Global Biopharmaceuticals

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Biopharma: The NMIBC Revolution - Innovation Finally Starting to Flow in Bladder Cancer, Setting the Stage for Multiple New Mega Blockbusters

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Key Message: Bladder cancer remains the 6th most common form of cancer, with an estimated ~85K new diagnoses and ~17K deaths expected from bladder cancer this year in the US alone. Unfortunately the pace of therapeutic innovation for treating bladder cancer has lagged the remarkable advances we have seen in many other cancer types, although we think this is finally starting to change. In this report we provide a deep dive look into the advances that are now starting to emerge in the treatment of non-muscle invasive bladder cancer (NMIBC) specifically, highlighted by the recent approvals of JNJ's Inlexzo (TAR-200) and URGN's Zusduri. Our conversations with multiple management teams, interviews of leading thought leaders, and review of the latest scientific literature lead us to believe that we are on the brink of a revolution in how NMIBC will be treated, with products such as JNJ's Inlexzo and TAR-210, CGON's cretostimogene, URGN's Zusduri and ENGN's detalimogene voraplasmid amongst the ones that are well-positioned to impact how patients are treated and likely to drive upside for investors. In conjunction with this report, we upgraded JNJ to BUY (from Neutral) and increased our price target to $206 (from $167) given the comfort we have in how the company has navigated the loss of exclusivity for their $10Bn+ asset Stelara, and the emerging new product story in their Innovative Medicine business that we expect to drive the company's next era of growth, including multi-billion dollar opportunities in products such as Inlexzo and TAR-210, Rybrevant, icotrokinra, JNJ-4804, Caplyta and more. Link to our full JNJ (Buy, $174.21) upgrade note is here.

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• **Non-Muscle Invasive Bladder Cancer (NMIBC)** is a subtype of bladder cancer that grows on the luminal side of the bladder. Though not lethal on its own, it can progress to more aggressive and deadly forms of bladder cancer. There are ~85K new cases of bladder cancer diagnosed and ~17K deaths from bladder cancer in the US each year, making it the 6th most common form of cancer. Of that, there are ~60K new cases of NMIBC diagnosed each year, as well as nearly 100K more that recur annually from the existing prevalent population (NCI SEER, Guggenheim Securities analysis). NMIBC has seen little impactful innovation in terms of novel therapies over the last several decades (see slide 11), but drugs that could potentially transform the treatment paradigm are now starting to hit the market, as exemplified by the recent approvals of JNJ's Inlexzo and URGN's Zusduri.

• **In this report we provide a broad overview of recent developments in the NMIBC space,** supported by proprietary research and interviews with management teams and thought leaders, that we then leveraged to develop a NMIBC market model that drives our sales forecasts for key products in the space. Our NMIBC market model is available upon request.

• **Key products discussed in the report include:**

1. **Inlexzo [TAR-200; JNJ]** shows strong clinical efficacy and safety, and we believe it is particularly well-suited to be used in community-based urology practices where 70-80% of NMIBC is treated. We now believe Inlexzo has WW PoS-adjusted peak sales potential of ~$4.6Bn.
2. **TAR-210 [JNJ]** has shown strong early efficacy data and utilizes the same technological platform as Inlexzo, driving our enthusiasm. The need for biomarker testing may slow adoption, but we still see WW PoS-adjusted peak sales potential of ~$1.7Bn.

3. **Cretostimogene [CGON]** also combines strong efficacy and very impressive safety, along with a unique mechanism of action (MoA) that should ensure significant uptake despite a potentially less convenient administration/delivery profile. We estimate $3.0Bn in WW probability-adjusted peak sales potential for cretostimogene.
4. **Anktiva [IBRX]** may play a modest role in the mid- to long-term in the BCG-naïve setting, but we believe its relatively weaker clinical profile may make it difficult for it to compete with JNJ and CGON products, although we still estimate ~$1.1Bn in PoS-adjusted global peak sales.
5. **Sasanlimab [PFE]** will likely be the leading agent in the PD(L)1-class for the treatment of NMIBC given its subcutaneous dosing and likely early entry in the BCG-naïve setting. However, we estimate somewhat more modest global PoS-adjusted peak sales of ~$0.6Bn given concerns urologists we spoke to have in managing sasanlimab's potential side effects.
6. **Zusduri [URGN]** is likely to play an important role in a subset of low-grade intermediate risk (LG-IR) patients, a new market for therapeutics in NMIBC. Based on our KOL interviews, we currently estimate $0.8Bn peak sales in 2031 and predominant uptake in patients who are ineligible for surgery (e.g., elderly and multiple comorbidities) and those who recur early or frequently from surgery, about 1/3 of the eligible LR-IR-NMIBC patient population.
7. **Detalimogene [EG-70; ENGN]** is a first-in-class nanoparticle-based gene therapy formulated with several drug product characteristics that are tailored to the practical needs of community urologists. The product's market share potential in HR NMIBC with CIS will likely be determined by the outcome of the pivotal LEGEND study, which completed enrollment in September and will have an interim data update in 4Q25.

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The NMIBC Revolution

Innovation Finally Starting to Flow in Bladder Cancer, Setting the Stage for Multiple New Mega Blockbusters

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Table of Contents

Executive Summary

The NMIBC Revolution - Innovation Finally Starting to Flow in Bladder Cancer, Setting the Stage for Multiple New Mega Blockbusters

- **Non-Muscle Invasive Bladder Cancer (NMIBC),** is a subtype of bladder cancer that grows on the luminal side of the bladder. Though not lethal in itself, it can progress to more aggressive and deadly forms of bladder cancer. We estimate there are ~60K cases of NMIBC diagnosed each year and nearly 100K more that recur annually from the existing prevalent population. NMIBC has seen little impactful innovation in terms of novel therapies, with drugs with the potential to significantly transform the treatment paradigm only now hitting the market, as exemplified by the recent approvals of JNJ's Inlexzo and URGN's Zusduri.
- **In this report we provide a broad overview of recent developments in the NMIBC space,** supported by proprietary research and interviews with management teams and thought leaders, that we then leveraged to develop a NMIBC market model that drives our sales forecasts for key products in the space.
- **Key products discussed in the report include:**
  - **Inlexzo [JNJ; TAR-200]** shows strong clinical efficacy and safety, and we believe it is particularly well-suited to be used in community-based urology practices where 70-80% of NMIBC is treated. We now believe Inlexzo has WW PoS-adjusted peak sales potential of ~$4.6Bn.
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  - **Anktiva [IBRX]** may play a modest role in the mid- to long-term in the BCG-naïve setting, but we believe its relatively weaker clinical profile may make it difficult for it to compete with JNJ and CGON products in near-term, although we still estimate ~$1.1Bn in PoS-adjusted global peak sales.
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Source: FactSet; Company data; Guggenheim Securities, LLC estimates and analysis

See pages 56 - 57 for analyst certification and important disclosures.

Multiple Near-Term Catalysts in the NMIBC Space

Company	Product	NMIBC Indication	Status	Next Potential Catalyst(s)
AURA	Bel-sar	High or Intermediate Risk	Ph1/2	Potential updated data in 2025 / 2026
AZN-GB	Imfinzi	BCG-naïve, any high-risk	Phase 3	Medical conference presentation 2H25 / 2026 (link)
AZN-GB	Imfinzi	BCG-naïve, any high-risk	Phase 3	Potential regulatory filing 2H25 / 2026 (link)
CGON	Cretostimogene	BCG-unresponsive, CIS	Phase 3	BLA submission 4Q 2025 (link)
CGON	Cretostimogene	BCG-unresponsive, papillary	Phase 3	Topline data 4Q 2025 (link)
CGON	Cretostimogene	BCG-naïve, high-risk CIS	Phase 2	Topline data 4Q 2025 (link)
CGON	Cretostimogene	BCG-exposed, any high-risk	Phase 2	Topline data 1H 2026 (link)
ENGN	Detalimogene	BCG-unresponsive, CIS	Pivotal Ph 2	Data Update 4Q 2025 (link)
ENGN	Detalimogene	BCG-unresponsive, CIS	Pivotal Ph 2	BLA filing 2H 2026 (link)
IBRX	Anktiva	BCG-unresponsive, papillary	Phase 2/3	Potential path forward after CRL in 2H25 / 2026 (link)
MRK	Keytruda	BCG-naïve / unresponsive, any high-risk	Phase 3	Potential clinical data 2H25 / 2026 (PCD 12/2025)
MRK	Sacituzumab Tirumotecan	Low-grade, intermediate risk	Phase 1/2	Potential clinical data 2H25 / 2026 (PCD 6/2026)
PFE	Sasanlimab	BCG-naïve, any high-risk	Phase 3	Potential regulatory filing 2H25 / 2026 (link)
TARA	TARA-002	BCG-unresponsive, CIS	Pivotal Ph 2	Interim analysis data at medical conference 1Q26 (link)
TYRA	Dabogratinib	Low-grade, intermediate risk	Phase 2	Initial data in 1H26 (link)
URGN	UGN-103	Low-grade, intermediate risk	Phase 3	Topline results YE 2025 / 2026 (link)
URGN	UGN-103	Low-grade, intermediate risk	Phase 3	Potential IND submission in 2026

Source: clinicaltrials.gov; Company data & slides; Guggenheim Securities, LLC estimates and analysis

Introduction To Bladder Cancer

Bladder Cancer Is A Common Disease Divided Into Three Major Segments Depending On The Extent The Cancer Has Spread

Prognosis And Treatment Options Depend On Which Of The Three Types Of Bladder Cancer The Patient Has

- About 90% of bladder cancers are urothelial carcinomas
- Urothelial carcinoma (aka transitional carcinoma) originate in urothelial cells which are specialized cells that line the inner surface of the urinary tract

Worsening Prognosis

1. Non-Muscle Invasive Bladder Cancer

NMIBC - Cancer cells are only in the bladder's inner lining and have not spread deeper into the muscle layer of the bladder

2. Muscle-Invasive Bladder Cancer

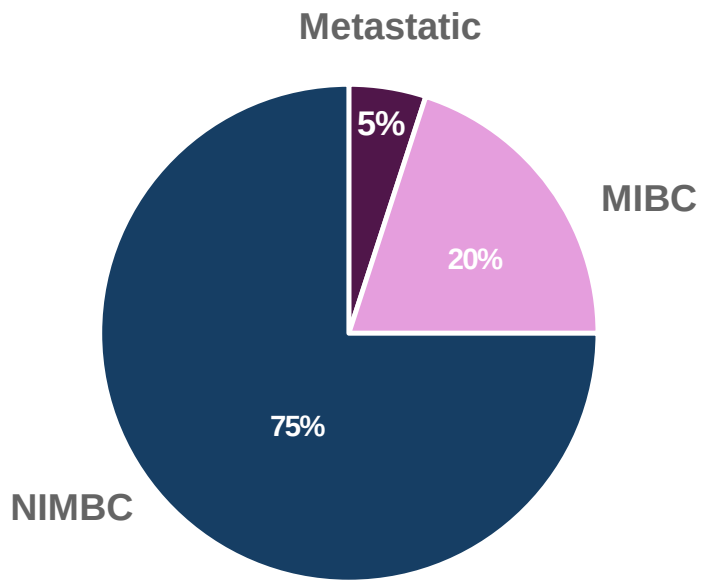
MIBC - Cancer cells have spread into the muscle layer of the bladder wall

3. Metastatic Bladder Cancer

MBC - Cancer cells has spread beyond the bladder to other parts of the body like lymph nodes and other organs

Types Of Bladder Cancer At Diagnosis

~85K new diagnoses of bladder cancer and ~17K deaths in 2025 in the US making it the 6th most common cancer



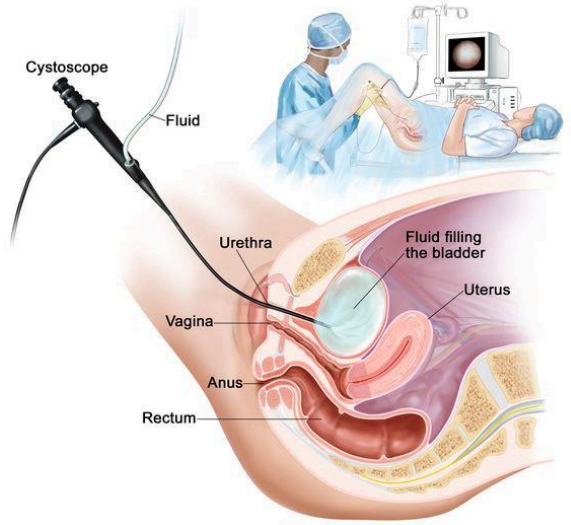
Relative frequency of bladder cancer types at diagnosis

Source: Up To Date (accessed 6/12/25); Bladder Cancer, NCI (6/12/25); SEER Cancer Stat Facts (6/13/25); Cleveland Clinic (6/12/25); Guggenheim Securities, LLC estimates and analysis

Multiple Steps Involved in Bladder Cancer Diagnosis and Evaluation

- Patients with bladder cancer commonly present with hematuria (blood in urine) though early symptoms can include those of an irritated bladder such as frequent/urgent urinating or a painful/burning sensation while urinating
- Diagnosis can be delayed as symptoms are similar to other benign disorders like a urinary tract infection and pain usually stems from locally advanced or metastatic tumors
- Median age at diagnosis of bladder cancer is 73, and the disease is more common in men than women
- Bladder cancer is linked to exposure to carcinogens, with smoking being of the more common risk factors but other carcinogens such as chemicals found in dye and petroleum products and chemotherapies are also a risk factor

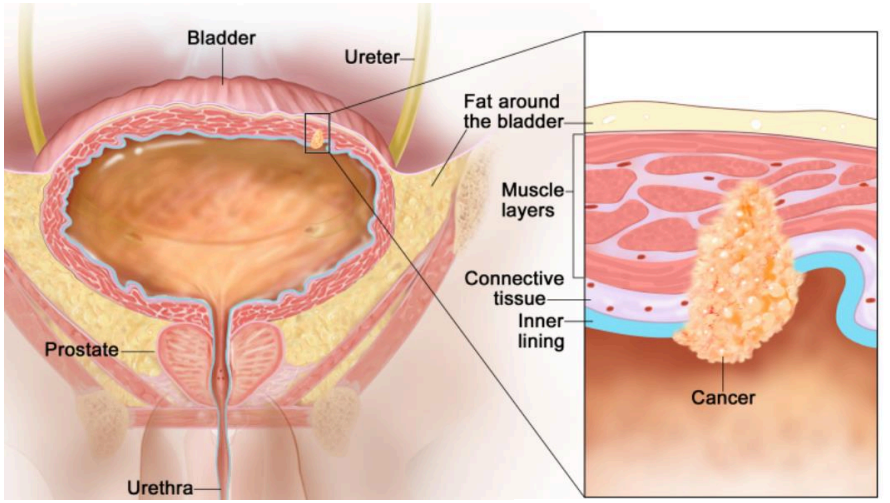
Cystoscopy Procedure



Source: NCI Cancer Dictionary

- Initial patient evaluation typically includes physical examination, cystoscopy (gold standard for initial diagnosis and staging), urine cytology and biomarker analysis, as well as radiographic imaging
- Cystoscopy procedure uses flexible cystoscope equipped with a camera / viewing lens inserted into the urethra to view and examine the inside of the bladder and urethra with the patient typically only requiring local anesthesia
- TNM clinical staging is performed according to the examinations, imaging and pathology results

