INLEXZO™ (gemcitabine intravesical system)
INLEXZO - Use in BCG-Unresponsive High-Risk NMIBC With CIS ± Papillary Tumors

Study overview[a-c]

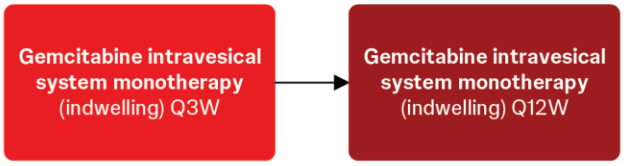
SunRISe-1

Ongoing, phase 2b, open-label, randomized, parallel-cohort, multicenter study evaluating the efficacy and safety of INLEXZO plus systemic cetrelimab (investigational IgG4 antibody targeting PD-1 receptor; cohort 1), INLEXZO monotherapy (cohort 2), or cetrelimab monotherapy (cohort 3) in patients with BCG-unresponsive high-risk NMIBC with CIS ± papillary disease who are ineligible for or decline RC.

INLEXZO monotherapy is additionally being studied in patients with BCG-unresponsive papillary-only high-risk NMIBC (no CIS; cohort 4).[d]

Results from cohort 2 (n=85) are presented.

Study design[a-c]



Endpoints

- **Primary endpoint:** Overall CR rate[e,f]
- **Secondary endpoints:** DOR,[g] OS, PK, safety, tolerability, and PROs

Efficacy[a]

Select response rates[b,h]

Endpoint	Cohort 2 (n=85)
Number of patients, n	85
Centrally assessed overall CR rate at any time, % (n/N) [95% CI]	82.4 (70/85) [72.6-89.8]
12-month KM-estimated CR rate,[i] % (95% CI)	45.9 (35-57)
Number of responders, n	70
Median follow-up in responders, months (range)	20.2 (5-48)
Median DOR, months (95% CI)	25.8 (8.3-NE)
DOR of ≥12 months, % (n/N)	52.9 (37/70)
12-month KM-estimated DOR rate, % (95% CI)	56.2 (43.4-67.1)

Safety[a,b]

- Most TEAEs were grade 1 or 2.
- Median time to TEAE resolution: 3 weeks

Safety profile[b,h]

TRAE,[j] n (%)	Cohort 2 (n=85)[k]
≥1 TRAE, any-grade[l]	71 (83.5)
≥1 TRAE, grade ≥3[m]	11 (12.9)[n]
≥1 serious TRAE	5 (5.9)[o]
TRAEs leading to treatment interruption	27 (31.8)
TRAEs leading to treatment discontinuation	3 (3.5)[p]

- The most common any-grade TRAEs were pollakiuria (43.5%), dysuria (40.0%), micturition urgency (24.7%), UTI (21.2%), hematuria (16.5%), urinary tract pain (10.6%), bladder pain (8.2%), bladder spasm (8.2%), noninfective cystitis (7.1%), and urinary incontinence (5.9%).[a,b]
- No treatment-related deaths were reported.[a]

Tolerability

- INLEXZO insertion success rate: 99% (745/755)[q]

Additional analyses[r-v]

- Exploratory analyses of immune biomarker responses to INLEXZO monotherapy (cohort 2)[r,s] and MAICs of INLEXZO monotherapy (cohort 2) vs FDA-approved novel agents[t] have been presented.
- A urine-based utDNA analysis was conducted, and the baseline MRD status and Genomic Disease Burden were correlated with INLEXZO monotherapy (cohort 2) response (CR, DOR, and CR ≥12 months).[u]
- An analysis of SunRISe-1 data was conducted to evaluate rates of periprocedural prophylactic antibiotic use and infectious AEs in patients who received INLEXZO monotherapy.[v]

Guidelines[w]

- The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Bladder Cancer recommend gemcitabine intravesical system (INLEXZO) as a therapy option in BCG-unresponsive or BCG-intolerant high-risk NMIBC with CIS (with or without papillary) tumors (NCCN Category 2A).[w]
- NCCN Categories of Evidence define Category 2A as based upon lower-level evidence, and there is uniform NCCN consensus (≥85% support of the Panel) that the intervention is appropriate.[w]
- Please refer to the NCCN Guidelines for Bladder Cancer at www.nccn.org for current and complete recommendations for the use of gemcitabine intravesical system (INLEXZO).[w]
- Please refer to the full Prescribing Information for gemcitabine intravesical system (INLEXZO) for information on INDICATIONS and USAGE.

