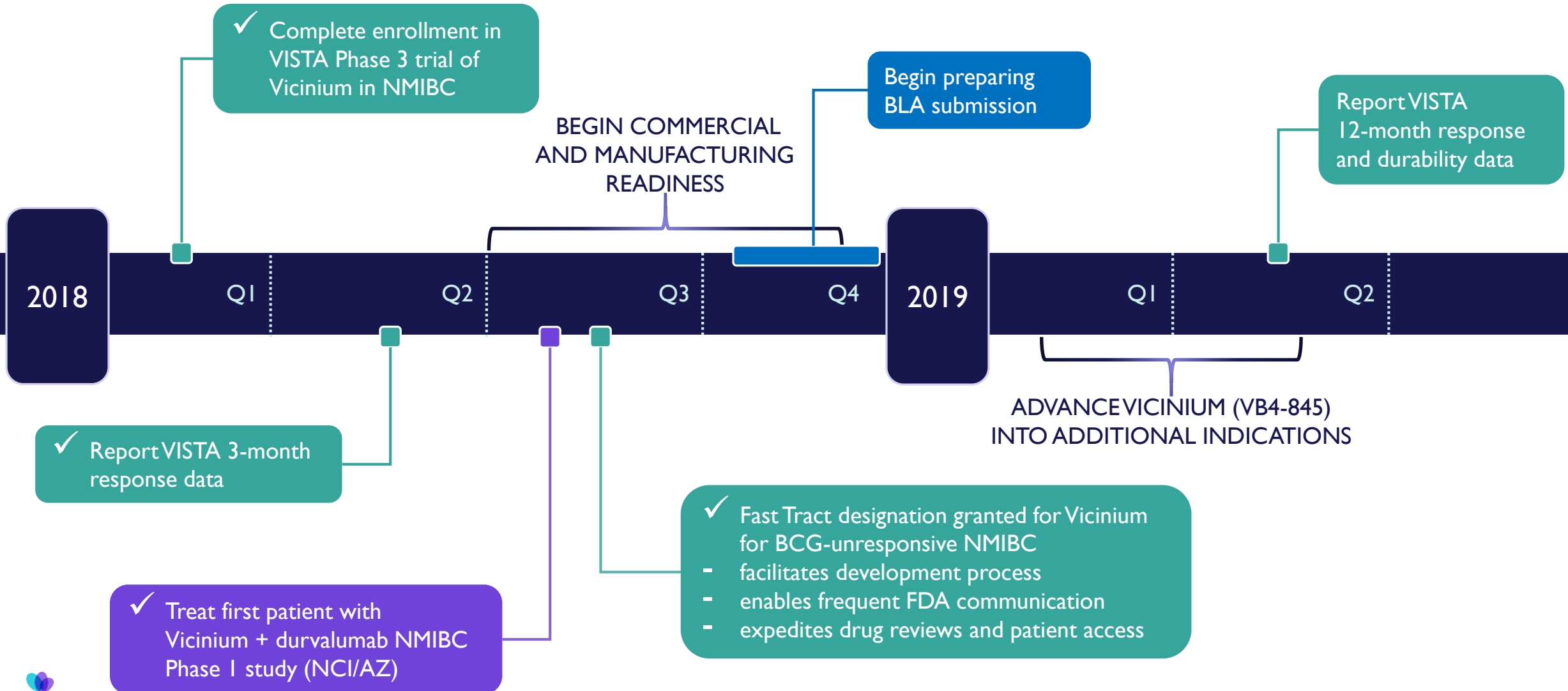


Vicinium expansion potential
via **CHECKPOINT INHIBITOR
COMBINATIONS**
in a range of tumor types



NEXT-GENERATION
fusion proteins design to
improve upon and overcome
challenges of existing ADCs