Patient With MIBC, Cancer Has Invaded Into Muscle Layer

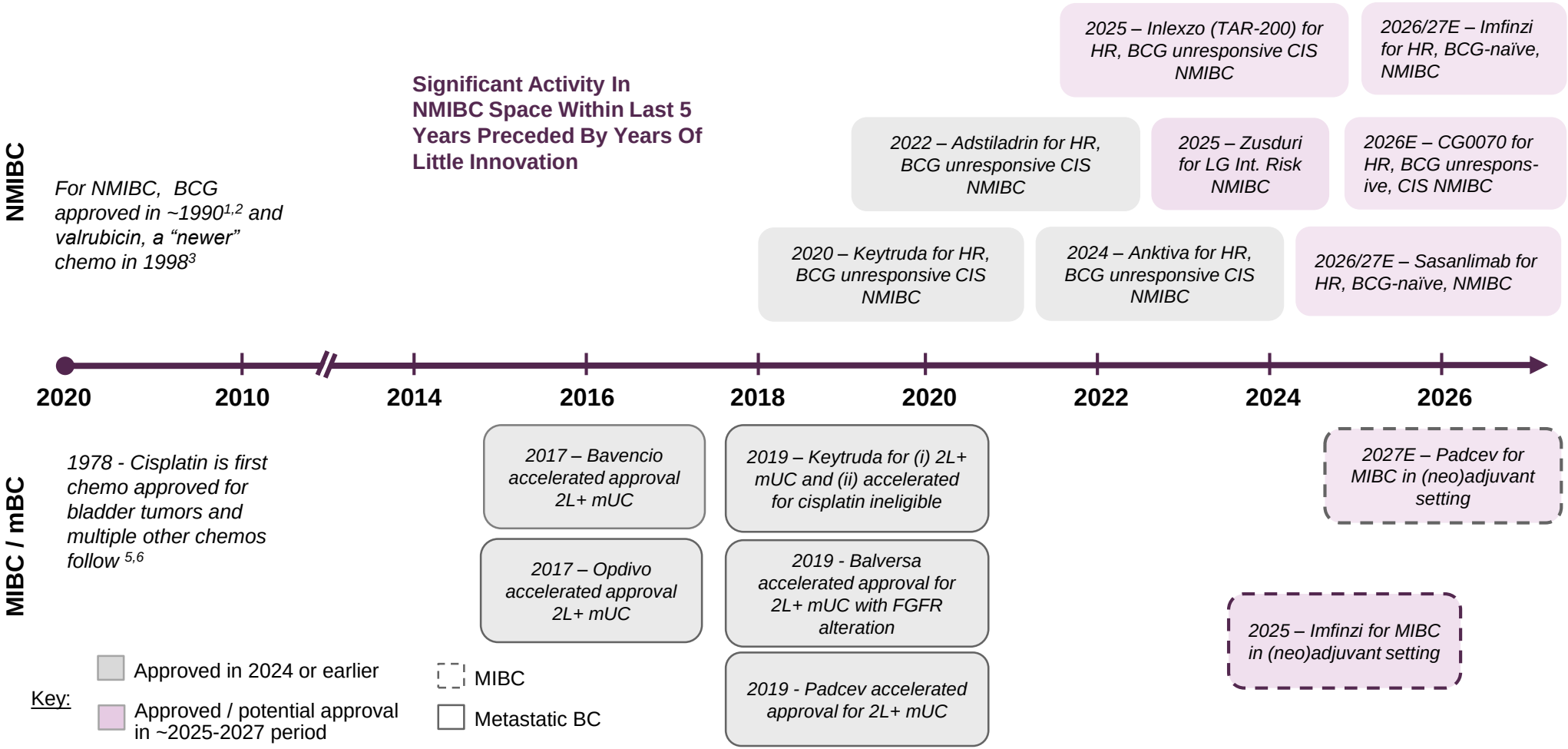


Source: NIH Library Of Medicine

Source: Up To Date (accessed 6/12/25); Bladder Cancer Treatment, NIH Library (6/13/25); NCI Cancer Dictionary (6/13/25); Guggenheim Securities, LLC estimates and analysis

Last Decade Has Seen Resurgence of New Bladder Cancer Drug Approvals After a Period of Stagnation; New Wave of Therapeutics Now Emerging

The timeline depicts select first approvals (accelerated or regular) of new agent across the segments of NMIBC, MIBC, and metastatic bladder cancer as grey boxes. Indication / lines expansions within a segment and conversions from accelerated to regular are not shown due to space constraints. Similarly, products such as Trodelvy [GILD] that were initially approved but were then withdrawn are not depicted. Pink boxes indicate novel agents that are approved or have the potential to get approved in the ~2025-2027 time period.

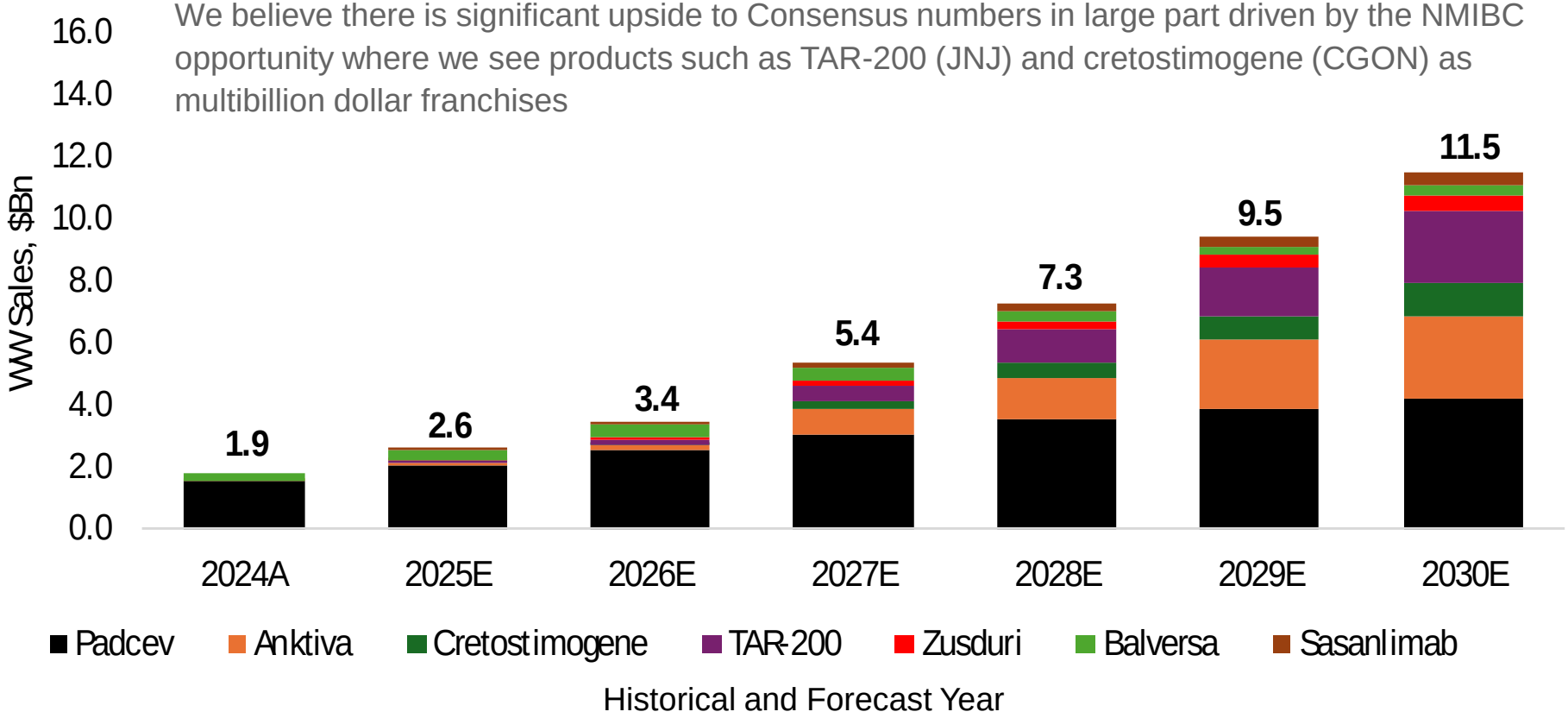


Abbreviations: NMIBC, nonmuscle invasive bladder cancer; mBC, metastatic bladder cancer; MIBC, muscle invasive bladder cancer; mUC, metastatic urothelial carcinoma; HR, high risk, IR, intermediate risk; CIS, carcinoma in situ, LG, low grade. Methodology: List of approved bladder cancer drugs sourced from NIH's National Cancer Institute (link) with approval dates and indications checked via FDA product labels and Drugs.com. Products [Co.]: Balversa (erdafitinib) [JNJ]; Bavencio (Avelumab) [MRK-DE]; Adstiladrin [Ferring]; Anktiva [IBRX]; Padcev [PFE]; Keytruda [MRK]; Zusduri [URGN]; Imfinizi [AZN-LON], Opdivo [BMY]; Sasanlimab [PFE]. Sources: 1) Tontonoz M., MSKCC (7/17/20); 2) Lamm DL. et al, NEJM 1991 (PMID: 1922207); 3) Valrubicin FDA approval (NDA 020892); 4) NIH national Cancer Institute (link); 5) Gibson CM, Bladder Cancer Historical Perspective (link); Product labels and FDA website; Guggenheim Securities, LLC estimates and analysis

Consensus Estimates Forecast Significant Growth in Emerging Bladder Cancer Products, With Sales >$10Bn Globally Expected By 2030E

Global Sell-Side Consensus Sales For Key Emerging Products*

We believe there is significant upside to Consensus numbers in large part driven by the NMIBC opportunity where we see products such as TAR-200 (JNJ) and cretostimogene (CGON) as multibillion dollar franchises



* Checkpoint inhibitors Keytruda [MRK], Opdivo [BMY], Bavencio [MRD-DE], and Imfinzi [AZN-LON] are not included in the graph because bladder cancer sales reflect a relative minor fraction of total sales, and it was challenging to decouple sales in bladder cancer from the other indications. Ferring's Adstiladrin is not included as it is a private company with no sell side estimates available. While we tried to exclude non-NMIBC sales estimates from the consensus Anktiva [Anktiva] figures (e.g., NSCLC), exactly what tumor types / indications are incorporated into available sell side estimates is uncertain. As such, some of the long term Anktiva consensus sell side estimates may include contribution from indications beyond NMIBC. Additional notes: Padcev [PFE], Balversa [JNJ]

Source: Sell side consensus estimates were obtained from Visible Alpha and FactSet; Guggenheim Securities, LLC estimates and analysis

Non-Muscle Invasive Bladder Cancer

See pages 56 - 57 for analyst certification and important disclosures.

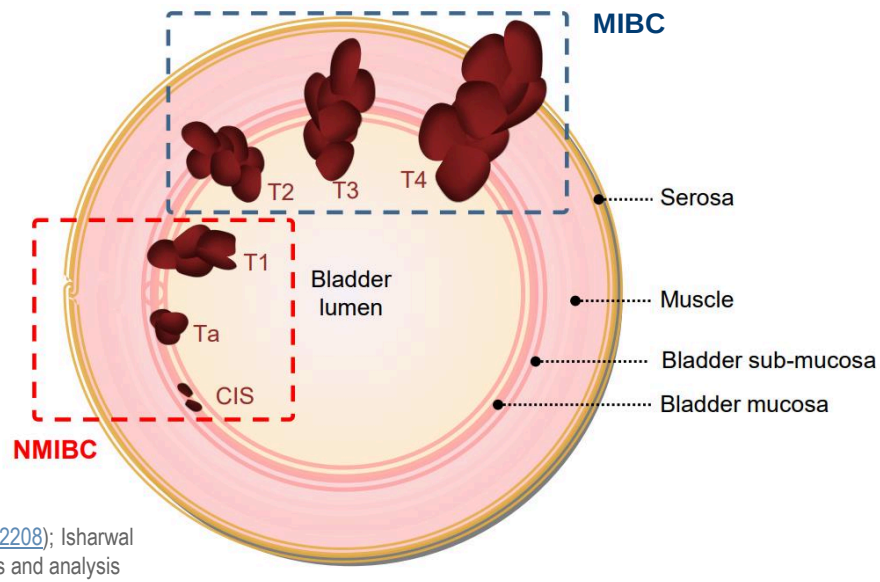
NMIBC Is a Heterogenous Disease Categorized Into Three Stages That Help Inform Treatment and Patient Risk Status

Non-Muscle Invasive Bladder Cancer Overview

- NMIBC are tumors that occur on the surface and mucosal layers of the bladder, but have not invaded deeper into the bladder's muscle layer or further beyond
- While NMIBC tumors tend to recur (estimates suggest ~50-70% recurrence), the major concern is that the tumors progress to become muscle invasive and/or metastatic, with time to progression being a predictor of patient survival
- Three stages of NMIBC are recognized including Ta, T1, and CIS, with Ta generally being a more favorable diagnosis than the other two
- Beyond stage, tumor histologic grade is another important factor impacting recurrence rate and patient survival; Grade scoring per WHO 2004/2022 includes PUNLMP, Low Grade, and High Grade (from least to most severe grade)
- Other factors such as tumor size, number of lesions, treatment history, and recurrence history also impact patient risk status and patient treatment strategy (detailed more on next slide)
- Applying frequencies of Ta, T1, and CIS (see table) to SEER bladder cancer data we estimate annual new US cases of Ta, T1, and CIS at 45K, 13k, and 6K, respectively

Type	Frequency*	Description
Cis / Tis	10%	**Carcinoma in situ** (CIS / Tis) are high grade, noninvasive, flat lesions that represent a high risk factor for the patient
Ta	70%	**Noninvasive papillary** (Ta) are confined to the urothelium and have not penetrated the basement membrane
T1	20%	**Papillary, submucosal invasive** tumors (T1) have penetrated into the submucosa but not the deeper muscle of the bladder

Bladder Cancer Stages



Source: UpToDate; European Association of Urology Guidelines (link); Cancer SEER statistic; Sylvester RJ et al 2006 (PMID 16442208); Isharwal S et al 2015 (PMID 26604439); Figure from Guggenheim ENGN Initiation Report (4/15/24); Guggenheim Securities, LLC estimates and analysis

Patients Are Stratified Into Risk Groups Based On NMIBC Stage And Multiple Other Factors

American Urologic Association (AUA) Risk Stratification For Primary NMIBC

Low Risk

- Papillary urothelial neoplasm of low malignant potential (PUNLMP)
- Low-grade solitary Ta tumor ≤3 cm in diameter

Low Risk has good prognosis with cancer-specific mortality <1%

Intermediate Risk

- Low-grade Ta and recurrence within 1 year
- Low-grade solitary Ta tumor >3 cm
- Low-grade multifocal Ta
- First occurrence, solitary, high-grade Ta tumor ≤3 cm in diameter
- Low-grade T1

High Risk

- High-grade T1
- Any recurrent high-grade Ta
- High-grade Ta tumor >3 cm or multifocal
- Any CIS
- Any BCG failure in a patient with high-grade tumor
- Any variant histology
- Any lymphovascular invasion
- Any recurrent high-grade Ta
- Any high-risk prostatic urethral involvement

Among patients with higher risk has disease, cancer-specific survival ranges between 70-85%

General Takeaways From Risk Stratification

- *Primary tumors are stratified into low, intermediate, and high-risk*
- *Beyond NMIBC stage, key factors for risk status include histologic grade, size and number of lesions amongst others*
- *CIS tumors are automatically high risk*
- *Most high-grade tumors are high-risk, exception is first occurrence of solitary and small high-grade Ta that is intermediate risk*
- *High-grade tumors failing BCG are high risk*

Source: UpToDate; Guggenheim Securities, LLC estimates and analysis

Current Treatment Guidelines for Urothelial NMIBC Are Primarily Driven By Patient Risk Status and Prior Exposure to BCG

Newly Diagnosed Urothelial NMBIC

Initial management based on risk stratification following TURBT; among straight chemotherapies gemcitabine tends to be preferred

Treatment by risk group:

Low Risk
- Surveillance
- TURBT with single intravesical instillation of chemo

Intermediate Risk
- intravesical BCG or chemo (induction + 1-year maintenance)
- Use chemo if under BCG shortage

High Risk
- Radical cystectomy* or intravesical BCG (induction+3-year maintenance)

Recurrent or Persistent NMIBC Without Progression To MIBC Or Metastatic

Management of recurrent patient based on risk status and the extent of previous treatment with BCG

Treatment by prior BCG:

BCG Naive
- Int. Risk:
  - Surveillance, TURBT
  - Intravesical BCG
  - Intravesical chemo (if naïve)
  - Zusduri for low-grade#
- High Risk: intravesical BCG

#, Zusduri approved in June 2025 for recurrent low-grade intermediate risk NMIBC

BCG Exposed
- High Risk: intravesical BCG
- V. High Risk: Radical cystectomy* (if not eligible, treat as high risk)

BCG-Exposed: Defined as single round of BCG induction w/o maintenance or relapse after maintenance w/ high-grade disease at > 1yr but <2 yr after last BCG dose

BCG Unresponsive
- High / V. High Risk:
  - Radical cystectomy* (if eligible)
  - Anktiva + BCG (CIS)
  - Adstiladrin (CIS, option for papillary per NCCN guidelines)
  - Gemcitabine / doce, chemos
  - Systemic Keytruda (CIS, option for papillary per NCCN guidelines)

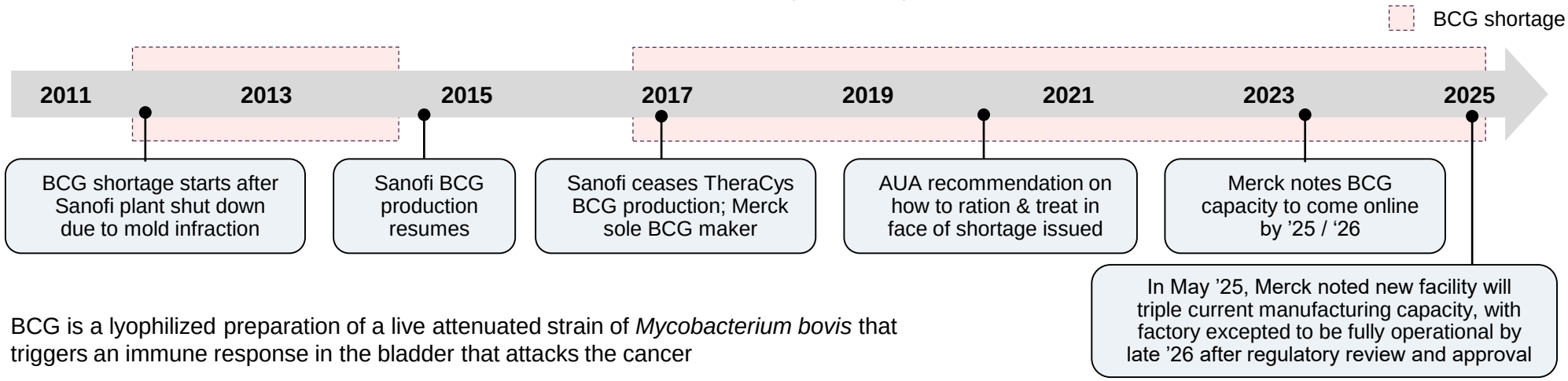
BCG-unresponsive: Persistent or recurrent high-grade following after at least induction & 1 round of maintenance for Ta/CIS or after at least induction for T1; Initial CR followed by high-grade recurrence within 6 (Ta/T1) or 12 mo (CIS) after last BCG dose

* While **Radical Cystectomy** (surgical removal of the bladder) is rarely required for intermediate risk patients, it is SOC for any patient with BCG-unresponsive high grade NMIBC. The surgery has high morbidity and a risk of mortality (~3%) and many patients are unfit for it or refuse it.

Source: FactSet; UpToDate; FDA Product Labels; NCCN Guidelines; Guggenheim Securities, LLC estimates and analysis

Ongoing Shortage of BCG Has Led to Rationing; More BCG Production May Come In Late 2026 But Patient Care Is Being Negatively Impacted

Timeline of BCG Shortage – Merck's TICE strain is currently the only BCG available in the US



- BCG is a lyophilized preparation of a live attenuated strain of *Mycobacterium bovis* that triggers an immune response in the bladder that attacks the cancer
- BCG dosing protocol consists of: an induction course (QW x 6), optional re-induction if tumor recurs/persist after 1st course, followed by a maintenance phase typically consisting of a weekly course of BCG for 3 weeks, every 3-6 months over a 1-3 year period
- Given BCG shortage, guidelines and medical societies have adopted a rationing strategy aimed at reducing consumption of BCG and prioritizing higher-risk patients
- Example of American Urological Association (AUA) BCG rationing guidelines include:
  - Not using BCG in low-risk disease and replacing BCG with intravesicular chemo for intermediate-risk patients
  - Full-strength BCG doses should be prioritized for induction of high-risk patients, but if not available can reduce to a 1/2 or 1/3 BCG dose
  - If supply for maintenance course exists, limit maintenance course to 1 year
  - In the event of BCG supply shortage, maintenance should not be given and BCG naïve patients with high-risk disease should be prioritized for induction

White Paper From 2023 Highlights Impact of BCG Shortage on Patient Care

- Notably 20% of organizations surveyed reported not being able to provide any BCG to eligible patients
- Reported mitigation steps include: chemo switch, dose reduction, initiation tx only, sterile splitting, and early cystectomy
- BCG production estimated to be 30% below need with a lack of ~150K vials potentially preventing 8.3K pts getting full dose course

Source: Protara corporate presentation and filings; A. Katz OncLive (12/1/16) Brennan, CNN (2/17/23); Idrus, FiercePharma (6/11/15); Sagonowsky, Fiercepharma (2/16/23), American Urological Association (9/4/20); Implications of the National BCG Drug Shortage, Feb 2023; BCG Shortage – An End in Sight; SCS AUA 2024 (link); Addressing the global shortage of TICE BCG, Merck (5/30/25); Guggenheim Securities, LLC analysis

Pipeline – BCG Unresponsive/Exposed (1 of 2)

Select Industry Phase 2 or Later Trials

BCG Status	Company	Agent	NMIBC	MOA	RoA	Study	Stage	Catalyst / Note
Unresponsive	MRK	Keytruda	CIS (±papillary)	PD-(L)1	IV	KN-057	Approved	Approved in 2022
	MRK	Keytruda +BCG	HR, CIS, T1, HG Ta	PD-(L)1 + BCG	IV / IVe	KN-676	Ph3	PCD 12/2025
	Ferring	Adstiladrin	CIS (±papillary)	Adenovirus vector gene tx	IVe	CS-003	Approved	Approved in 2022
	Ferring	Adstiladrin + pembro or chemo	CIS (±papillary)	Adenovirus vector gene tx	IVe / IV / IVe	ABLE-22	Ph3	PCD 12/2030
	IBRX	Anktiva + BCG	CIS (±papillary)	IL-15 + BCG	IVe	QUILT-3.032	Approved	Approved in 2024
	IBRX	Anktiva + BCG	HG papillary	IL-15 + BCG	IVe	QUILT-3.032	sBLA	Refusal to File, May 2025
	JNJ	Inlexzo (TAR-200)	CIS (±papillary)	Slow-release gemcitabine	IVe	SunRISe-1	Approved	Approved 9/2025
	JNJ	Inlexzo (TAR-200)	HR papillary	Slow-release gemcitabine	IVe	SunRISe-1	Ph2	Data at AUA 2025
Unresponsive/ Exposed	JNJ	TAR-210	HR papillary, FGFR+	Slow-release erdafitinib	IVe	MoonRISe-3	Ph3	PCD 8/2027
	JNJ	Inlexzo (TAR-200)	HR papillary	Slow-release gemcitabine	IVe	SunRISe-5	Ph3	PCD 11/2030
Unresponsive	CGON	Cretostimogene	CIS (±papillary)	Oncolytic adenovirus	IVe	BOND-003 Cohort C	Ph3	BLA filing in 4Q25
	CGON	Cretostimogene	HR papillary	Oncolytic adenovirus	IVe	BOND-003 Cohort P	Ph3	Topline data in 4Q25
	CGON	Cretostimogene +Keytruda	CIS (±papillary)	Oncolytic adenovirus	IVe	CORE-001	Ph2	2-yr data at ASCO 2024

Recall that for BCG-unresponsive patients, the FDA is currently open to approving agents based on single-arm Phase 2 studies, while BCG-unresponsive high-risk papillary only disease still requires a randomized Phase 3 trial

Abbreviations: NMIBC, nonmsucle invasive bladder cancer; mBC, metastatic bladder cancer; MIBC, muscle invasive bladder cancer; mUC, metastatic urothelial carcinoma; HR, high risk, IR, intermediate risk; CIS, carcinoma in situ, LG, low grade; HG, high-grade; ;IV, intravenous; IVe, intravesicular Source: Company filings and presentations; www.clinicaltrials.gov; Biomedtracker; Guggenheim Securities, LLC estimates and analysis

Pipeline – BCG Unresponsive/Exposed (2 of 2)

Select Industry Phase 2 or Later Trials

BCG Status	Company	Agent	NMIBC	MOA	RoA	Study	Stage	Catalyst / Note
Unresponsive	TARA	TARA-002	CIS (±papillary)	Inactivated microbe	IVe	ADVANCED-2 Cohort B	Ph2	Updated data 1Q26
	ENGN	Detalimogene	CIS (±papillary)	Non-viral gene tx	IVe	LEGEND Cohort 1	Ph2	Data update 4Q25; BLA filing 2H 2026
	ENGN	Detalimogene	HR papillary	Non-viral gene tx	IVe	LEGEND Cohort 3	Ph2	PCD 6/2026
Exposed	ENGN	Detalimogene	CIS (±papillary)	Non-viral gene tx	IVe	LEGEND Cohort 2b	Ph2	PCD 6/2026
Unresponsive	TLT-CA	Ruvidar	CIS (±papillary)	PDT	IVe	NCT03945162	Ph2	PCD 12/2025
Unresponsive / Uncertain	SURGE therapeutics	STM-416	HG Ta/T1	Immuno-stim. Gel	Intraop	NCT05710848	Ph2	PCD 12/2025
Unresponsive / Exposed	CGON	Cretostimogene + gemcitabine	HR, CIS and papillary	Oncolytic adenovirus	IVe	CORE-008 Cohort CX	Ph2	Topline data in 1H26
Exposed	CGON	Cretostimogene	HR, CIS and papillary	Oncolytic adenovirus	IVe	CORE-008 Cohort B	Ph2	Data in 2026

Recall that for BCG-unresponsive patients, the FDA is currently open to approving agents based on single-arm Phase 2 studies, while BCG-unresponsive high-risk papillary only disease still requires a randomized Phase 3 trial

Abbreviations: NMIBC, nonmsucle invasive bladder cancer; mBC, metastatic bladder cancer; MIBC, muscle invasive bladder cancer; mUC, metastatic urothelial carcinoma; HR, high risk, IR, intermediate risk; CIS, carcinoma in situ, LG, low grade; HG, high-grade; ;IV, intravenous; IVe, intravesicular Source: Company filings and presentations; www.clinicaltrials.gov; Biomedtracker; Guggenheim Securities, LLC estimates and analysis

See pages 56 - 57 for analyst certification and important disclosures.

Pipeline – BCG Naïve (1 of 2)

Select Industry Phase 2 or Later Trials

BCG Status	Company	Agent	NMIBC	MOA	RoA	Study	Stage	Catalyst / Note
Naïve	URGN	Zusduri	Recurrent LG-IR	Slow release mitomycin	IVe	ENVISION	Approved	Approved 6/2025
	URGN	UGN-103	Recurrent LG-IR	Slow release mitomycin	IVe	UTOPIA	Ph3	Topline data YE 2025 / 2026
	PFE	Sasanlimab + BCG	HR, CIS and papillary	PD-(L)1 + BCG	SubQ / IVe	CREST	Ph3	Data at AUA 2025; Regulatory update
	AZN-GB	Imfinzi + BCG	HR, CIS and papillary	PD-(L)1 + BCG	IV / IVe	POTOMAC	Ph3	Topline Data May 2025
	AZN-GB	Imfinzi + BCG	HR, CIS and papillary	PD-(L)1 + BCG	IV / IVe	PATAPSCO	Ph3	PCD 9/2025
	MRK	Keytruda +BCG	HR (CIS, T1, HG Ta)	PD-(L)1 + BCG	IV / IVe	KN-676	Ph3	PCD 12/2025
	MRK / MRNA	V940 + BCG	HR (CIS, T1, HG Ta)	Vaccine + BCG	IM / IVe	INTerpath-011	Ph2	PCD 9/2031
	Verity Pharma (private)	VERITY-BCG	Int / HR	BCG	IVe	EVER	Ph3	PCD 2/2029
	CGON	TURBT + adjuvant Cretostimogene	IR (primary HG, primary/ recurrent LG)	Oncolytic adenovirus	IVe	PIVOT-006	Ph3	Potential topline data in 2027
	CGON	Cretostimogene	HR, CIS and papillary	Oncolytic adenovirus	IVe	CORE-008 Cohort A	Ph2	Topline data in 4Q25
	JNJ	TAR-210	Primary or recurrent, LG-IR, FGFR+	Slow release erdafitinib	IVe	MoonRISe-1	Ph3	PCD 6/2028
	JNJ	Inlexzo ± cetrelimab	HR (CIS, HG Ta, any T1)	Slow release gemcitabine	IVe	SunRISe-3	Ph3	PCD 9/2029

Abbreviations: NMIBC, nonmsucle invasive bladder cancer; mBC, metastatic bladder cancer; MIBC, muscle invasive bladder cancer; mUC, metastatic urothelial carcinoma; HR, high risk, IR, intermediate risk; CIS, carcinoma in situ, LG, low grade; HG, high-grade; ;IV, intravenous; IVe, intravesicular Source: Company filings and presentations; www.clinicaltrials.gov; BioMedTracker; Guggenheim Securities, LLC estimates and analysis

Pipeline – BCG Naïve (2 of 2)

Select Industry Phase 2 or Later Trials

BCG Status	Company	Agent	NMIBC	MOA	RoA	Study	Stage	Catalyst / Note
Naïve	IBRX	Anktiva + BCG	CIS, HG-Ta/T1	IL-15 + BCG	IVe	QUILT-2.005	Ph3	PCD 12/2028
	IBRX	Anktiva + BCG	Recurrent, LG-IR, Ta/T1 papillary	IL-15 + BCG	IVe	NCT06829823	Ph2	PCD 5/2026
	ENGN	Detalimogene	CIS (±papillary)	Non-viral gene tx	IVe	LEGEND Cohort 2a	Ph2	PCD 6/2026
Naïve / Exposed	TARA	TARA-002	CIS (±papillary)	Inactivated microbe	IVe	ADVANCED-2 Cohort A	Ph2	-
	TYRA	Dabogratinib (TYRA-300)	LG IR, FGFR+ (allows recurrent)	FGFR3i	PO	SURF302	Ph2	Initial Data 1H26
	MRK	Sacituzumab Tirumotecan	Recurrent LG-IR	TROP2 ADC	IVe	NCT06637423	PH1/2	PCD 6/2026
Naïve / Uncertain	AURA	Bel-sar ±laser	HR / Int Risk	Virus-like drug conjugate	IM ±IT	NCT05483868	Ph1/2	Initial Data 2025 Potential data update 2H25 / 2026
Naïve / Uncertain	SURGE therapeutics (private)	STM-416	HG Ta/T1	Immuno-stim. Gel	Intraop	NCT05710848	Ph2	PCD 12/2025

Abbreviations: NMIBC, nonmsucle invasive bladder cancer; mBC, metastatic bladder cancer; MIBC, muscle invasive bladder cancer; mUC, metastatic urothelial carcinoma; HR, high risk, IR, intermediate risk; CIS, carcinoma in situ, LG, low grade; HG, high-grade; ;IV, intravenous; IVe, intravesicular Source: Company filings and presentations; www.clinicaltrials.gov; Biomedtracker; Guggenheim Securities, LLC estimates and analysis

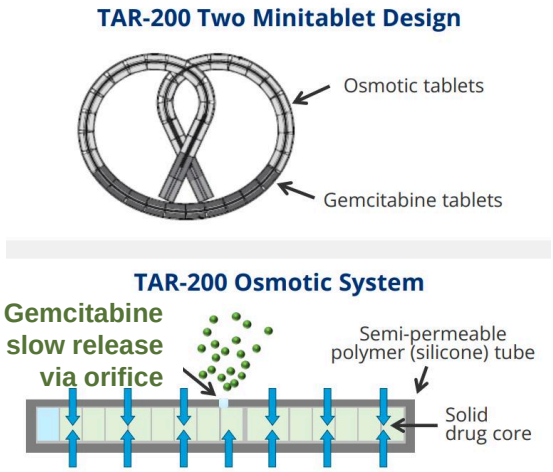
See pages 56 - 57 for analyst certification and important disclosures.