Click on the following link to related section within the document: SunRISe-1 Study

Abbreviations: AE, adverse event; BCG, Bacillus Calmette-Guérin; CI, confidence interval; CIS, carcinoma in situ; CR, complete response; DOR, duration of response; FDA, Food and Drug Administration; IgG4, immunoglobulin G4; KM, Kaplan-Meier; MAIC, matching-adjusted indirect comparison; MRD, minimal residual disease; NCCN, National Comprehensive Cancer Network; NE, not estimable; NMIBC, non-muscle-invasive bladder cancer; OS, overall survival; PD-1, programmed cell death protein-1; PK, pharmacokinetics; PRO, patient-reported outcome; Q12W, every 12 weeks; Q3W, every 3 weeks; RC, radical cystectomy; TEAE, treatment-emergent adverse event; TRAE, treatment-related adverse event; utDNA, urine tumor DNA; UTI, urinary tract infection.

[a]Daneshmand (2025).[1] [b]Daneshmand (2025).[2] [c]ClinicalTrials.gov NCT04640623 (2025).[3] [d]Per protocol amendment 4. [e]CR rate is defined as the proportion of patients without high-grade disease assessed by cystoscopy and biopsy and centrally read urine cytology at any timepoint.[3] [f]Response is based on centrally reviewed urine cytology, local cystoscopy, and central biopsy (if available). CRs do not have to be confirmed. A CR is defined as having a negative cystoscopy and negative (including atypical) centrally read urine cytology, or positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative (including atypical) centrally read cytology at any timepoint.[1] [g]DOR was defined as the time from the first CR to the first evidence of recurrence or progression or death, whichever occurs first. The 12-month assessment indicates 365 days of DOR, represented by 52 weeks/12 months.[1] [h]Data cutoff date of March 31, 2025.[1] [i]The 12-month observed overall CR rate is represented by disease evaluation occurring at 48 weeks from the first dose.[1] [j]An AE was categorized as related if the investigator determined that there was a possible, probable, or causal relationship between the AE and INLEXZO or the insertion or removal procedure or urinary placement catheter.[1] [k]Safety data are shown for all patients who received ≥1 dose of study drug.[1] [l]Reported in ≥5% of patients.[1] [m]Reported in ≥2% of patients.[1] [n]Patients may have had >1 grade ≥3 TRAE.[1] [o]Patients may have had >1 serious TRAE.[1] [p]Patients may have had >1 TRAE.[1] [q]Jacob (2025).[4] [r]Xylinas (2024).[5] [s]Guerrero-Ramos (2025).[6] [t]Daneshmand (2025).[7] [u]Kulkarni (2025).[8] [v]Zainfeld (2026).[9] [w]NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Bladder Cancer (2025).[10]

PRODUCT LABELING

- **INLEXZO (gemcitabine intravesical system) [Prescribing Information]**. Horsham, PA: Janssen Biotech, Inc; https://www.jnjlabels.com/package-insert/product-monograph/prescribing-information/INLEXZO-pi.pdf.
- **INLEXZO (gemcitabine intravesical system) [Instructions for Use]**. Horsham, PA: Janssen Biotech, Inc; https://www.jnjlabels.com/package-insert/product-instructions-for-use/INLEXZO-ifu.pdf.

CLINICAL DATA

SunRISe-1 Study

SunRISe-1 (NCT04640623) is an ongoing, phase 2b, open-label, randomized, parallel-cohort, multicenter study evaluating the efficacy and safety of INLEXZO (gemcitabine intravesical system), an intravesical drug releasing system (iDRS), referred to as TAR-200 in literature.

SunRISe-1 study is assessing INLEXZO plus systemic cetrelimab (investigational IgG4 antibody targeting PD-1 receptor; cohort 1), INLEXZO monotherapy (cohort 2), or cetrelimab monotherapy (cohort 3) in patients with Bacillus Calmette-Guérin (BCG)-unresponsive high-risk non-muscle invasive bladder cancer (NMIBC) with carcinoma in situ (CIS) with or without papillary disease who are ineligible for or decline radical cystectomy (RC). INLEXZO monotherapy is additionally being studied in patients with BCG-unresponsive papillary-only high-risk NMIBC (no CIS; cohort 4, per protocol amendment).[1-3]

The results of the SunRISe-1 study are also included in the INLEXZO product labeling. The efficacy and safety results below may vary from that in the INLEXZO product labeling due to the evaluation of different patient populations in the efficacy analyses and difference in evaluation of the individual safety events, contributing to differences in reported n-values and percentages.