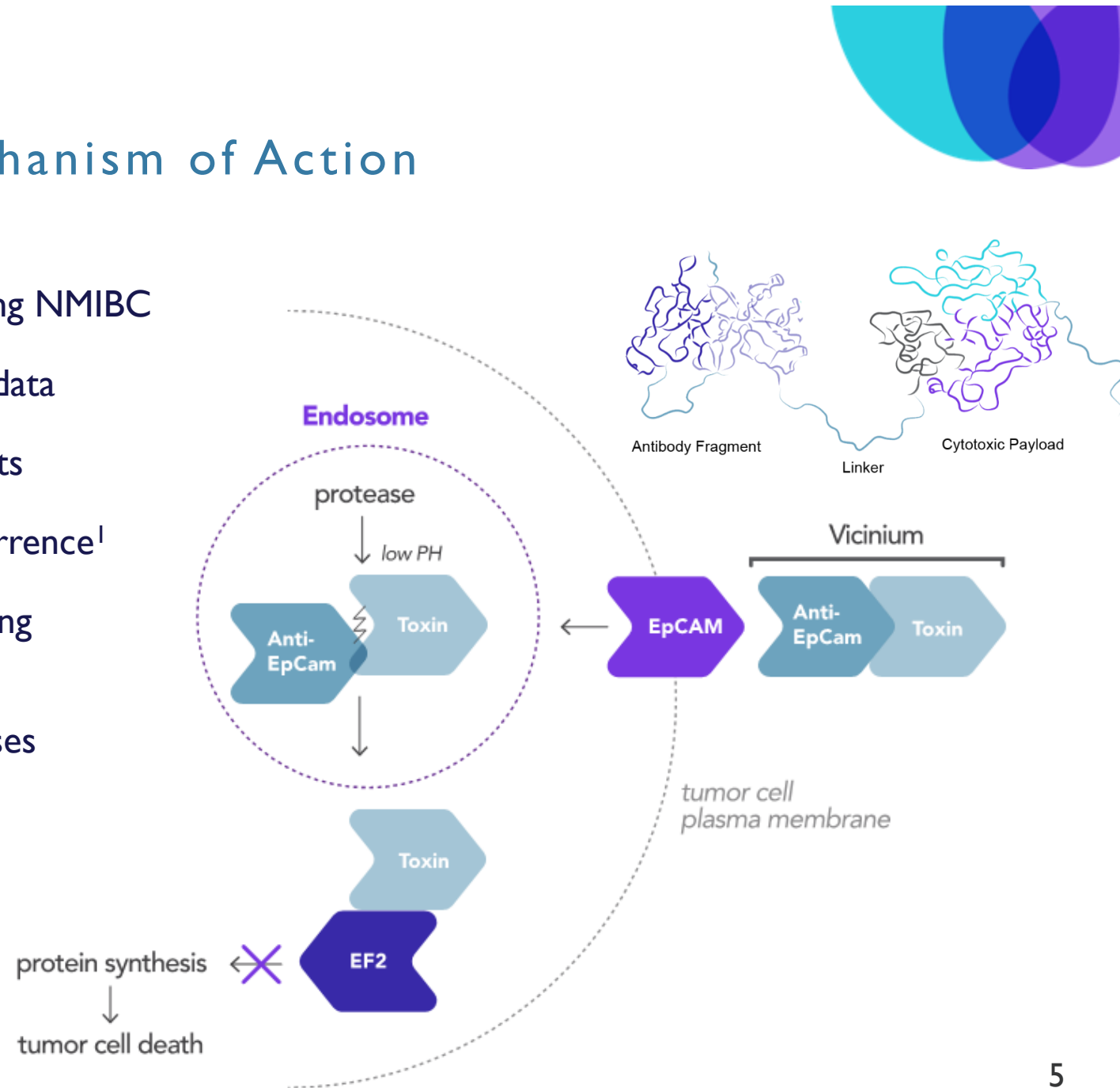
2018 Milestones Leading to BLA Preparation



VICINIUM™

Efficacy, Safety and Unique Mechanism of Action

- Targeted therapy with unique modality for treating NMIBC
- Efficacy established in NMIBC; positive 3-month data
- Well-tolerated with limited serious adverse events
- Durability of responses; 2+ years to disease recurrence¹
- Simple administration; potential for in-home dosing by medical professional
- Potential to enhance anti-tumor immune responses in combination with I/O agents