GUGGENHEIM

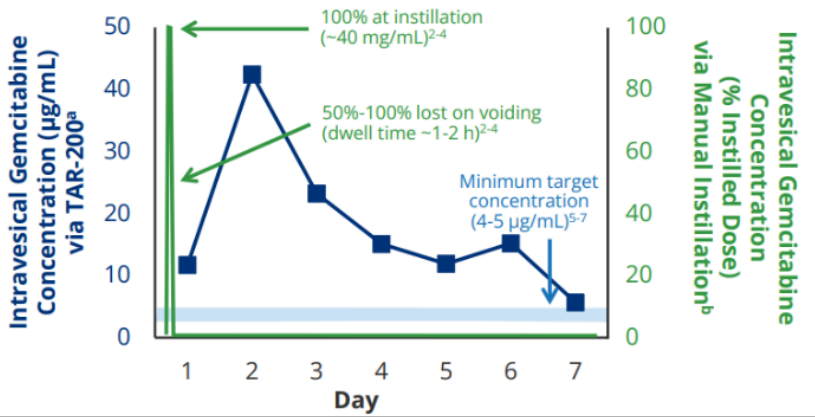
NMIBC Product Story

Inlexzo Is a Slow Chemo Release Device Placed Directly Into the Bladder That Urologists Appear Eager To Adopt In Our Expert Checks

- JNJ's Inlexzo (TAR-200) first approved in September 2025 for BCG-unresponsive CIS, is a pretzel-shaped device that gradually releases gemcitabine by an osmotic mechanism over the period when the pretzel is in the bladder
- Inlexzo is inserted intravesically via urinary placement catheter into the bladder and can be removed using grasping forceps and cystoscopy; JNJ has explained that placement / removal of the device can be done in a few minutes
  - Our checks with leading urologists suggest the entire procedure could be done in office with local anesthesia in ~15-20 minutes and fits extremely well within the current practice flow of urologists that treat NMIBC patients
- Per the CIS label, Inlexzo is inserted into the bladder once every 3 weeks for up to 6 months (8 doses), followed by once every 12 weeks for up to 18 months (6 doses), or until disease recurrence / progression or unacceptable toxicity
- **In our checks, Inlexzo stood out among novel agents as the product that a majority of urologists anticipated using the most in the future given the strong clinical data to date, the logistical convenience, and good fit into urology practices**
- JNJ is also developing TAR-210 which leverages the same TARIS platform technology, but releases the FGFR inhibitor erdafitinib instead of gemcitabine



Gemcitabine urine levels show sustained release overtime for TAR-200 (blue) compared to current intravesical chemo delivery methods (green)



Gemcitabine dwell time in bladder ≥7 days with TAR-200

Source: JNJ Company Presentation Slides; AUA 2023 JNJ presentation; Guggenheim Securities, LLC estimates and analysis

[a]Estimated clinical concentrations based on miniature pig pharmacokinetics.[1]
[b]Patients received instilled doses of 500-2000 mg in 50-100 mL,[2] 2000 mg in 50 mL,[3] or 2000 mg in 50-100 mL.[4]

JNJ Has a Broad Development Plan For Inlexzo and Sees the TARIS Platform as a $5Bn+ Opportunity That Is Underappreciated By The Street

- JNJ has stated that the broader TARIS platform which includes the tech for TAR-200/TAR-210 is a $5Bn+ revenue opportunity and stressed on their 1Q25 and 2Q25 earnings calls a disconnect between the Street and their estimates
  - *"Looking ahead to 2028, we anticipate sales for…TARIS to be at least 3x higher than current Street estimates" – 1Q25*
  - *"TAR-200, that is probably the asset that has the biggest disconnect between our internal forecasts and…the Street" – 2Q25*
- The SunRISe-1 Phase 2 study for TAR-200 has shown strong clinical data across two BCG-unresponsive (BCG-UR) high-risk cohorts, namely Cohort 2 for CIS subtype patients and Cohort 4 for papillary disease patients
  - While controlled randomized trial data are needed for the BCG-UR papillary indication, the FDA accepts single-arm trial data like that from Cohort 2 for BCG-UR CIS
- JNJ's regulatory submission for TAR-200 was reviewed under Real-Time Oncology Review and the drug was approved by the FDA in September 2025
  - Approvals in the larger BCG-UR papillary (SunRISe-5) and BCG-naïve HR (SunRISe-3) indications for TAR-200 will likely come closer to the ~2030 time frame based on current primary completion dates listed in clinicaltrials.gov

Multiple Trials With TARIS Platform Products Ongoing With TAR-200 and TAR-210

Trial	N	NMIBC Indication	Regimen	Stage	Note
SunRISe-5	250	BCG-UR, HR papillary	TAR-200	Ph3	PCD 11/2030
SunRISe-3	1135	BCG-naïve, Any HR NMIBC	TAR-200 ± PD1	Ph3	PCD 9/2029
SunRISe-1 Cohort 2	85	BCG-UR, CIS (±papillary)	TAR-200	Ph2	Data update at AUA 2025 9/9/25 FDA approval
SunRISe-1 Cohort 4	52	BCG-UR, HR papillary	TAR-200	Ph2	Data at AUA 2025 Potential NCCN guidelines in 2026
MoonRISe-1	540	Low grade IR, FGFR+	TAR-210	Ph3	PCD 6/2028
MoonRISe-3	220	BCG-exposed or UR, HR papillary, FGFR+	TAR-210	Ph3	PCD 8/2027

Source: JNJ company presentation slides, press releases, and conference transcripts; Cliniicaltrials.gov; Guggenheim Securities, LLC estimates and analysis

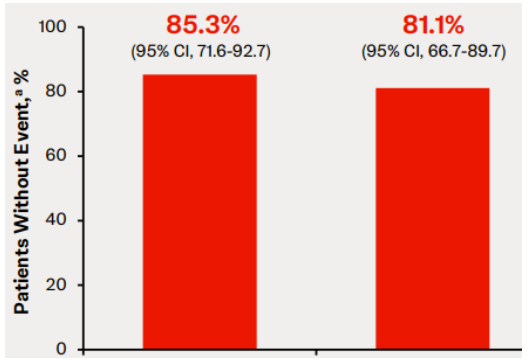
Strong Inlexzo Clinical Data Compared to Currently Available Agents In BCG-Unresponsive High-Risk NMIBC Should Drive Commercial Uptake

- We view the SunRISe-1 data in BCG-unresponsive CIS as superior to that of currently approved products (see table) with strength of the data and good fit with urology practices likely to foster a relatively quick uptake
- Moreover, SunRISe-1 papillary-only data are likely sufficient for Inlexzo to earn NCCN guidelines (see figure below) which, based on our urologist checks, should be enough to drive some adoption in that indication without FDA approval
- While urologists broadly praised the strong response rates and response duration which should drive broad adoption, some noted the Inlexzo side effect profile was not ideal and could be improved on (see slide 39)
  - Urologists noted Inlexzo AEs were of the type that they can handle, but with a 13% Grade 3+ treatment related adverse event rate and 3.5% discontinuation rate, some patients cannot tolerate Inlexzo and require it removed
- Additionally, in our checks, urologists liked that Inlexzo: (i) allowed them to perform a common procedure to insert / remove Inlexzo that could potentially be performed by a nurse or physician's assistant; (ii) allowed them to keep their patient and provide continuation of care; (iii) provided some financial return to the practice; (iv) and allowed for simple room temperature storage and handling

Efficacy in BCG-unresponsive CIS NMIBC

Agent	TAR-200	Adstiladrin	Anktiva + BCG*	Keytruda
CR Rate (primary endpoint)	82%	51%	62%	41%
≥12-month DOR (secondary end point)	51%	46%	58%	46%
Proportion of all patients who achieved & kept CR for ≥12 mo	42% (35/83)	24% (23/98)	36% (28/77)	19% (18/96)

Promising Efficacy Signal For TAR-200 in BCG-Unresponsive HR Papillary-Only NMIBC



SunRISe-1 Cohort 4 (N=52)

- Currently no drugs approved specifically for this patient segment
- Compares favorably with the 44% 12-mo DFS/RFS rates for novel agents that are NCCN guideline recommended (Keytruda[1], Adstiladrin[2])
- Adstiladrin 58% HG-recurrence free at 9-mo[2]

Note: * With reinduction. Source: 1) Necchi A et al, Lancet Oncol 2024 (PMID: 38740030); 2) Boorjian SA et al Lancet Oncol 2021 (PMID: 33253641); JNJ Company Presentation Slide from AUA 2025; Product Labels; Guggenheim Securities, LLC estimates and analysis

TAR-210 Is Being Developed For Intermediate and High-Risk NMIBC Patients With FGFR Mutations, Complementing JNJ's Inlexzo Franchise

TAR-210's early clinical data and strong mechanistic rationale drive our enthusiasm

- TAR-210 uses the same slow-release pretzel device as Inlexzo instilled intravesically, but is loaded with JNJ's pan-FGFR inhibitor erdafitinib, which is approved for 2L+ metastatic bladder cancer patients with an FGFR3 mutation
- FGFR-alterations are estimated to be found in ~50-80% of intermediate risk (IR) NIMBC and in ~35-40% of high-risk (HR) papillary only NMIBC patients, per JNJ
  - As such, pivotal TAR-210 trials require a "susceptible" FGFR-mutation or fusion by urine or tumor tissue testing
- First-in-human Phase 1/2 data for TAR-210 show signals of efficacy across both HR and IR cohorts (papillary only patients) selected for FGFR-alteration positivity
  - HR: Recurrent BCG-exposed, HG Ta/T1, showed estimated 12-month RFS rate of 90% (N=21)
  - IR: Recurrent, LG Ta/T1 with visible target lesion (chemoablation design) showed 90% 3-mo CR rate (N=28/31)
- Ph1/2 safety appeared tolerable, with 47% of patients (N=64, all patients) experiencing a TRAE which were predominantly Gr1/2 and only 2 patients (3%) discontinuing due to TRAEs (low-grade urinary symptoms)
- In our checks, urologists were positive on the efficacy but noted that they anticipated TAR-210 would show a similar safety profile to TAR-200 and additionally stressed that incorporating FGFR-biomarker testing into their clinical practice would take some effort as biomarker testing is currently not common in their specialty
- Global TAR-210 Phase 3s include MoonRISe-1 for LG IR patients and MoonRISe-3 for BCG-unresponsive or exposed HR-papillary only patients
  - Trials have primary completion dates in mid 2027/2028, suggesting potential launches in the ~2028/2029 timeframe
- We note MoonRISe-1 uses a more convenient dosing regimen for TAR-210 (vs TAR-200) with dosing every 12 weeks for ~1-year; MoonRISe-3 uses the same every 12-week dosing but for 2 years

Source: JNJ TAR-210 Presentation AUA 2024; Urology Today AUA 2025 MoonRISe-3 (link); www.clinicaltrials.gov; Guggenheim Securities, LLC estimates and analysis

While Anktiva Is Gaining Traction in BCG-Unresponsive CIS, We Believe It Will Struggle To Compete With TAR-200 and Cretostimogene in the Future

- Anktiva (nogapendekin alfa) is an immune agonist (IL-15R) dosed as an intravesical instillation into the bladder that was first approved by the FDA in April 2024 for BCG-unresponsive CIS NMIBC in combo with BCG
- In NMIBC, Anktiva + BGC combo is given as an induction (weekly doses for 6 weeks), with an option for a 2nd induction course for patients without a complete response, followed by maintenance (weekly doses for 3 weeks every 3 months for months 4-13, then every 6 months from month 19 to 37)
- While docs like that Anktiva's schedule matches that of BCG, some have raised concerns that Anktiva is approved in combination with BCG when there is still a BCG shortage and that these patients are already BCG refractory
- In our checks, urologists favored Anktiva over marketed products Adstilarin and Keytruda based on the greater efficacy and greater convenience, but they also viewed the emerging TAR-200 and cretostimogene efficacy profiles as significantly superior
  - As such, we anticipate that Anktiva will lose market share when TAR-200 and creto get approved in indications that overlap with Anktiva, such as BCG-UR CIS in the near-term and the BCG-naïve setting longer-term

Efficacy in BCG-unresponsive CIS NMIBC

Agent	Anktiva + BCG	TAR-200	Adstiladrin
CR Rate (primary endpoint)	62%	82%	51%
≥12-month DOR (secondary end point)	58%	53%	46%
Proportion of all patients who achieved and maintained CR for ≥12 mo	36% (28/77)	44% (37/85)	24% (23/98)

Anktiva Being Developed Across Multiple NMIBC Indications

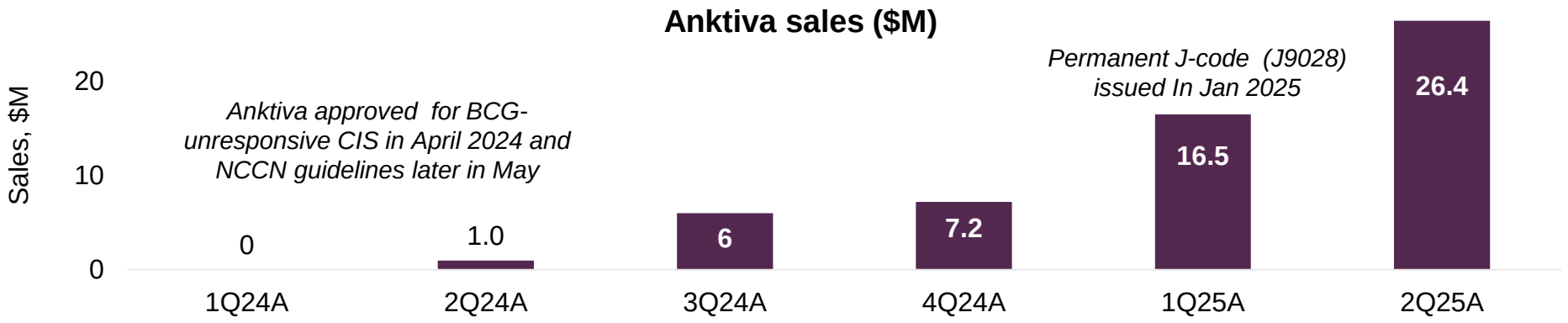
Trial	Regimen	Indication#	Stage
QUILT-3.032	Anktiva +BCG	High risk, BCG-UR, CIS NMIBC	Approved in 2024
		High risk, BCG-UR, papillary NMIBC	RTF in May 2025
QUILT-2.005	Anktiva +BCG	BCG naïve, high-grade NMIBC	Phase 3 PCD 12/2028
Other Anktiva trials being conducted in lung, ovarian and colorectal cancers, lymphoma, COVID and HIV, amongst other diseases			