Daneshmand et al (2025)[1] summarized the 1-year results of the SunRISe-1 study, including INLEXZO monotherapy use in patients with BCG-unresponsive high-risk NMIBC with or without papillary disease (cohort 2).

Study Design/Methods

- Phase 2b, ongoing, randomized, open-label, parallel-cohort, multicenter study[1,3]
  - Patients were enrolled between March 2021 and April 2024 at 142 sites in 14 countries.
  - Three CIS cohorts were originally designed to enroll 200 patients randomized 2:1:1 to cohorts 1-3.
  - In June 2023, INLEXZO monotherapy development was prioritized in the CIS population, and enrollment in cohorts 1 and 3 was closed on the basis of the more favorable risk-benefit profile observed with INLEXZO monotherapy in this setting based on the totality of evidence.
  - The protocol was amended to expand the INLEXZO monotherapy cohort to add an additional cohort of 80 patients for INLEXZO monotherapy in patients with papillary-only high-risk NMIBC (cohort 4).
- Patients in cohort 2 received INLEXZO (indwelling) monotherapy every 3 weeks for the first 24 weeks (6 months) and then every 12 weeks (Q12W) through week 96 (year 2).[1,3]
  - Patients continued treatment with INLEXZO for up to 2 years or until confirmed high-risk disease persistence, recurrence, or progressive disease based on central urine cytology and/or central biopsy assessment or local biopsy/local imaging.
- Reinduction was not allowed for nonresponders per study protocol.[4]
- **Select inclusion criteria**[1,3]**:**
  - Age ≥18 years
  - Histologically confirmed diagnosis of persistent or recurrent high-risk NMIBC CIS with or without papillary disease (tumor grade [T]1, high-grade Ta) within 12 months of completion of the last dose of BCG therapy
  - Ineligible for or have elected not to undergo RC
  - BCG-unresponsive high-risk NMIBC after treatment with adequate BCG therapy
    - Adequate BCG therapy defined as a minimum of 5 of 6 full doses of an induction course (adequate induction) plus 2 of 3 doses of a maintenance course, or ≥2 of 6 doses of a second induction course
  - Eastern Cooperative Oncology Group performance status of 0-2
- **Select exclusion criteria**[3]**:**
  - Muscle-invasive, locally advanced, nonresectable, or metastatic urothelial carcinoma (UC)
  - UC or histological variant at any site outside of the urinary bladder
  - Prior therapy with anti-programmed death 1 (PD-1) agent, anti-programmed death-ligand 2 (PD-L2) agent, or agent targeting inhibitory T-cell receptor
- **Primary endpoint:** Overall complete response (CR) rate at any time[1-3]
  - Overall CR rate is defined as the percentage of patients achieving a CR at any time posttreatment. CR was defined as ≥1 of the following: (1) negative cystoscopy and negative (including atypical) urine cytology, or (2) positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative (including atypical) urine cytology.
  - Disease-response assessments based on cystoscopy and central urine cytology Q12W for up to 2 years, then every 24 weeks (Q24W) until end of study; local imaging (computed tomography/magnetic resonance imaging) Q24W until the end of study; and central pathology (bladder biopsy/transurethral resection of bladder tumor) at weeks 24 and 48 in cohorts 1-3 or as clinically indicated in cases of positive cystoscopy

- **Key secondary endpoints:** Duration of response (DOR), overall survival (OS), safety, tolerability, pharmacokinetics, patient-reported outcomes (PROs)[1,3]
- **Exploratory endpoint:** Time to cystectomy[1,3]

Results

Patient Characteristics

- The characteristics of patients treated with INLEXZO monotherapy in cohort 2 (n=85) are summarized in Table: Patient Characteristics in the INLEXZO Monotherapy Group (Cohort 2).
- A consistent modality of cystoscopy at baseline and postbaseline was observed in 91.8% of patients.[1]
- White light cystoscopy was the most frequently used modality; 1 patient underwent blue light cystoscopy at baseline and white light cystoscopy at follow-up.[1]

Patient Characteristics in the INLEXZO Monotherapy Group (Cohort 2)[1]