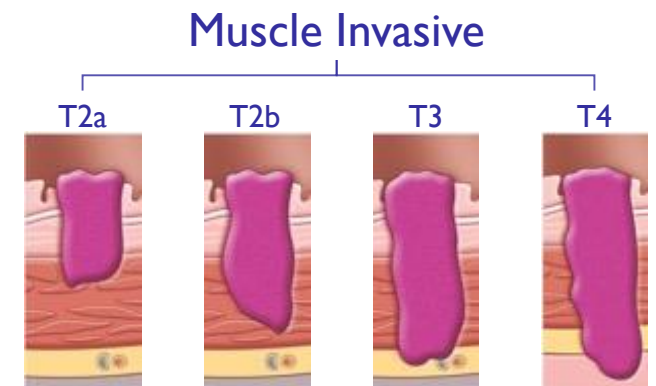
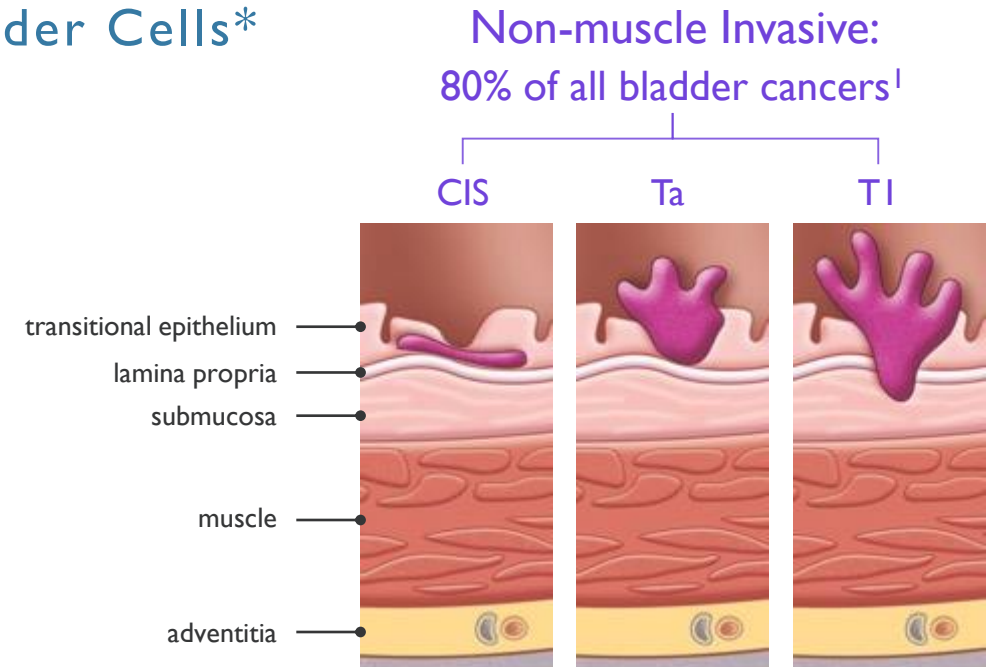
Strong Rationale for Vicinium for High-grade NMIBC

98% High-grade NMIBCs Express EpCAM;

Minimal-to-no EpCAM Expression on Normal Bladder Cells*



- Carcinoma in situ (CIS, 10%¹)
 - All high-grade
 - 73% recurrence with concomitant disease
 - >50% progress to muscle invasive²
- Papillary stage Ta (60%¹)
 - 18% are high-grade²
 - ~50% recur
- Papillary stage T1 (30%¹)
 - Nearly all high-grade¹
 - Worse prognosis with concomitant CIS²
 - 80% recur; half progress to muscle invasive³



*Data generated in prior internal studies using internal antibody

¹Aldousari, S. Can Urol Assoc J. 2010 Feb. ²Anastasiadis A. *Therapeutic Advances in Urology* 2012. ³Nepple Can Urol Assoc J. 2009
Image source: Pugashetti, N. Non-Muscle-Invasive Bladder Cancer: Review of Diagnosis and Management, 2011



BLADDER CANCER: Highly Prevalent and Most Expensive Cancer to Treat in US¹


6th most common cancer²

72 years median age at diagnosis²

\$4B+ in annual costs¹

- ~82,000 new cases diagnosed annually in U.S.; 2x prevalence in EU²
- Majority of patients treated in community urological centers
- bacillus Calmette-Guérin (BCG) remains SOC since 1980s; ~50% of patients do not respond or relapse within 3 years^{3,4}
 - Major complications can appear after systemic absorption of BCG⁵
 - BCG treatment limited by its side effects³
- ***Survivors face life-long risk of recurrence with stage progression***

¹Mossanen M. Curr Opin Urol. 2014 ²National Cancer Institute, SEER Cancer Stat Facts: Bladder Cancer, 2017

³Aldousari, S. Can Urol Assoc J. 2010 Feb ⁴Sylvestor, R.J. J Urol. 2005 Jul ⁵Anastasiadis A. Therapeutic Advances in Urology 2012. 