BCG-UR, BCG unresponsive

Source: Boorjian SA et al Lancet Oncol 2021 (PMID: 33253641); JNJ Company Presentation Slide from AUA 2025 Anktiva prescribing label; Company website; Guggenheim Securities, LLC estimates and analysis

Anktiva Generating Modest Sales In BCG-Unresponsive CIS Approximately Year After Launch Though Sales Have Picked Up After J-Code Issuance

- Anktiva showed a modest launch during its first calendar year on the market, but sales have picked up after its permanent J-code was issued in January 2025 with the sellside forecasting ~$100M in Anktiva sales in 2025E
- We note that Anktiva sales are being driven by the BCG-unresponsive CIS NMIBC population, which represents one of the smaller segments of BCG-unresponsive NMIBC
  - We estimate the number of BCG-unresponsive papillary disease patients to be twice that of the corresponding CIS
- The UK granted the first ex-US approval for Anktiva for BCG-unresponsive CIS patients in July 2025, and the application has been filed with EMA
- Unlike Adstiladrin and Keytruda that have labeled indications for BCG-unresponsive CIS but also NCCN category 2B recommendations for unresponsive papillary disease, Anktiva lacks a NCCN recommendation for unresponsive papillary. IBRX has applied to expand Anktiva to papillary, with the NCCN to review the submission in August 2025
- In May 2025, the FDA issued a Refusal to File (RTF) for the Anktiva sBLA for the papillary BCG-unresponsive indication, with the FDA suggesting that unlike for CIS where a single arm suffices, a randomized trial was needed
- In our KOL checks, some urologist have pointed to the high price of Anktiva as a limiting factor, with a list price of $35,800 per dose yielding ~$215K for the induction (6 doses) and ~$320K for the first year's maintenance (9 doses) assuming a patient gets the full induction and regimen for the first year

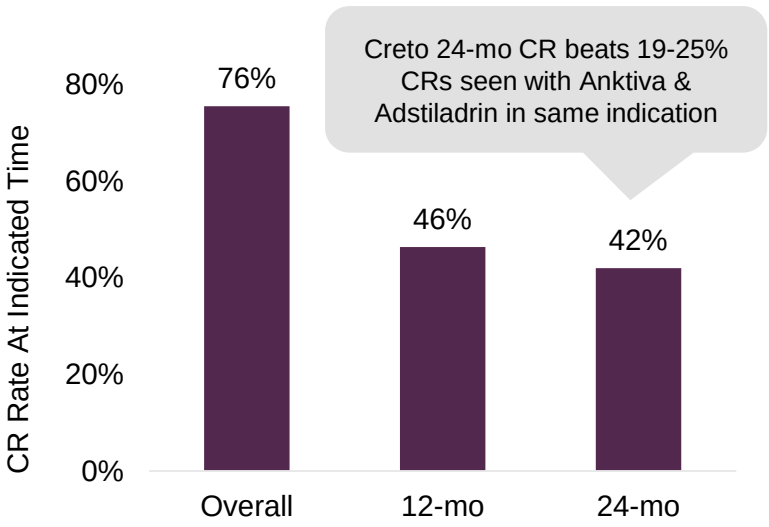


Source: ImmunityBio press releases; NCCN guidelines; PriceRx; KOL interviews; FactSet; Guggenheim Securities, LLC estimates and analysis

CGON's Cretostimogene Is On Track For Commercial Launch In 2026 With a Clinically Attractive Efficacy and Safety Profile

- Cretostimogene grenadenorepvec (creto) is an oncolytic adenovirus engineered to selectively replicate in cancer cells with Rb-pathway mutations and express GM-CSF, an immune stimulating cytokine that promotes anti-tumor immunity
- Creto is being developed in multiple NMIBC trials across intermediate and high-risk indications, with a potential first FDA approval in 2026 for BCG-unresponsive CIS following CGON's planned BLA filing in 4Q25 (See table below)
- Overall, in our KOL checks, urologists highlight the strong efficacy, durable responses, and the well-tolerated safety profile of creto, but urologists note that the administration procedure and storage requirements for creto are more burdensome than BCG, Anktiva, and Inlexzo (more details on next slide)
- That said, given the strong clinical data we do envision creto will garner substantial commercial uptake
- Note that in July 2025, CGON won a jury trial that ruled CGON does not owe royalites on future creto sales to ANI Pharmaceuticals (ANIP) though ANIP's management has indicated they will appeal the decision

Creto Shows Strong Complete Response Rates In BCG-Unresponsive CIS



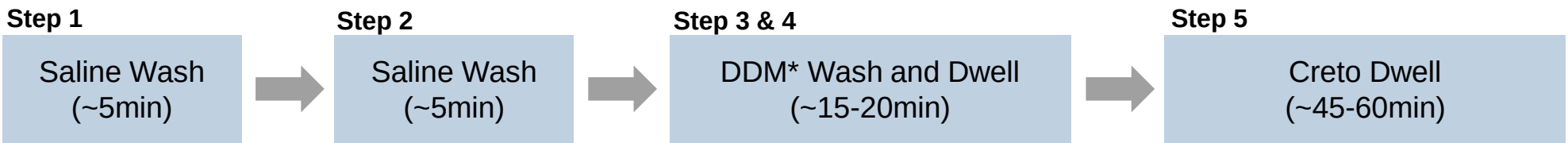
Trial	NMIBC Indication	Stage	Note
BOND-003, Cohort C (Creto monotherapy)	High-risk, BCG-unresponsive, CIS NMIBC	Ph3	BLA filing 4Q25
BOND-003, Cohort P (Creto monotherapy)	High-risk, BCG-unresponsive, Papillary NMIBC	Ph2	Topline in 4Q25
PIVOT-006 (Creto monotherapy)	Intermediate-risk, adjuvant treatment post TURBT	Ph3	PCD 2028
CORE-008, Cohort A (Creto monotherapy)	High-risk, BCG-naïve	Ph2	Topline in 4Q25
CORE-008, Cohort B (Creto monotherapy)	High-risk, BCG-exposed	Ph2	Data in 2026
CORE-008, Cohort CX (Creto +chemo)	High-risk, BCG-exposed or unresponsive	Ph2	Initiated in 1H25
CORE-008, Cohort CX (Creto +pembro)	High-risk, BCG-unresponsive	Ph2	Topline in 1H26

Source: CG Oncology; KOL interviews; Li R et al, Nat Med 2024 (PMID: 38844794); FactSet; Guggenheim Securities, LLC estimates and analysis

Despite a Strong Clinical Profile, Doctors View Creto's Administration Protocol, Safety and Storage Requirements as a Hinderance To Adoption

- Creto is delivered intravesically via a soft catheter without the need for general anesthesia, and the dosing schedule includes an induction phase (with optional reinduction for non-responders to initial induction) and maintenance phase
- For induction, creto is dosed weekly for 6 weeks (QW x 6) followed by maintenance dosing at weekly doses for 3 weeks every 3 months for the 1st year and every 6 months for years 2-3 for high-risk patients. Intermediate risk patients get only 1 year of maintenance, with 3 doses at the 3 and 6 month marks, but then only 1 dose at the 9 and 12 month marks
- The current creto administration protocol consist of five steps (see figure) which, per CGON, would take ~90 minutes, and the procedure could be performed by a doctor, a medical assistant, a nurse, or a physician assistant
- Given the viral nature of creto, it requires cold chain shipping and storage at -60ºC or below (akin to Adstiladrin) in specialized freezers and requires biosafety handling (BSL-2)
- CGON points out that the biosafety handling for creto is the same as BCG which is widely used, but in our checks, urologists seem to hold creto to higher safety standards (e.g., need for a positive pressure hood) that they do not apply to BCG and would like to see these additional safety requirements eliminated for them to use creto more
- Additionally, a majority of urologists we spoke to noted that the administration protocol and -60ºC storage of creto in specialized freezers was a barrier to adoption; While some urology practices noted they already have or may get access to the required freezers, other practices suggested it was not feasible for them

Creto Administration Protocol:



Patient comes into procedure room, without need for full camera setup that is needed when performing a cystoscopy

Mild detergent wash & dwell delivered intravesically to enhance viral infection efficiency

Intravesically delivered creto is allowed to dwell in patient's bladder so virus can infect cancer cells

Note: *DDM, n-Dodecyl-ß-D-maltoside; Source: CG Oncology presentations and conferences; Financial filings; KOL interviews; Guggenheim Securities, LLC estimates and analysis

CGON Is Actively Taking Steps To Make Creto More Convenient; We Also Note Opportunity In Distinct Settings More Adapted To Creto's Profile

CGON taking steps to simplify creto protocol and logistics to enhance commercial appeal of product

- On the administration protocol, CGON is looking to eliminate the 3 wash steps and go straight to the DDM dwell and creto dwell which the company thinks could eliminate ~20 min from the procedure
- The 2-step protocol has already been implemented in multiple trials, and, although the pivotal CIS patient cohort used 5-steps, CGON explained that with N~50 patients worth of data from CORE-008 showing similar efficacy and safety between the two protocols, CGON would be able to incorporate the 2-step protocol into the initial label for CIS
- To provide greater logistical flexibility to sites (including those without -60^{o}C freezers) CGON is also currently validating a just-in-time delivery option where creto is shipped at -60^{o}C in a carton that is stable for 5 days as well as an option where creto could be stored in a common 2-8^{o}C fridge for up to 1 month at the urologist's center

Beyond these logistical improvements, we see multiple reasons for creto to garner significant uptake

- We believe a large share of the market will have access to freezers, including academic centers and large practices
  - AUA Census data suggest 32% of urologists are in an academic setting and 42% are in a private practice with 21% of these having ≥16 urologists
  - Moreover, in our checks some urologists reported having access to freezers and CGON was successful in running multiple creto trials
- Even if creto is not the first-line treatment of choice, we think many patients will eventually be treated with creto given NMIBC has a high tendency to recur, given creto's strong efficacy / tolerability data, and urologists will want to treat patients with a drug patients have not been exposed to before in order to maximize efficacy
- While biosafety consideration did come up in our KOL conversations, we think sufficiently large practices will be able to meet the requirements and that with more experience, physicians will become more accepting. In our checks, we noted some urologists are relatively lax on meeting all BCG biosafety handling standards now that they have experience using the product

Source: CG Oncology presentations, conferences, financial filings; KOL interviews; AUA, State of the Urology Workforce and Practice in the US 2024 (link); Guggenheim Securities, LLC estimates and analysis

Given the Overall Mediocre Fit For NMIBC, We Anticipate Modest Commercial Uptake of Anti-PD(L)1s in the BCG-Naïve Setting

- Multiple late-stage PD(L)1s are being developed predominantly as a BCG combo in the BCG-naïve setting (see table below) with Keytruda's initial BCG-unresponsive CIS approval in 2020, and recent data from CREST and POTOMAC derisking the class in NMIBC
- We anticipate overall modest commercial uptake of PD(L)1 agents based on the profile of these agents and how they fit into the NMIBC treatment landscape, urologists' practice, and considering competition from other emerging agents
- In our checks, urologists explained that Keytruda saw limited commercial uptake in CIS because the product did not fit well within the urology practice; Issues cited included urologists being uncomfortable with managing Keytruda's safety profile, lack of IV infusion capabilities, modest efficacy, and having to refer out a patient for them to get Keytruda
- That said, we do envision modest uptake of PD(L)1 agents, particularly in the BCG-naïve setting, given positive data from AZN-GB's Imfinzi and PFE's sasanlimab + BCG Phase 3 (see next slide)
  - PD(L)1 agents will likely be approved in the BCG-naïve setting several years ahead of TAR-200 and Creto, and based on our conversations with multiple urologists, could be used by those physicians with additional oncology training and/or physicians in certain practices settings (e.g., academic hospitals) who can conveniently refer patients to a medical oncologist to assist with management of the patient

*ALBAN is a European IST, with no US sites listed on ct.gov (NCT03799835)

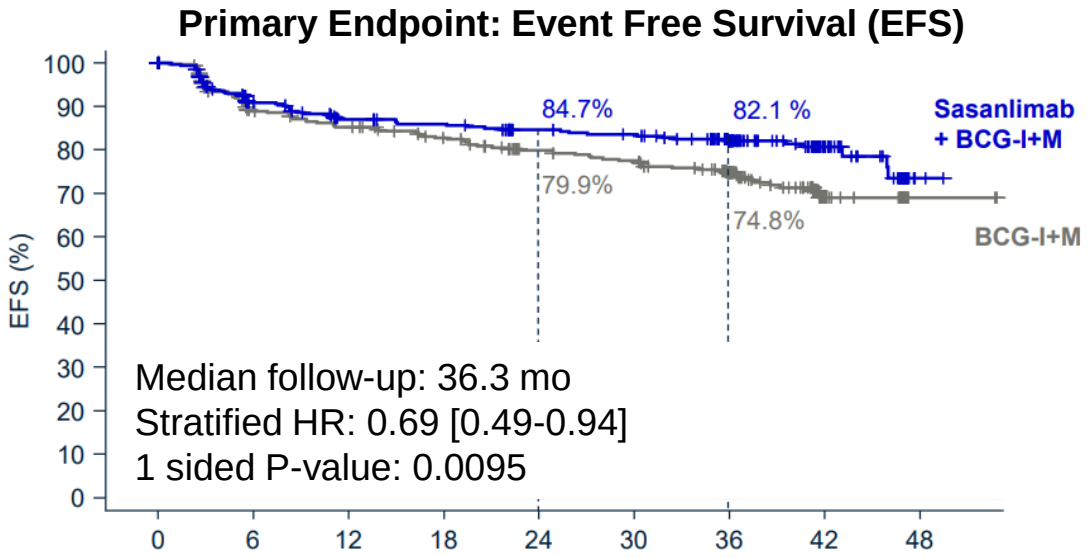
Phase 3 Studies For PD(L)1 Agents In NMIBC

Indication	Trial [Company]	Regimen	PD(L) RoA	Note
BCG-Naïve, High-Risk	CREST [PFE]	Sasanlimab + BCG	SubQ	AUA 2025 data presentation; PFE preparing for regulatory filing
	POTOMAC [AZN-GB]	Imfinzi + BCG	IV	Topline Data May 2025
	PATAPSCO [AZN-GB]	Imfinzi + BCG	IV	PCD 9/2025
	ALBAN [ROG-SWX]*	Tecentriq + BCG	IV	PCD 6/2025
	KEYNOTE-676 [MRK]	Keytruda + BCG	IV	PCD 12/2025
BCG Unresponsive, High-Risk	KEYNOTE-676 [MRK]	Keytruda + BCG	IV	PCD 12/2025

Source: KOL interviews; Company press releases and data presentations; Necchi, KEYNOTE-057 (PMID: 34051177); FactSet; Guggenheim Securities, LLC estimates and analysis

Among PD(L)1s, Sasanlimab Appears Well Positioned to Capture Significant Class Share Given SubQ Dosing and Early Entry Into BCG-Naïve Space