Characteristics	INLEXZO Monotherapy (Cohort 2) (n=85)[a]
Median age, years (range)	71 (40-88)
Sex, male, n (%)	68 (80)
Race, n (%)	
White	74 (87.1)
Asian	8 (9.4)
Black or African American	2 (2.4)
Not reported/unknown	1 (1.2)
Geographic region, n (%)[b]	
America	23 (27.1)
Asia Pacific	10 (11.8)
EMEA	52 (61.2)
Nicotine use, n (%)	
Current	7 (8.2)
Former	50 (58.8)
Never	28 (32.9)
ECOG PS, n (%)	
0	78 (91.8)
1	7 (8.2)
2	0
Tumor stage, n (%)	
CIS only	57 (67.1)
CIS + papillary disease	28 (32.9)
CIS + Ta	19 (22.4)
CIS + T1	9 (10.6)
PD-L1 status 1, n (%)[c]	
CPS ≥10	12 (32.4)
CPS ≤1	25 (67.6)
PD-L1 status 2, n (%)[c]	
CPS ≥1	23 (62.2)
CPS ≤1	14 (37.8)
Median total doses of prior BCG, n (range)	12 (7-42)
Median time from last BCG to CIS diagnosis, months (range)	3.2 (0.1-21.7)[d]
Reason for not undergoing RC, n (%)	
Declined	82 (96.5)
Preservation of bladder	50 (58.8)
Preservation of sexual function	1 (1.2)
Concern about quality of life after procedure	29 (34.1)

Characteristics	INLEXZO Monotherapy (Cohort 2) (n=85)[a]
Concern about mortality and morbidity risk of procedure	2 (2.4)
Ineligible	3 (3.5)
Age	1 (1.2)
Medical and surgical comorbidities	2 (2.4)

Abbreviations: BCG, Bacillus Calmette-Guérin; CIS, carcinoma in situ; CPS, combined positive score; ECOG PS, Eastern Cooperative Oncology Group performance status; EMEA, Europe, Middle East, and Africa; PD-L1, programmed death-ligand 1; RC, radical cystectomy; T, tumor.
[a]Data cutoff date: March 31, 2025.
[b]America includes Canada, USA; Asia Pacific includes Australia, Japan, South Korea; EMEA includes Belgium, France, Germany, Greece, Italy, Netherlands, Portugal, Russia, Spain.
[c]Percentages are based on the number of patients with available data (n=37).
[d]Two patients had >12 months from the last BCG dose to CIS diagnosis (protocol deviation); all other patients had ≤12 months from the last BCG dose to CIS diagnosis (per protocol).
Note: Patient characteristics are shown for all patients who received ≥1 dose of study drug in the full analysis set of INLEXZO monotherapy in CIS with or without papillary disease cohort (n=85).

Efficacy

- At the data cutoff date of March 31, 2025, the overall CR rates in cohort 2 are summarized in Table: CR Rates in the INLEXZO Monotherapy Group (Cohort 2).
- Median time to onset of response was 2.8 months.[1]
- In total, 96% of CRs were achieved during the first disease assessment.[1]
    - The remaining patients who achieved CR were nonevaluable for disease response at week 12 due to missing samples or assessments, but they achieved CR at the subsequent evaluation.

CR Rates in the INLEXZO Monotherapy Group (Cohort 2)[1]

Overall CR Rate,[a] % (95% CI)	INLEXZO Monotherapy (Cohort 2) (n=85)[b]
Centrally assessed rate at any time, % (n/N) [95% CI]	82.4 (70/85) [72.6-89.8][c]
Investigator-assessed	83.5 (73.9-90.7)[c]
KM-estimated rate posttreatment initiation	
3-month	78.8 (68.6-86.9)
6-month	58.8 (47.6-69.4)
12-month	45.9 (35.0-57.0)

Abbreviations: CI, confidence interval; CR, complete response; KM, Kaplan-Meier; NMIBC, non-muscle-invasive bladder cancer.
[a]Response is based on centrally reviewed urine cytology, local cystoscopy, and central biopsy (if available). A CR is defined as having a negative cystoscopy and negative (including atypical) centrally read urine cytology, or positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative (including atypical) centrally read cytology at any timepoint.
[b]Data cutoff date: March 31, 2025.
[c]Overall concordance between centrally and investigator-assessed CR rate, 95.0%.

- CR rates across patient subgroups are summarized in Table: CR Rates Across Patient Subgroups in the INLEXZO Monotherapy Group (Cohort 2).