NO SIGNIFICANT TREATMENT INNOVATION IN 30+ YEARS

BLADDER REMOVAL: PRIMARY RECOMMENDED APPROACH AFTER BCG

60-70% LIFE-TIME RISK OF RADICAL CYSTECTOMY¹

- Significant morbidity (30%-60% within 30–90-days)²
- Mortality (2-9% within 6 months)³
- High complication rate within 90-days² (64%)
- Many require ER visits (35%) and readmission (26%)²

LIFE FOLLOWING CYSTECTOMY REQUIRES CATHETERIZATION AND URINARY DIVERSION

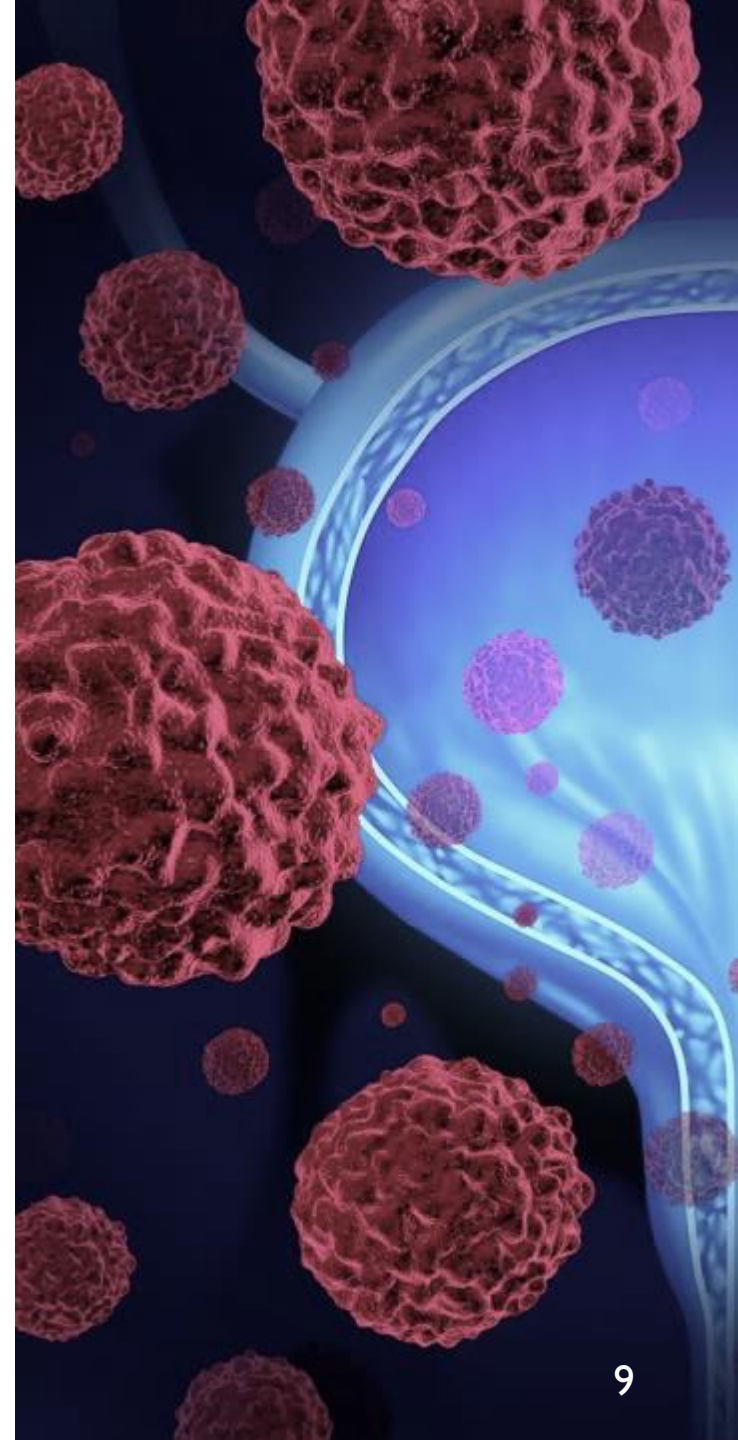
- Potential for further BCG supply shortages
- Last U.S. drug approved (1998) limited to BCG-refractory CIS in patients for whom immediate cystectomy would be associated with unacceptable morbidity or mortality⁴
 - 12-month CRR of ~10%
 - Painful dosing administration; challenging toxicities (spasm, urinary incontinence, urinary tract infection, nausea)



FDA Recognizes Need for New Treatments for Patients with BCG-unresponsive NMIBC

“In the absence of pharmacologic intervention or cystectomy, BCG-unresponsive CIS, with or without resected disease, will persist and progress.”