- Positive results for PFE's CREST Phase 3 were presented at AUA 2025 for BCG-naïve high-risk patients treated with (Arm A) sasanlimab (sansa) + BCG induction and maintenance (I+M) versus (Arm C) BCG I+M
- Beyond the primary endpoint data (see figure), we also note strong any time complete response (CR) rates of 90% (Arm A) and 85% (Arm B) for CIS patients while interim survival data were quite immature (HR 1.1; 95%CI: 0.7-1.9)
- We view sasan's profile as differentiated with its subcutaneous dosing while other late-stage PD(L)1 agents are being dosed IV, which should favor sasan uptake given the lack of IV infusion capabilities for many urology practices
- However, in line with safety concerns urologists have already noted impacting potential PD(L)1 adoption, we highlight the sasan + BCG profile was less tolerable: any TRAE Gr 3/4 (29% vs 6% BCG); serious TRAE (18% vs 1% BCG)
- As such, while we continue to think the PD(L)1 class will have moderate uptake in BCG-naïve high-risk patients, we envision that sasanlimab's subcutaneous profile will capture majority class share unless other emerging PD(L)1 agents are able to achieve substantially differentiated efficacy / safety profiles, which we believe is unlikely
- While some investors have pushed back saying that the BCG shortage makes PD(L)1 + BCG combos fraught, we do not anticipate this as a major issue in the medium-to-long term
  - In our checks, even with the current shortage, urologists prioritize high-risk patients for BCG and usually have sufficient doses for these patients
  - Merck expects its new BCG factory to triple current production (should be online late 2026)
  - Recombinant BCG is gaining some traction



Source: KOL interviews; Pfizer CREST presentation, AUA 2025; FactSet; Guggenheim Securities, LLC estimates and analysis

URGN's Recently Approved Zusduri Provides a New Therapeutic Option For Low-Grade Intermediate-Risk Patients

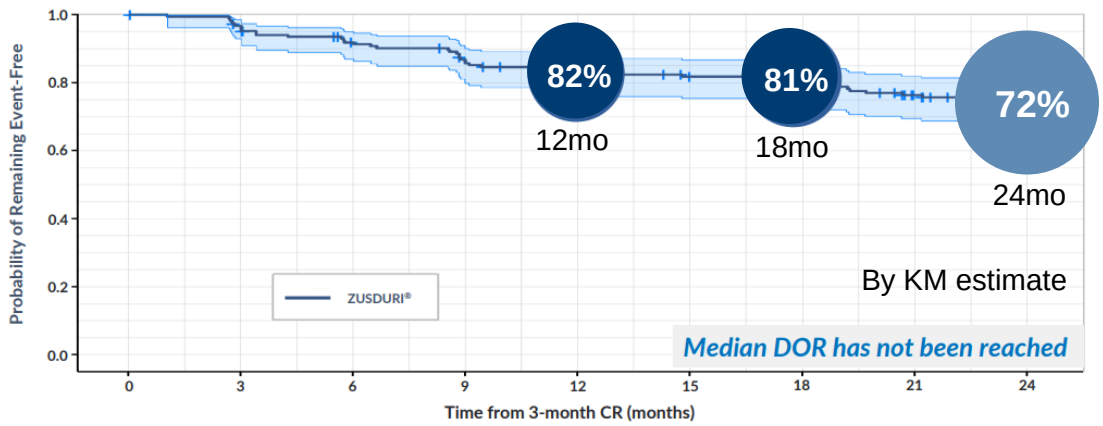
- Zusduri consists of mitomycin chemotherapy co-formulated with Urogen's RTGel, a novel proprietary polymeric reverse thermal hydrogel which is liquid at lower temperatures and converts into gel form when warmed to body temperature after intravesical instillation. The characteristics of RTGel enable sustained release of mitomycin in the urinary tract allowing for prolonged tumor-drug exposure and potentially improved efficacy of treatment.
- Zusduri received US FDA approval in June 2025 as first and only pharmacologic therapy for recurrent low-grade intermediate-risk (LG-IR) NMIBC based on the results of the ENVISION trial, a single-arm, multicenter trial in 240 adults with LG-NMIBC that recurred after prior transurethral resection of bladder tumor (TURBT).
- Zusduri is dosed weekly for six weeks intravesically into the bladder via a urinary catheter, with each dose at a list price of $21,500 ($129,000 per course); URGN has noted that they expect a GTN roughly similar to Jelmyto's 75%
- While Zusduri has patent protection into 2031, a next-generation product (UGN-103) with protection through 2041 is in Phase 3 (UTOPIA) for LG-IR NMIBC, with topline interim results (3-mo CR rate) guided for YE 2025. UGN-103 may reach the market by 2027, if successful.

Zusduri's ENVISION Shows Strong Efficacy and Clean Safety

ENVISION was a single arm Phase 3 study that enrolled N=240 patients with LG-IR NMIBC

Efficacy Per Label (N=223)	
Complete Response, 3 mo	78%
Duration of response % with duration ≥ 12 mo	79%
TEAE Safety (N=240)	
Any grade	57%
Any Gr3+	14%
Any serious	12%
Leading to study discontinuation	2.5%
Other AE >5%: Dysuria (23%), Hematuria (8.3%), UTI (7.1%), Pollakiuria (6.7%), Fatigue (5.4%)	

Sustained CR For Zusduri Responders Out To 24 Months



Source: KOL interviews; URGN presentations and conference calls; Zusduri product label; Prasad SM, et al. J Urol. 2025 (PMID: 39446087) ; Guggenheim Securities, LLC estimates and analysis

We See A Key Role For Zusduri In LG-IR-NMIBC Patients Who Cannot Tolerate TURBT Or Want To Pursue A Less Invasive Option

In our view, Zusduri will get substantial commercial uptake in LG-IR initially driven by patients with the highest need, such as those unfit for TURBT or those who require frequent TURBT procedures

- **Overall opportunity in treatment paradigm based on physician feedback**
  - The long-standing standard treatment approach for recurrent LG-IR-NMIBC has been surveillance and repeat TURBT, most often with perioperative intravesical chemotherapy. That said, TURBT is an involved procedure with a significant logistical burden, and it comes with bladder injury risks along with a requirement for general anesthesia. And patients often experience a recurrence.
  - KOLs we spoke with have been enthusiastic about the Zusduri clinical data and overall risk/benefit profile relative to TURBT, noting that the therapy also provides a "value add" to workflow efficiency with a simple outpatient treatment that is well tolerated. Key limitations of TURBT include the requirement for general anesthesia, potential risks of bladder injury, and overall logistical burdens.
- **Commercial launch and early adoption**
  - Even though there may be some physician skepticism given the lack of head-to-head data vs. TURBT or long-term relapse-free survival data, most physicians believe the risk/benefit for Zusduri is favorable.
  - We anticipate initial commercial adoption in patients who are surgically ineligible (e.g., elderly and multiple comorbidities) and those who recur early or frequently, which URGN expects to make up ~1/3 of the eligible population.
  - During the initial launch period, URGN will focus marketing efforts on potential early adopters (~2K providers) who are willing to prescribe with a miscellaneous J-code, including some physicians who already write scripts for FDA-approved Jelmyto.
  - We anticipate a slow initial launch gated by reimbursement approvals until a permanent J-code is assigned, likely January, 2026.
- **Peak sales potential**
  - We currently forecast $800M US peak sales in 3031
- **Potential future life cycle management**
  - URGN completed enrolling a Phase 3 clinical "UTOPIA" trial of UGN-103, a next generation mitomycin-based therapy which has a shorter manufacturing process and a simpler reconstitution procedure. Top-line results (3-month CR rate) are guided for YE25.

Source: KOL interviews; URGN presentations, slides and management commentary Guggenheim Securities, LLC estimates and analysis

Detalimogene (EG-70) Has Optimized Drug Product Characteristics With Easier Logistics For Use In Community Urology Clinics

- Detalimogene (EG-70) is a first-in-class nanoparticle-based gene therapy derived from ENGN's DDX platform that delivers non-integrative plasma DNA encoding secreted IL-12 protein and two dsRNA agonists of RIG-I to activate innate and adaptive immunity
- EG-70 is formulated with several drug product characteristics that are tailored to the practical needs of community urologists, including: (1) ease of storage and handling as a lyophilized drug product reconstituted within BSL1 guidelines, versus therapies requiring special deep cold storage or enhanced biosafety level measures (e.g., Ferring's adenovirus vector-based Adstiladrin, CGON's oncolytic virus cretostimogene), (2) straightforward IVe administration in line with common urology treatment practices, versus therapies requiring intravenous administration (i.e., MRK's Keytruda) and (3) relatively infrequent dosing (4 doses every 12 weeks during maintenance)

	Agent	EG-70	Keytruda	Adstiladrin	BCG	Cretostimogene	Anktiva	Inlexzo	TARA002
Overview	**Sponsor**	ENGN	MRK	Ferring	N/A	CGON	ImmunityBio	JNJ	TARA
	Mechanism	Non-viral gene therapy	Anti-PD-1	Non-viral gene therapy	Microbial immune potentiator	Oncolytic Virus	IL-15 superagonist	Local delivery gemcitabine	Microbial immune potentiator
Dosing	**RoA**	IVe	IV (systemic therapy)	IVe	IVe	IVe	IVe (combo w/BCG)	IVe delivery of in-dwelling device	IVe
Logistics Requirements	**Medical Oncology**	No	Yes	No	No	No	No	No	No
	Special Storage (-80ºC)	No	No	Yes	No	-60 to -80	No	No	No
	Urine Bleaching	No	No	Yes (48h)	Yes (6h)	Not reported	No	No	No
	Device Installation / Removal	No	No	No	No	No	No	Yes	No
	Enhanced Biosafety (above BSL1)	No	No	Yes	Yes	Yes	No	No	No

Source: Company reports and presentations; Guggenheim Securities, LLC estimates and analysis

See pages 56 - 57 for analyst certification and important disclosures.

Detalimogene May Find a Role in Community Practices if Pivotal Cohort Data "Approach" Competitors; Interim Update Is Guided for 4Q25

In our view, detalimogene has the potential to show a competitive clinical profile relative to approved/late-stage competitor agents with likely best-in-category drug product characteristics

- In September 2024 ENGN reported interim pivotal data (LEGEND Cohort 1) for detalimogene in NMIBC showing 71% CR at any time and 47% 6-month CR (51% Kaplan-Meier est.). In June the FDA granted Regenerative Medicine Advanced Therapy (RMAT) designation to detalimogene based on the preliminary pivotal cohort data.
- Following the update, ENGN implemented two protocol amendments to better align with current treatment practices, including: **(1)** allowing for resection/re-induction of patients with recurrent Ta disease at 3-mo and, **(2)** allowing for re-resection of T1 disease prior to enrollment.
- **The company has guided to updated data from the LEGEND pivotal cohort in 4Q25** which will include over 20 patients who were enrolled in the study after the two protocol amendments were implemented to potentially show improvement over the interim data reported last year (focusing on 6-month CR).
- In early September 2025, ENGN reported that they have achieved their target enrollment of 100 patients with HR NMIBC with CIS in the LEGEND pivotal cohort 1, and will over-enroll in its pivotal cohort with plans to submit a BLA in 2H26.
- Our KOL feedback suggests that final efficacy data for detalimogene will need to "approach" the new benchmarks set by CGON/JNJ to be impactful but also noted that safety and logistical advantages could be drivers of usage in the community setting.

Source: Company reports and presentations; Guggenheim Securities, LLC estimates and analysis

GUGGENHEIM

Clinical Data Comparisons For Select Key Products In NMIBC

Efficacy Of Novel Agents In BCG-Unresponsive CIS NMIBC

Company	JNJ	CGON	IBRX	Ferring	MRK
Regimen	Inlexzo (TAR-200)	Cretostimogene	Anktiva + BCG	Adstiladrin	Keytruda
Status	FDA Review	Filing Est. 4Q25	Marketed	Marketed	Marketed
Mechanism	Slow release chemo	Oncolytic adenovirus	IL-15 agonist	Non-replicating adenovirus GTx*	Anti-PD-1
Trial	SunRISe-1, Cohort 1	BOND-003, Cohort C	QUILT 3.032	CS-003	KN-057, Cohort A
Efficacy N	85	110	77	98 or 103	96
Median FU	20 mo	22 mo	-	19.7 mo	36 mo
CR rate at any time	82% (70/85)	76% (83/110)	62% (48/77)	51% (50/98)	41% (39/96)
12 mo CR	46% (39/85)	46% (51/110)	36% (28/77)	24% (25/103)	19% (18/96)
By KM Est.	52%	51%	-	-	-
24 mo CR	-	34% (33/101)	25% (19/77)	19% (20/103)	-
By KM Est.	45%	42%	-	-	-
DOR, median	25.8 mo	27.9 mo	-	9.7	16.2 mo
≥ 12 mo DOR	53% (37/70)	-	58%	46%	46% (18/39)
By KM Est.	56%	64%	-	-	-
≥ 24 mo DOR	-	-	40%	-	-
By KM Est	52%	58%	-	-	-
References	AUA 2025	AUA 2025	Label	Boorjian 2021, Label	Balar 2021

JNJ and CGON agents show notably superior efficacy versus other products, not only in terms of overall rates of complete response, but also with the overall durability of the responses

CGON updated data at NEAUA (9/5/2025) **reported a 24-month CR rate of 42% (46/110)** based on more patients in CR at the landmark which is a notable improvement versus the AUA 2025 data

Inlexzo label shows landmark 12 mo CR rate of 42% (35/83) vs. 46% seen at AUA. At 42%, JNJ's 12 mo data are numerically equivalent to CGON's updated 24 mo CR data (see NEAUA update box) suggesting better durability for creto were the data to hold up in their future product label

KOLs we spoke to saw JNJ and CGON efficacy data as comparable, with perhaps slightly higher any time CR rates for JNJ (e.g., 82% vs 76%) but more durable responses for CGON though the data are close enough that urologists will consider factors beyond efficacy in making treatment decisions (e.g., safety, dosing & schedule, convenience, etc.)