CR Rates Across Patient Subgroups in the INLEXZO Monotherapy Group (Cohort 2)[1]

Subgroup	INLEXZO Monotherapy (Cohort 2) (n=85)[a]	
	CR Rate n/N (%)	95% CI
Overall	70/85 (82.4)	72.6-89.8
Age, years		
<65	21/24 (87.5)	67.6-97.3
65 to <75	28/32 (87.5)	71.0-96.5
≥75	21/29 (72.4)	52.8-87.3

Subgroup	INLEXZO Monotherapy (Cohort 2) (n=85)[a]	
	CR Rate n/N (%)	95% CI
Race		
White	59/74 (79.7)	68.8-88.2
Non-White	11/11 (100)	71.5-100.0
Sex		
Female	16/17 (94.1)	71.3-99.9
Male	54/68 (79.4)	67.9-88.3
Region		
Asia Pacific	10/10 (100)	69.2-100
EMEA	42/52 (80.8)	67.5-90.4
America	18/23 (78.3)	56.3-92.5
Tumor stage		
CIS (Tis)	47/57 (82.5)	70.1-91.3
CIS + papillary disease	23/28 (82.1)	63.1-93.9
ECOG PS		
0	64/78 (82.1)	71.7-89.8
≥1	6/7 (85.7)	42.1-99.6
Nicotine use		
Current/former	48/57 (84.2)	72.1-92.5
Never	22/28 (78.6)	59-91.7
PD-L1 status 1		
CPS <10 (negative)	20/25 (80)	59.3-93.2
CPS ≥10 (positive)	11/12 (91.7)	61.5-99.8
PD-L1 status 2		
CPS <1 (negative)	13/14 (92.9)	66.1-99.8
CPS ≥1 (positive)	18/23 (78.3)	56.3-92.5
Reason for not receiving RC at screening		
Ineligible	2/3 (66.7)	9.4-99.2
Declined	68/82 (82.9)	73-90.3
Prior intravesical BCG doses		
7-9	23/25 (92)	74-99
10-14	22/30 (73.3)	54.1-87.7
>14	25/30 (83.3)	65.3-94.4
BCG strain		
Tice	51/58 (87.9)	76.7-95
Non-Tice	19/27 (70.4)	49.8-86.2

Abbreviations: BCG, Bacillus Calmette-Guérin; CI, confidence interval; CIS, carcinoma in situ; CPS, combined positive score; CR, complete response; ECOG, Eastern Cooperative Oncology Group; EMEA, Europe, Middle East, and Africa; PD-L1, programmed death ligand 1; RC, radical cystectomy; Tis, tumor in situ.
[a]Data cutoff date: March 31, 2025.

- The DOR rates in cohort 2 are summarized in Table: DOR Rates in the INLEXZO Monotherapy Group (Cohort 2).

DOR[a] Rates in the INLEXZO Monotherapy Group (Cohort 2)[1]

Response	INLEXZO Monotherapy (Cohort 2) (n=85)[b]
Number of responders, n	70
Median follow-up in responders, months (range)	20.2 (5-48)
Median DOR, months (95% CI)	25.8 (8.3-NE)
DOR of ≥12 months, % (n/N)	52.9 (37/70)
12-month KM-estimated DOR rate, % (95% CI)	56.2 (43.4-67.1)
Responders remaining in CR, n	37
Patients with ongoing response,[c] % (n/N)	47.1 (33/70)[d]

Abbreviations: CI, confidence interval; CR, complete response; DOR, duration of response; KM, Kaplan-Meier; NE, not evaluable; OS, overall survival.

[a]DOR is defined as the time from the first CR to the first evidence of recurrence or progression or death, whichever occurs first.[2]
[b]Data cutoff date: March 31, 2025.
[c]Response is based on centrally reviewed urine cytology, local cystoscopy, and central biopsy (if available). A CR is defined as having a negative cystoscopy and negative (including atypical) centrally read urine cytology, or positive cystoscopy with biopsy-proven benign or low-grade NMIBC and negative (including atypical) centrally read cytology at any timepoint.
[d]Of the 70 responders, 37 (52.9%) were censored, including 4 (5.7%) who discontinued the study, started subsequent therapy, or missed ≥2 consecutive assessments; 11 responders completed 2 years of treatment.

- Disease recurrence and progression reported in responders are summarized in Table: Disease Recurrence and Progression in the INLEXZO Monotherapy Group (Cohort 2).