“In BCG-unresponsive NMIBC, a single-arm clinical trial with complete response rate and duration of response as the primary endpoint can provide primary evidence of effectiveness to support a marketing application.”



VISTA TRIAL: Phase 3 Registration Study of Vicinium for BCG-unresponsive NMIBC



- Single-arm, open-label, multi-center registration study in 3 cohorts
- Dosing: 30mg Vicinium intravesical instillation in 50 ml buffered saline held for 2 hours
 - Induction: biweekly for 6 weeks → weekly for 6 weeks
 - Once CR, proceed to maintenance every other week for 2 years
- Primary endpoint: Complete response rate and duration of response in Cohort 1
 - CR= negative central urine cytology, pathology and local cystoscopy
- Key Secondary Endpoints: event-free survival (EFS) in all patients, time to disease recurrence, time to cystectomy, progression-free survival, overall survival, safety and tolerability

COHORT 1:

CIS with or without papillary tumors that recurred within 6 months of BCG

COHORT 2:

CIS with or without papillary tumors that recurred >6 months but ≤ 11 months of BCG

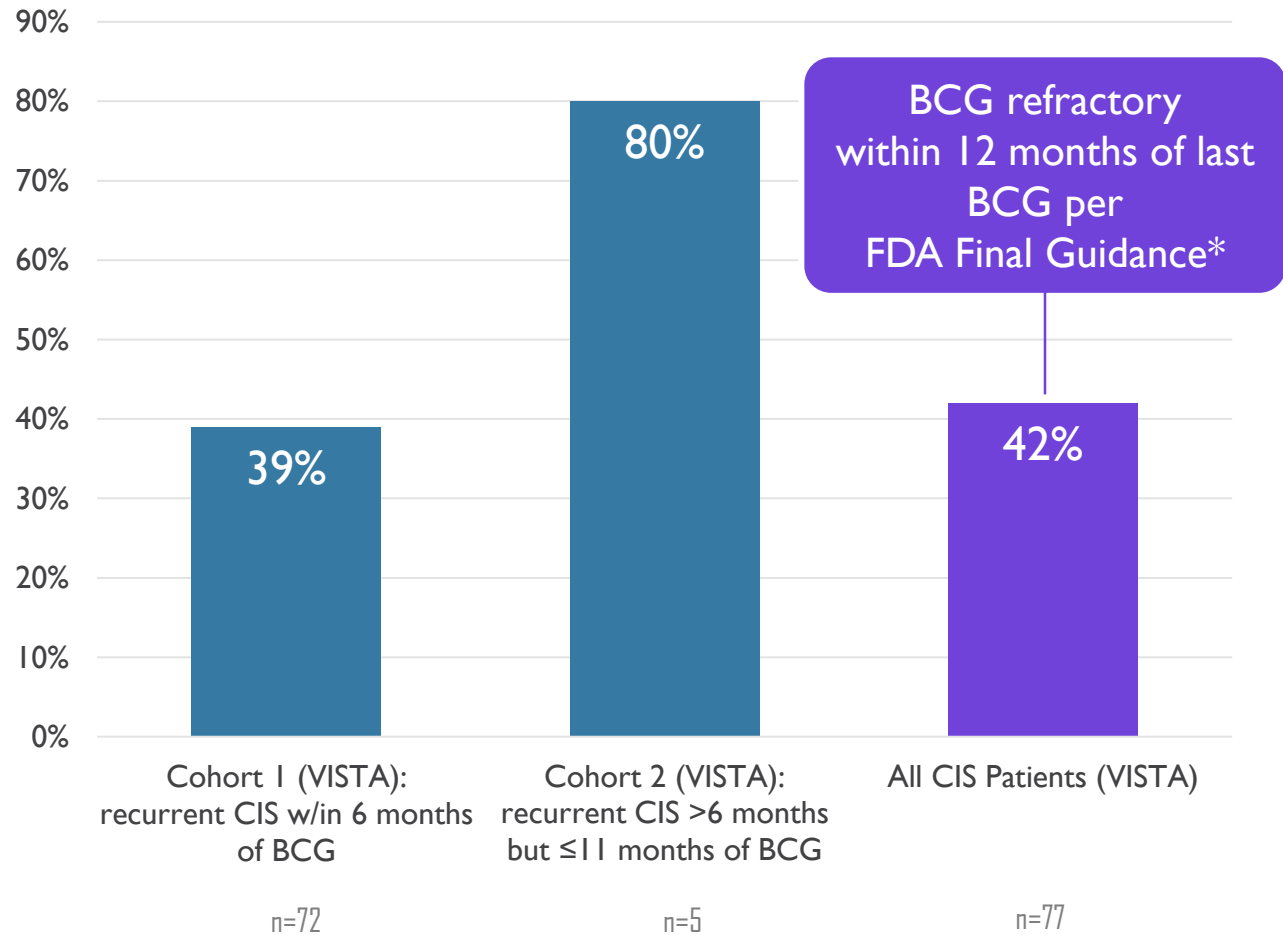
COHORT 3:

Papillary tumors only that recurred within 6 months of BCG



VISTA TRIAL: 42% COMPLETE RESPONSE RATE at 3-months in CIS Patients

3-MONTH COMPLETE RESPONSE RATE WITH VICINIUM



CIS PATIENT JOURNEY TO COMPLETE RESPONSE

76 YEAR OLD FEMALE

CIS
diagnosed
March 2016



Post TURBT treated BCG
per AUA guidelines
(induction course of 6 doses over 6
weeks followed by maintenance
course of 3 doses over 3 weeks)



CIS remained
confirmed by local and
central pathology
September 2016



Enrolled into VISTA Trial
cohort 1 October 2016;
treated with Vicinium

CONFIRMED COMPLETE RESPONSE OBSERVED JANUARY 2017

Patient remains on treatment with
complete response at last observation out to

19 MONTHS



VISTA TRIAL: Encouraging Clinical Activity in Patients with Papillary Tumors

- Patients deemed to have no visible evidence of disease when starting Vicinium treatment
- Disease recurrence remains appropriate response criteria
- Time to disease recurrence remains standard clinical endpoint

68%

RECURRENCE-FREE
RATE AT 3-MONTHS
WITH VICINIUM

(n=34)

VISTA TRIAL: Vicinium Well-tolerated¹



Treatment-Emergent Adverse Event ²	Patients (n=129) with:			
	All TEAEs		Treatment-Related TEAEs	
	All Grades	Grade ≥3	All Grades	Grade ≥3 ³
Any TEAE	104 (81%)	36 (28%)	52 (41%)	5 (4%)
Urinary tract infection	37 (29%)	5 (4%)	13 (10%)	2 (2%)
Dysuria	25 (19%)	0 (0%)	14 (11%)	0 (0%)
Hematuria	21 (16%)	2 (2%)	11 (9%)	0 (0%)
Pollakiuria (frequency of urination)	16 (12%)	0 (0%)	12 (9%)	0 (0%)
Diarrhea	13 (10%)	0 (0%)	2 (2%)	0 (0%)
Fatigue	13 (10%)	0 (0%)	8 (6%)	0 (0%)
Micturition urgency	11 (9%)	0 (0%)	8 (6%)	0 (0%)
Nausea	10 (8%)	1 (1%)	3 (2%)	0 (0%)
Lipase increased (all asymptomatic)	10 (8%)	4 (3%)	2 (2%)	1 (<1%)

Patients (n=129)	Treatment-Emergent SAEs ⁴	Treatment-Related SAEs
Any Serious AE	17 (13%)	4 (3%)
Acute kidney injury or renal failure	4	3
Hematuria	3	0
Cholestatic hepatitis	0	1

¹ <1% (n=4) treatment discontinuations due to AEs or progression of bladder cancer

² Includes named TEAE and Lab Investigations occurring in more than 10 (8%) subjects regardless of treatment relationship