Note: a hyphen indicates data were not reported; GTx, gene therapy; FU, follow up; * CR at any time; # CR at 3 months

Source: Guggenheim Securities, LLC estimates and analysis

Efficacy Of Novel Agents In BCG-Unresponsive Papillary Only NMIBC

Company	JNJ	CGON	MRK	Ferring	IBRX
Regimen	Inlexzo (TAR-200)	Cretostimogene	Keytruda	Adstiladrin	Anktiva + BCG
Mechanism	Slow release chemo	Oncolytic adenovirus	Anti-PD-1	Non-replicating adenovirus GTx*	IL-15 agonist
Trial	SunRISe-1, Cohort 4	BOND-003, Cohort P	KN-057, Cohort B	CS-003	QUILT 3.032 Cohort B
N	52	24	132	48	72
DFS / HG-RFS Landmark Efficacy					
% at 3 mo (95% CI)	-	91% HG-RFS (78%-100%)	88% DFS (81% - 92%)	73% HG-RFS (58%-85%)	-
% at 6 mo (95% CI)	85% DFS (72%-93%)	91% HG-RFS (78%-100%)	53% DFS (44%-61%)	63% HG-RFS (47%-76%)	-
% at 12 mo (95% CI)	*Early data cuts, more follow up needed*		44% DFS (35%-52%)	44% HG-RFS (20%-48%)	55% (42%-67%)
% at 24 mo (95% CI)			35% DFS (26%-43%)	33% HG-RFS (20%-48%)	48% (35%-61%)
Data References	AUA 2025	AUA 2025	Neechi 2024	Boorjian 2021, Vikram 2024	Chamie 2023

Based on MRK and Ferring data we believe N~50 worth of data with 12-mo HG-RFS / DFS above ~44% should suffice for NCCN guideline inclusion

- We expect the superior efficacy of JNJ and CGON versus other agents to translate to BCG-unresponsive papillary setting as seen with the CIS data
- JNJ and CGON data are still early in terms of follow up, but the data are supportive of their superior efficacy (e.g., 6 mo landmark DFS / HG-RGS rates)
- While both the MRK and Ferring products are not formally FDA approved for BCG-unresponsive papillary only disease, both have NCCN category 2B recommendations; Anktiva lacks such a recommendation though IBRX has applied for guideline inclusion with the review to start in August 2025
- Both CGON and JNJ plan to leverage their early data to get into the guidelines, and KOLs in our checks indicating that they would be willing to use these agents in BCG-unresponsive papillary were they listed in the guidelines

Note: a hyphen indicates data were not reported; DFS, disease-free survival; HG-RFS, high-grade recurrence-free survival

Source: AUA 2025 presentations; Company presentations and conferences; Guggenheim Securities, LLC estimates and analysis

Safety Of Select Novel Agents In High-Risk BCG-Unresponsive NMIBC

Creto Stands Out With A Cleaner AE Profile And Sasanlimab + BCG With Both Bladder And IO-Related AEs

	Company	JNJ	CGON	IBRX	Ferring	MRK	PFE	
	Indication	CIS, BCG-UR		HR, BCG-UR		CIS, BCG-UR	HR, BCG-naive	
	Regimen	TAR-200	Creto	Anktiva +BCG	Adstiladrin	Keytruda	Sasan + BCG	BCG
	Trial	SunRISe-1	BOND-003	QUIL 3.032	CS-003	KN-057	CREST	
	N	85	112	161	157	101	350	349
	Any TRAE	84%	63%	-	70%	67%	87%	70%
Bladder Related	Pollakiuria	44%	21%	-	-	-	23%	19%
Bladder Related	Dysuria	40%	16%	-	11%	-	29%	32%
Bladder Related	(Micturition) urgency	25%	21%	-	15%	-	-	-
Bladder Related	UTI	22%	-	-	-	-	19%	20%
Bladder Related	Hematuria	17%	13%	-	-	2%	21%	20%
Bladder Related	Urinary tract pain	11%	-	-	-	-	-	-
Bladder Related	Bladder spasm	8%	25%	-	15%	-	-	-
Bladder Related	Noninfective cystitis	7%	-	-	-	-	-	-
Immune Related	Any imAE*	-	-	2% Gr3	-	22%	43%	-
Immune Related	Hepatitis	-	-	-	-	1%	4%	-
Immune Related	Pancreatitis	-	-	-	-	-	4%	-
Immune Related	Pneumonitis	-	-	-	-	3%	3%	-
Immune Related	Colitis	-	-	-	-	2%	3%	-
Immune Related	Myocarditis	-	-	-	-	-	0.3%	-
	Any Gr3+ TEAE	-	-	23% (3% Gr4+, 1% death)	18%	-	-	-
	Any Gr3+ TRAE	13%	0%	-	4%	13%	29%	6%
	Serious TRAE	6%	2%	-	2%	8%	18%	1%
	Discont. due to TRAE	3.5%	0%	7%	2%	11%	-	-
	TRAE Death	0%	0%	-	0%	0%	0%	0%
	Source	AUA 2025	AUA 2025	Chamie 2023, label	Boorjian 2021, label	Balar 2021	AUA 2025	AUA 2025

Many urologists we spoke to are concerned about immune related AEs and their ability to manage them, which was one of the factors that has limited Keytruda adoption. PFE's Sasan +BCG data suggests notable rates immune-mediated AEs (imAE) and broadly a less tolerable profile than Keytruda or BCG alone which may hinder adoption

TAR-200 data suggest less tolerable profile than Creto not only in terms of bladder-related AEs, but also in more general assessments of patient tolerability as measured by any Gr3+ TRAE, serious TRAE, and discontinuation rates. That said TAR-200 is tolerable and we note TAR-200 has similar Gr3+ TRAEs and serious TRAEs as Keytruda (approved in NMIBC) with Keytruda's being more severe and difficult for urologists to manage given the immune mechanism of Keytruda

Note: BCG-UR, BCG unresponsive; imAE, immune-mediated AE; HR, high risk; Sasan, Sasanlimab; UTI, urinary tract infection; * sum of Gr1/2 and Gr3/4 imAEs reported for PFE data
Source: Guggenheim Securities, LLC estimates and analysis

GUGGENHEIM

Assessing The Large Commercial Opportunity In NMIBC

Buy And Bill Model Provides An Economic Incentive For Urologists To Adopt Novel Therapies, Though There Will Be Some Hurdles To Overcome

Buy And Bill Model Relatively New To Urologists But Has Potential To Be Financially Rewarding, Which Will Ultimately Help Drive Uptake, In Our View

- Traditionally, urologists have relied more on oral therapies and in-office procedures rather than relatively expensive drugs delivered via a Buy and Bill model
  - Under the Buy and Bill model, physicians purchase the drug, bill the insurance company, and then get reimbursed by insurance
- Although initial expense to buy drug and the inventory buildup can be a barrier for some urologists, especially if they are not sure to get reimbursed, it could also allow urologists to make additional revenue
- URGN, JNJ, and CGON, have all noted that they expect their respective products combined with the actual placement / instillation procedure would be economically rewarding for the urologist practice
- While many urologists understand the dynamics of Buy and Bill and are open to it, some have noted that if the novel drugs are priced too high it may be a challenge for them use those products, especially until reimbursement is fully secured

"this is an exciting space where these providers who are urologists have not previously experienced a kind of a boom in the buy and bill set up, but this is their chance to do so…it really comes down to the drug, which is ASP + 6%. There are administration fees associated with administering creto, which is an intravesical inflation delivery fee, that's call it, $80-$100. But really what they're going to make money off of is going to be from the creto ASP + 6%" – CGON (6/10/25)

"…[in an] oncologist's practice, about 70% of their revenue …is from buy and bill drugs. But urologists, that's not the case. And up until just a few years ago, they didn't have any buy and bill drugs… and so they don't have the infrastructure in place, as … oncologists do. And they don't have the confidence. And so, they're concerned about not getting reimbursed" – URGN (9/3/25)

Source: KOL interviews; Company commentary; Guggenheim Securities, LLC estimates and analysis

While We Note Some Variation In How Companies Characterize The Size Of The NMIBC Patient Pools; Overall, It Points To A Sizeable Opportunity

We think the variation in how different companies characterize the potentially addressable patient pools for the different NMIBC segments likely reflects complicating characteristics of the NMIBC landscape including: (1) the many different patient segments that result from classifying patients by risk group, prior BCG status, tumor grade, and CIS versus papillary; (2) the existence of both new patients (incident population) and a recurrent population from the prevalence pool

NMIBC Type	Estimate	Co.	Comment / Note
High-Risk NMIBC			
BCG-UR, HR	15K pts /yr	CGON	"the BCG-unresponsive high risk NMIBC population. That's about 15,000 patients a year…[CIS is] about 40% of the unresponsive market. The remaining 60% are Ta/T1 or papillary [only] lesions that do not have CIS present"– CEO 6/10/25 Conference
BCG-UR, CIS	6K pts/yr	CGON	Estimate BCG-UR CIS at 6,000 patients per year per CEO commentary on 6/10/25 detailed above
	15-20K pts prevalence	IBRX	"We really need to look at prevalence rather than incidence …So we're looking at a 15,000 to 20,000 available addressable market in disease of CIS." – Chairman, Global CSO and CMO on 4/26/24
	4K pts Prevalence*	AURA	August 2025 investor presentation suggests an ~4,000 US patient prevalence for high-risk CIS that is BCG unresponsive*
HR	38K pts prevalence	PFE	"In the U.S., it is estimated that about 38,000 people have high-risk NMIBC…approximately 40-50% of patients with high-risk NMIBC receiving BCG will eventually have disease recurrence or progression" – Sasanlimab press release (4/26/25)
HR, papillary	20K pts prevalence	AURA	August 2025 investor presentation suggests a ~20,000 US patient prevalence for high-risk papillary
BCG-UR, HR papillary	9K pts/yr	CGON	Estimate BCG-UR, HR papillary at 9,000 patients per year per CEO commentary on 6/10/25 as detailed above
BCG-Naïve, HR	25K pts/yr	CGON	"there are about 25,000 patients for BCG-naïve, high risk coming to the market every year. And even in a BCG shortage environment, most of them will get some BCG." – CEO 3/5/25 Conference
Intermediate-Risk NMIBC			
IR	20-40K pts/yr	TYRA	"the intermediate risk NMIBC market where there's 70% FGFR3 positivity and 20,000 to 40,000 addressable patients each year" – 3/3/25 Conference
	18K new pts/yr	CGON	"intermediate risk bucket, that's 18,000 new patients coming to the market each year. "– CEO 6/10/25 Conference
Low-grade, IR	23K new pts/yr 59K recurrent/yr	URGN	August 2025 investor presentation suggests that for low-grade intermediate risk (LG-IR) there are ~23,000 newly diagnosed patients / year and ~59,000 recurrent patients / year

Note: *, numbers seem low for prevalence and would seem more reasonable as incidence numbers suggesting they could be miss labeled in the investor deck; BCG-UR, BCG unresponsive; IR, intermediate risk; HR, high-risk, CIS, carcinoma in situ

Source: Company presentations and conference presentations; SEC filings; FactSet; Guggenheim Securities, LLC estimates and analysis

See pages 56 - 57 for analyst certification and important disclosures.

We Developed A Detailed NMIBC Market Model From Which We Derived Estimated Patient Numbers Across The Key NMIBC Segments

- We built a market model to try and estimate US patient numbers for key NMIBC segments using a mix of epidemiological data from publications, government websites and other resources supported by Urologists interviews
- The model considers both newly diagnosed patients (57K pts/yr) and recurrent patients, emerging from the large NMIBC prevalence pool (~500K pts), that will need treatment; These patient numbers are used as a basis to model future NMIBC products sales (later slides)

	NMIBC Segment	Estimated Patients Per Year
Newly Diagnosed (57,000 pts/yr)	Any HR	19,000
	HR papillary only	13,000
	CIS (±papillary)	6,000
	Any IR	19,000
	Low grade	13,000
	High grade	6,000
	Low Risk	19,000
Prevalent NMIBC Population (500,000 pts)	Any HR recurrence	65,000
	BCG-naïve	26,000
	BCG-exposed	20,000
	BCG-unresponsive	20,000
	Papillary only	14,000
	CIS (±papillary)	6,000
	Any IR recurrence	50,000
	Low grade	30,000
	BCG-naïve	27,000
	BCG-exposed	3,000
	High grade	20,000
	BCG-naïve	16,000
	BCG-exposed	4,0000

Source: KOL interviews; Guggenheim Securities, LLC estimates and analysis

Learnings And Considerations For Our NMIBC Patient Estimates Include:

- The recurrent NMIBC population (~65K pts/yr) stemming from the prevalence pool offers a considerable opportunity given ~57K pts/yr from the newly diagnosed population
- Multiple patient segments offer opportunities of 10K+ patients pointing to multiple commercially attractive segments in the NMIBC space
- Many companies are pursuing BCG-UR CIS as a 1st indication given the fast regulatory path, but this is one of the more modest opportunities and the related BCG-UR papillary-only opportunity is twice as large
- Despite the lower unmet need compared to high-risk patients, the intermediate risk opportunity is substantial with LG-IR segment being larger than the HG-IR
- The BCG-exposed opportunity is relatively small for IR given limited use of BCG for IR, but the HR BCG-exposed opportunity is meaningful
- Overall, it was challenging to model the size of patient segments given the limited epidemiological data available to us; We anticipate our estimates for the newly diagnosed segments are more robust than our estimates for the recurrent segments given the scarcer data for the latter
- We note our estimates generally fit with comments from company management (see prior slide) but there are some discrepancies: We and CGON both estimate 6K BCG-UR pts/yr; We estimate 30K recurrent LG-IR patients while URGN estimates ~59K/yr

See pages 56 - 57 for analyst certification and important disclosures.

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US Sales Projections

Summary Of Main Assumptions And Peak Sales Estimates For Select Key Products Per Our NMIBC Market Model

- CGON's cretostimogene and JNJ's Inlexzo (TAR-200) standout with US-PoS adjusted peak sales in the ~$3-4Bn range while other products are in the $1Bn or <$1Bn range
- The blockbuster sales estimates for creto and TAR-200 are driven by their broad clinical development across multiple NMIBC indications and their strong clinical data, which we expect to set them up to achieve significant market share across multiple indications

	Anktiva* [IBRX]	Creto [CGON]	Sasan [PFE]	Inlexzo [JNJ]	TAR-210 [JNJ]	Zusduri [URGN]
Gross Price / Dose*	$35,800**	$46,000	$20,000	$69,000	$75,000	$21,500#
Gross Price For 1st Year Of Therapy	$360,000	$552,000	$240,000	$480,000	$300,000	$129,000
GTN Discount	25%	25%	25%	25%	25%	25%#
Net Price For 1st Year	$270,000	$414,000	$180,000	$360,000	$225,000	$97,000
Patient Compliance Rate	80%	80%	80%	80%	80%	80%
Peak US Sales PoS-unadj.	$1.1Bn in 2034E	$3.1Bn in 2037E	$0.55Bn in 2035E	$4.0Bn in 2039E	$1.7Bn in 2039E	$0.8Bn in 2031E
PoS Range Across Indications	80% - 100%	75% - 90%	90%	85% - 100%	75%	100%
Peak US Sales PoS-adj.	$0.94Bn	$2.6Bn	$0.49Bn	$3.6Bn	$1.3Bn	$0.8Bn
Ex-US Sales As Percent Of US Sales	15%	15%	30%	30%	30%	n/a
Peak Ex-US Sales PoS-adj.	$0.14Bn in 2035E	$0.39Bn in 2038E	$0.15Bn in 2036E	$1.1Bn in 2040E	$0.39Bn in 2040E	$0 (no ex-US)

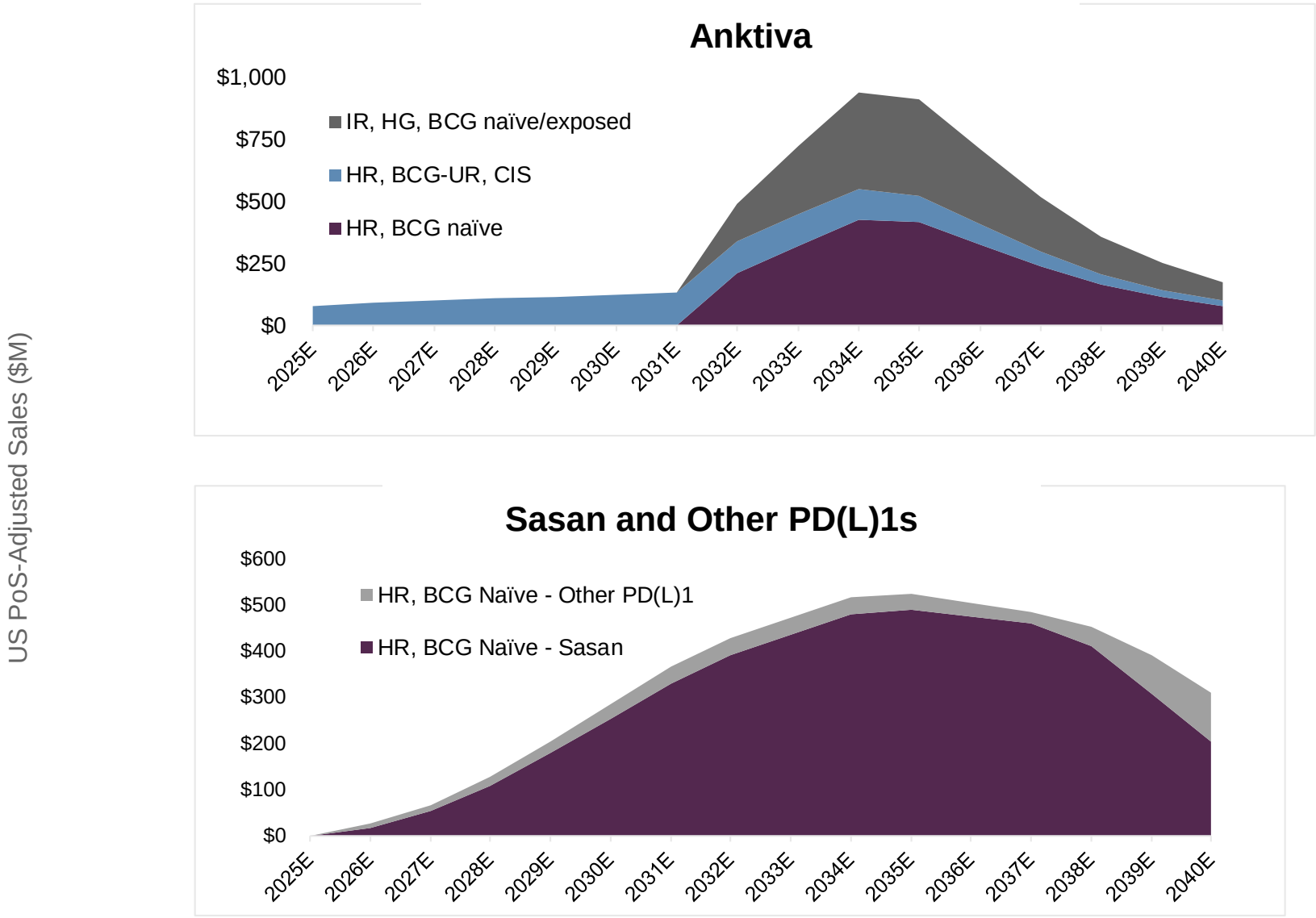
Annual cost calculated based on estimated number of doses the average patient will get in the first year