Disease Recurrence and Progression in the INLEXZO Monotherapy Group (Cohort 2)[1,11,a]

Outcome, n (%)	INLEXZO Monotherapy (Cohort 2) Responders (n=70)	INLEXZO Monotherapy (Cohort 2) All Patients (n=85)
Patients with disease persistence (nonresponders only), recurrence, or progression[b]	30 (42.9)	41 (48.2)
High-risk NMIBC recurrence[c]	23 (32.9)	30 (35.2)
Positive cytology only	1 (1.4)	2 (2.4)
CIS and/or Ta only	18 (25.7)	23 (27.1)
T1 (± CIS)	4 (5.7)	5 (5.9)
≥T2 progression	4 (5.7)	7 (8.2)
T2-T4a	2 (2.9)	5 (5.9)
N1	1 (1.4)	1 (1.2)
M1a	1 (1.4)	1 (1.2)
No evidence of disease[d]	3 (4.3)	4 (4.7)

Abbreviations: CIS, carcinoma in situ; M, metastasis; N, node; NMIBC, non-muscle-invasive bladder cancer; T, tumor; TURBT, transurethral resection of bladder tumor; UC, urothelial carcinoma.
[a]Data cutoff date: March 31, 2025.
[b]Disease persistence, recurrence, or progression event was based on positive central cytology, high-grade central pathology, or positive imaging. All results were based on the highest stage from local TURBT results, investigator-assessed clinical stage, and pathologic stage after cystectomy. Patients who discontinued study before disease evaluation are excluded. Note, upper tract UC occurring after treatment initiation was reported in 1 patient and was not included in the response assessment.
[c]Includes patients with high-grade Ta, CIS, or T1 or patients with positive central cytology (n=5) or high-risk NMIBC from central pathology (n=2) but no evidence of high-risk NMIBC by investigator. Note, no cases of low-grade Ta recurrence were reported.
[d]Patients had positive central cytology or high-grade disease by central pathology but no disease based on local assessment.

- The 6- and 12-month OS rates were 98.7% (95% CI, 91.2-99.8) and 94.7% (95% CI, 86.5-98), respectively.[1]
- Total number of deaths in cohort 2 was 7 (8.2%). No deaths were treatment-related.[1]
  - Among the 33 patients with centrally assessed disease recurrence or progression, 3 deaths unrelated to treatment were reported.
- In total, 25 patients received subsequent treatment.[1]
  - Of the 85 patients, 18 (21.2%) underwent RC.
  - Of the 70 responders, 12 (17.1%) underwent RC.
- Median time to cystectomy was not estimable.[1]
- The estimated 12- and 24-month RC-free rates were 86.6% (95% confidence interval [CI], 76.6-92.6) and 75.5% (95% CI, 63.4-84.1), respectively.[1,11]
- Among the 18 patients who underwent RC, tumor-node-metastasis staging was performed locally by the investigator for 15 patients; majority of the tumors were classified as tumor in situ/CIS.[11]
- The summary of pathology at RC are detailed in Table: Summary of Pathology at RC (Cohort 2).

Summary of Pathology at RC (Cohort 2)[1,11]

Outcome, n (%)	INLEXZO Monotherapy (Cohort 2) (n=85)
Patients with RC	18 (21.2)
Patients with TNM staging[a]	15 (17.6)
TIS/CIS	10 (11.8)
T2	2 (2.4)
T4[a]	2 (2.4)
M1[a]	1 (1.2)[b]

Abbreviations: CIS, carcinoma in situ; M, metastasis; N, node; RC, radical cystectomy; T, tumor; TIS, tumor in situ.
[a]All results based on stage from pathologic stage after RC.
[b]Patients also had N^+ disease.

Safety

- At the data cutoff date of March 31, 2025, most treatment-emergent adverse events (AEs) were grade 1 or 2 in severity.[1]
- Median time to AE resolution was 3 weeks (range, 0.1+ to 150.3+).[1]
- No treatment-related deaths were reported.[1]
- The overall safety profile of patients in cohort 2 is summarized in Table: Overall Safety Profile of the INLEXZO Monotherapy Group (Cohort 2).

Overall Safety Profile of the INLEXZO Monotherapy Group (Cohort 2)[1,2]

Patients with events, n (%)	INLEXZO Monotherapy (Cohort 2) (n=85)[a]
Related AEs[b]	71 (83.5)
INLEXZO	63 (74.1)
Insertion procedure	30 (35.3)
Removal procedure	14 (16.5)
Urinary placement catheter	19 (22.4)
Related grade ≥3 AEs[b]	11 (12.9)[c]
INLEXZO	9 (10.6)
Insertion procedure	1 (1.2)
Removal procedure	0
Urinary placement catheter	1 (1.2)
Related serious AEs[b]	5 (5.9)[d]
INLEXZO	3 (3.5)
Insertion procedure	1 (1.2)
Removal procedure	0
Urinary placement catheter	1 (1.2)
Related AEs leading to INLEXZO interruption[b,e]	27 (31.8)[f]
INLEXZO	21 (24.7)[g]
Insertion procedure	10 (11.8)
Removal procedure	5 (5.9)
Urinary placement catheter	6 (7.1)
Related AEs leading to INLEXZO discontinuation[b,h]	3 (3.5)[i]
INLEXZO	2 (2.4)
Insertion procedure	1 (1.2)
Removal procedure	1 (1.2)
Urinary placement catheter	0
Related AEs with fatal outcome	0