³ No grade 5 treatment-related adverse events observed

⁴ All SAEs that occurred in more than 1 patient

Expanding Vicinium Benefit by Combining with Immuno-oncology Agents



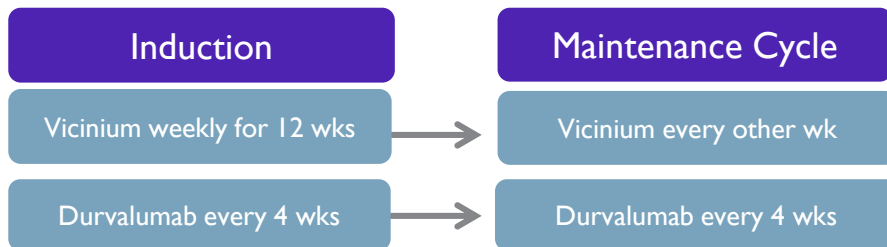
- Anti-tumor T-cell responses critical to success of checkpoint inhibitors
- Preclinical and clinical data suggest Vicinium promotes host anti-tumor immune responses via immunogenic cell death¹
 - Promotes pro-inflammatory environment; drives anti-tumor T-cell responses by releasing tumor neoantigens into environment
 - Cell death signals recognized by APCs
 - Hallmark presence of Damage Associated Molecular Patterns (DAMPs)
- Vicinium treatment of tumor cells *in vitro* results in increase in DAMPs² supporting immunogenic cell death
 - Potential to drive host anti-tumor immune responses that synergize with checkpoint inhibitors and I-O agents

INDUCTION OF
IMMUNOGENIC CELL
DEATH CAN TURN
“COLD” TUMORS “HOT”

Phase I Checkpoint Inhibitor Combination in NMIBC: Enrollment Initiated



- NCI CRADAs with AstraZeneca: Vicinium + durvalumab (PD-L1 checkpoint inhibitor)
- Provide clinical validation of Vicinium's ability to induce anti-tumor immune responses necessary for effective use of checkpoint inhibitors
- Assessment of critical biomarkers that could support broader combination studies
- Key endpoints include safety, tolerability, preliminary combination anti-tumor activity



Evaluate every three months (Cysto, Cytol, Biopsy)
If CR repeat maintenance cycle up to 7 cycles
(2 years including induction phase)



VICINIUM Monotherapy Demonstrates Opportunity in Late-stage SCCHN

- Targeted tumor cell cytotoxicity may lead to cross-priming and immune therapy (T-cell-mediated killing) of non-targeted tumors
- Phase 2 U.S. trial completed
 - Well-tolerated; pain at injection site reported as most common AE
 - Reduction in bi-directional size of principle targeted tumor observed in 71% (10/14) of evaluable patients

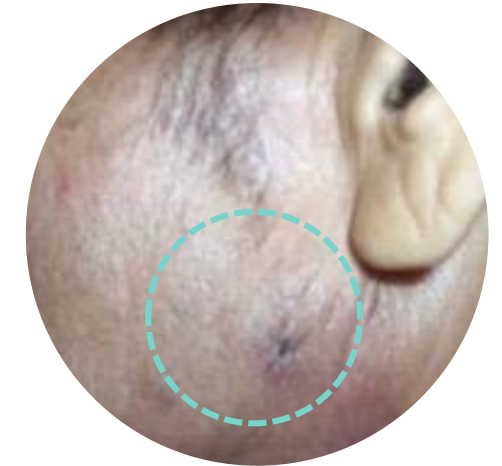
Responses Observed
in Both Injected &
Non-Injected Tumors

PRE-TREATMENT

AFTER FOUR WEEKS
OF TREATMENT

PATIENT A:

Injected Tumor



PATIENT B:

Non-Injected
Tumor

Injected Tumor



Financially Strong: Capital Well Past 12-Month VISTA Trial Results



\$19.7 M

in cash and cash equivalents
as of 3/31/18

\$4.2 M

in cash proceeds from 5.2M shares
issued pursuant to warrant exercises
between 4/1/18 - 5/10/18*

\$40 M capital raised in follow-on offering 5/30/18



- Positive Vicinium preliminary data from VISTA Trial in BCG-unresponsive high-grade NMIBC
- FDA engagement and commercial readiness planning underway; BLA preparations to begin
- VISTA Trial 12-month data expected mid-2019
- Enrollment initiated in NMIBC combination trial with PD-L1 by NCI
- Study planned for checkpoint inhibitor combination in SCCHN
- Exploring addition Vicinium indications
- Pipeline of next-generation fusion proteins



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