Abbreviations: AE, adverse event; TRAE, treatment-related AE; UTI, urinary tract infection.
[a]Data cutoff date: March 31, 2025.
[b]An AE was categorized as related if the investigator determined that there was a possible, probable, or causal relationship between the AE and INLEXZO or procedure.
[c]Other grade ≥3 TRAEs included acute kidney injury, pseudomonal cystitis, and urosepsis (n=1 each). Patients may have had ≥1 grade ≥3 TRAEs.

Patients with events, n (%)	INLEXZO Monotherapy (Cohort 2) (n=85)[a]
[d]Serious TRAEs (n=1 each) included cystitis with bladder pain (grade 2), pseudomonal cystitis (grade 3), UTI (grade 3), urosepsis with acute kidney injury (grade 3), and urinary tract pain (grade 3). Note, patients may have had ≥1 serious TRAE. [e]Number of patients who experienced AEs related to INLEXZO, insertion procedure, removal procedure, or urinary placement catheter that led to interruption of INLEXZO. INLEXZO interruption is defined as when an INLEXZO dose is skipped or INLEXZO is removed early. [f]Most patients had 1-2 skipped INLEXZO doses and most patients resumed treatment. Common reasons for interruption included urinary tract pain (5.9%), pollakiuria (4.7%), and UTI (4.7%). [g]The most frequent INLEXZO-related AEs leading to interruption were urinary tract pain (5.9%), hematuria (4.7%), and pollakiuria (4.7%). [h]Number of patients who experienced AEs related to INLEXZO, insertion procedure, removal procedure, or urinary placement catheter that led to discontinuation of INLEXZO. [i]TRAEs leading to INLEXZO discontinuation included noninfective cystitis (n=2; 2.4%), pollakiuria (n=1; 1.2%), and urinary tract disorder (n=1; 1.2%). Note, patients who discontinued may have had ≥1 TRAE. Note: Safety data are shown for all patients who received ≥1 dose of the study drug in the full analysis set. Patients are counted only once for any given event, regardless of the number of times they actually experienced the event.	

- The most common any-grade and grade ≥3 treatment-related adverse events (TRAEs) by preferred term reported in cohort 2 are summarized in Table: Most Common TRAEs in the INLEXZO Monotherapy Group (Cohort 2).

Most Common TRAEs in the INLEXZO Monotherapy Group (Cohort 2)[1]

≥1 TRAEs,[a] n (%)	INLEXZO Monotherapy (Cohort 2) (n=85)[b]	
	Any Grade[c]	Grade ≥3[d]
Pollakiuria	37 (43.5)	0
Dysuria	34 (40)	0
Micturition urgency	21 (24.7)	0
UTI	18 (21.2)	1 (1.2)
Hematuria	14 (16.5)	0
Urinary tract pain	9 (10.6)	4 (4.7)
Bladder pain	7 (8.2)	2 (2.4)
Bladder spasm	7 (8.2)	0
Noninfective cystitis	6 (7.1)	0
Urinary incontinence	5 (5.9)	0
Nocturia	4 (4.7)	0
Urethral pain	4 (4.7)	0
Urinary retention	4 (4.7)	1 (1.2)
Cystitis	3 (3.5)	1 (1.2)
Lower urinary tract symptoms	3 (3.5)	0
Pelvic pain	3 (3.5)	0
Abdominal pain	2 (2.4)	0
Abdominal pain lower	2 (2.4)	0
Asthenia	2 (2.4)	0
Constipation	2 (2.4)	0
Fatigue	2 (2.4)	0
Penile pain	2 (2.4)	0
Perineal pain	2 (2.4)	0
Urethral injury	2 (2.4)	0
Vulvovaginal pain	2 (2.4)	0
Abbreviations: AE, adverse event; TRAE, treatment-related AE; UTI, urinary tract infection. [a]An AE was categorized as related if the investigator determined that there was a possible, probable, or causal relationship between the AE and INLEXZO or procedure. [b]Data cutoff date: March 31, 2025. [c]Any-grade TRAEs by preferred term are listed if they were reported in ≥2% of patients. [d]Other grade ≥3 TRAEs included acute kidney injury, pseudomonal cystitis, and urosepsis (n=1 each). Note, patients may have had ≥1 grade ≥3 TRAEs. Note: Safety data are shown for all patients who received ≥1 dose of the study drug in the full analysis set.	

≥1 TRAEs,[a] n (%)	INLEXZO Monotherapy (Cohort 2) (n=85)[b]	
	Any Grade[c]	Grade ≥3[d]
Patients are counted only once for any given event, regardless of the number of times they actually experienced the event.		

Tolerability

- The INLEXZO insertion success rate was 99% (745/755).[4]

Patient-Reported Outcomes

- At baseline, the mean global health status (GHS) and physical functioning (PF) scores on the European Organisation for Research and Treatment of Cancer Quality-of-Life Questionnaire Core 30 (EORTC QLQ-C30) were 75 (standard deviation [SD], 16.7) and 86.2 (SD, 17.3), respectively.[1]
- Mean GHS and PF scores remained stable on INLEXZO monotherapy, with changes not exceeding the 10-point threshold for a clinically meaningful change.[1]

Periprocedural Prophylactic Antibiotic Use

- At the data cutoff date of March 31, 2025, periprocedural prophylactic antibiotic use and the rates of infectious AEs were evaluated in patients who received INLEXZO monotherapy.[9]
  - Periprocedural prophylactic antibiotic was administered ≤2 days before/after INLEXZO insertion or removal procedure.
  - Infectious AEs included any UTI, cystitis, or other plausibly related infections occurring ≤14 days after an insertion or removal procedure.
- Periprocedural prophylactic antibiotic use during INLEXZO procedures is summarized in Table: Summary of Periprocedural Antibiotics Used in INLEXZO Insertions or Removals.

Summary of Periprocedural Antibiotics Used in INLEXZO Insertions or Removals[9]

Prophylactic Antibiotic Use[a]	INLEXZO Monotherapy (Cohort 2) (n=85)
Patients with use of ≥1 periprocedural prophylactic antibiotic, n (%)	79 (92.9)
Most common periprocedural prophylactic antibiotics used, n (%)[b]	
Ciprofloxacin	19 (22.4)
Levofloxacin	8 (9.4)
Fosfomycin trometamol	15 (17.6)
Cefalexin	9 (10.6)
Sulfamethoxazole; trimethoprim	9 (10.6)
Nitrofurantoin	9 (10.6)
Total insertions, n	755
Prophylactic antibiotics given, n (%)[c]	616 (81.6)
Prophylactic antibiotics not given, n (%)[c]	139 (18.4)
Total removals, n[d]	735
Prophylactic antibiotics given, n (%)[c]	570 (77.6)
Prophylactic antibiotics not given, n (%)[c]	165 (22.4)

Data cutoff date: March 31, 2025.
[a]Periprocedural prophylactic antibiotic use was defined as antibiotics given ≤2 days before or after an INLEXZO insertion or removal procedure.
[b]Reported in ≥10% of patients. Type of antibiotic was per institutional guidelines, not specified in protocol.
[c]Percentages are based on the number of insertions/removals.
[d]Patients who had INLEXZO indwelling on the clinical data cutoff do not have a removal.

- The use of periprocedural prophylactic antibiotics was not associated with a difference in rates of infectious AEs following INLEXZO insertion or removal.

- Most infectious AEs after insertions and removals were grade 1-2 and resolved with institutional standard of care; these outcomes are summarized in Table: Infectious AE Outcomes by Periprocedural Prophylactic Antibiotic Use.

Infectious AE Outcomes by Periprocedural Prophylactic Antibiotic Use[9]

Infectious AEs, n (%)[a,b]	INLEXZO Monotherapy (Cohort 2) (n=85)
Infectious AEs following insertion	
With antibiotics	46 (7.5)
Without antibiotics	10 (7.2)
Infectious AEs following removal	
With antibiotics	28 (4.9)
Without antibiotics	11 (6.7)
Infectious AEs resolved, n/n (%)	90/92 (97.8)
Duration of infectious AEs, median (range), weeks	1.9 (0.1-61.0+)

Abbreviation: AE, adverse event; UTI, urinary tract infection.
Data cutoff date: March 31, 2025.
+ indicates censored.
[a]Infectious AEs were defined as any UTI, cystitis, or other plausibly related infections occurring ≤14 days after an insertion or removal procedure.
[b]Percentages are based on the number of procedures in which prophylactic antibiotics were given or not given.

LITERATURE SEARCH

A literature search of MEDLINE®, Embase®, BIOSIS Previews®, and Derwent Drug File (and/or other resources, including internal/external databases) was conducted on 06 March 2026.

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