We model ex-US sales as a percentage of US sales offset by one calendar year. Our base assumption is 30%, but for products with higher pricing we use 15% to account for more limited international expansion given the premium pricing

Note: Pricing as of 2025, but we model an annual drug price increase of 1.5%; *Our Anktiva sales estimates are based on our NMIBC estimates only. Anktiva is being developed in cancer indications beyond NMIBC but sales from non-NMIBC indications are not included in our estimates; ** per WAC from PriceRx, # URGN management commentary

Source: Price Rx; Company data; Guggenheim Securities, LLC estimates and analysis

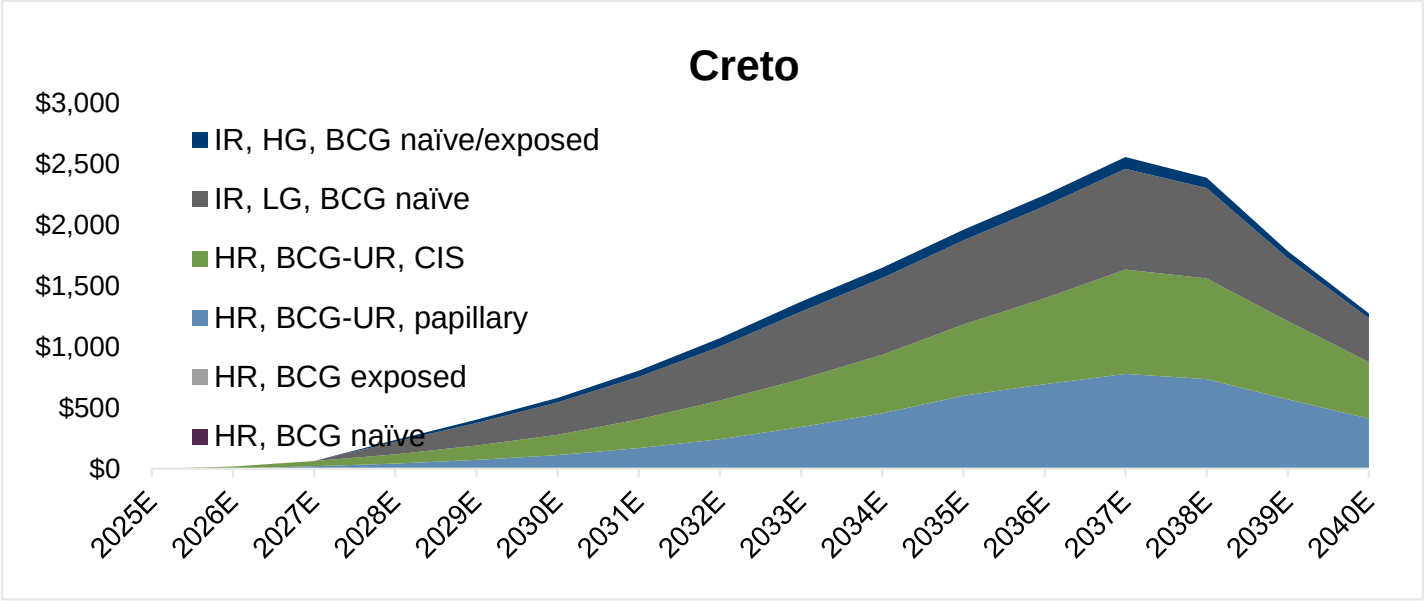
PoS-Adjusted US Product Sales: Anktiva, Sasanlimab and Other PD(L)1s

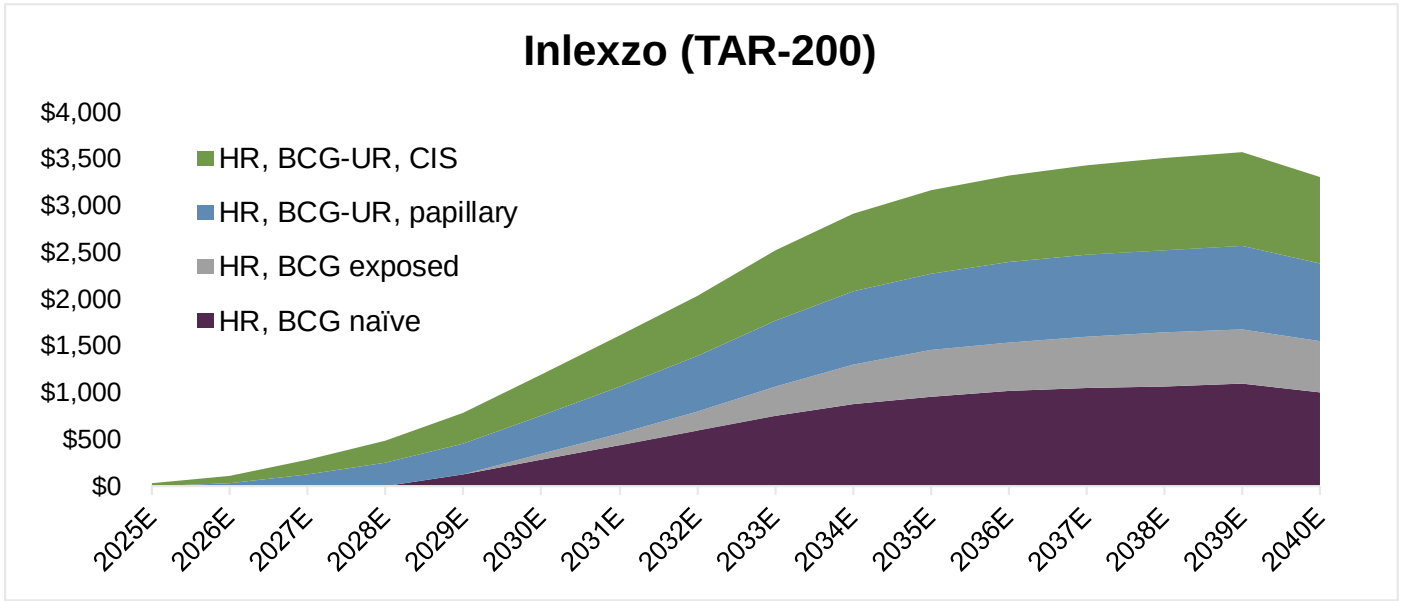


Source: Guggenheim Securities, LLC estimates and analysis

PoS-Adjusted US Product Sales: Cretostimogene and Inlexzo (TAR-200)

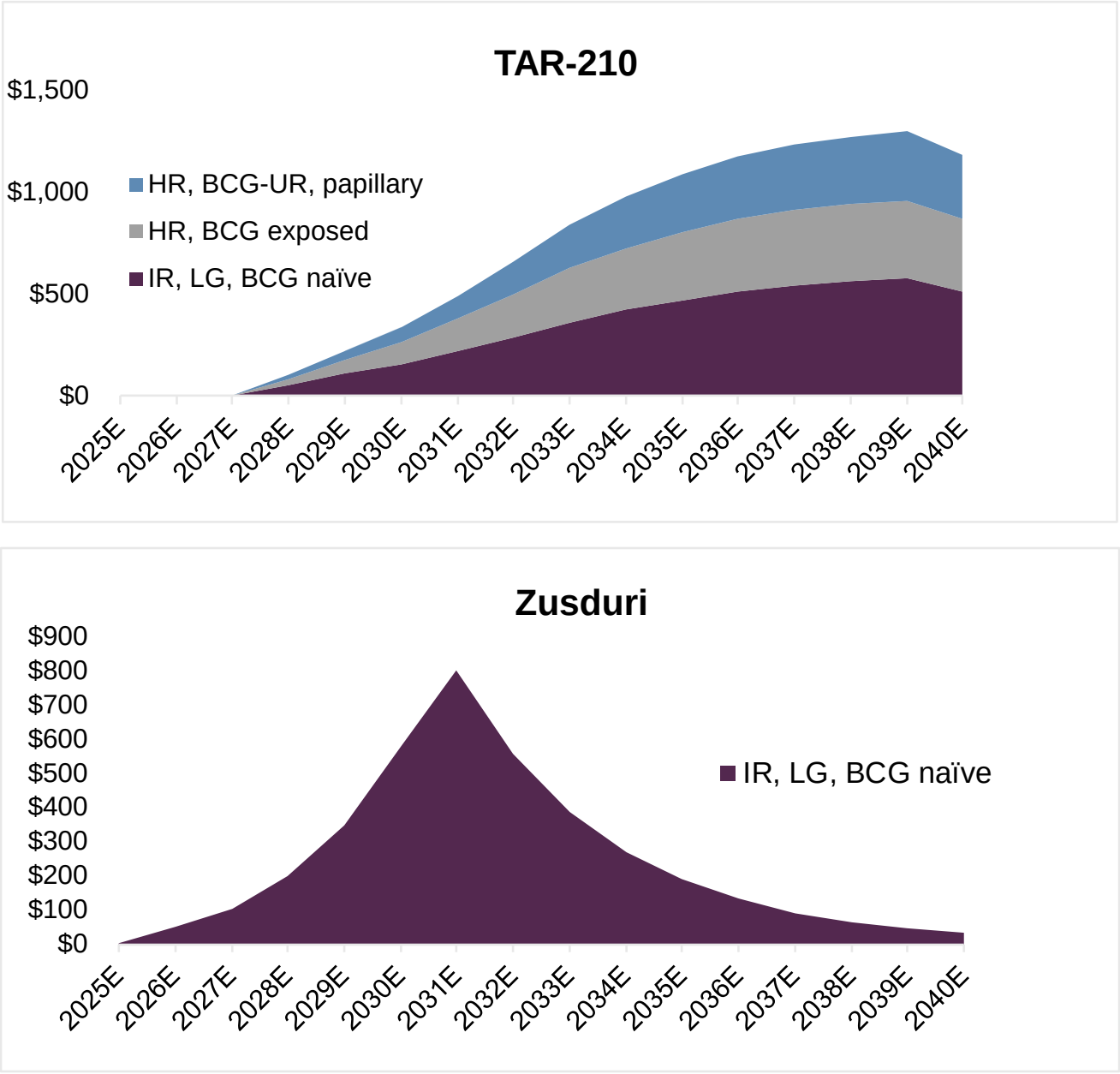
US PoS-Adjusted Sales ($M)





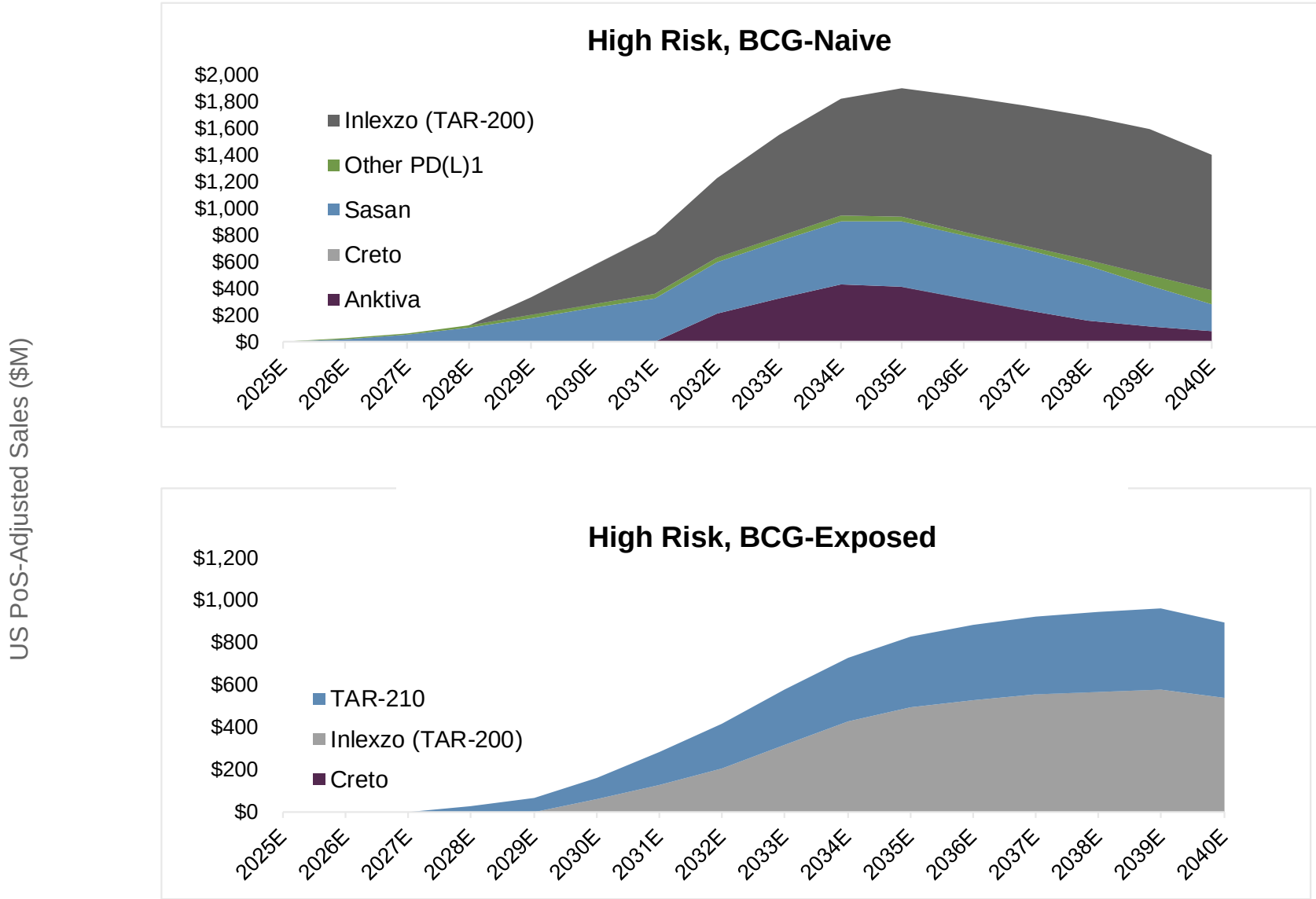
Source: Guggenheim Securities, LLC estimates and analysis

PoS-Adjusted US Product Sales: TAR-210 and Zusduri



Source: Guggenheim Securities, LLC estimates and analysis

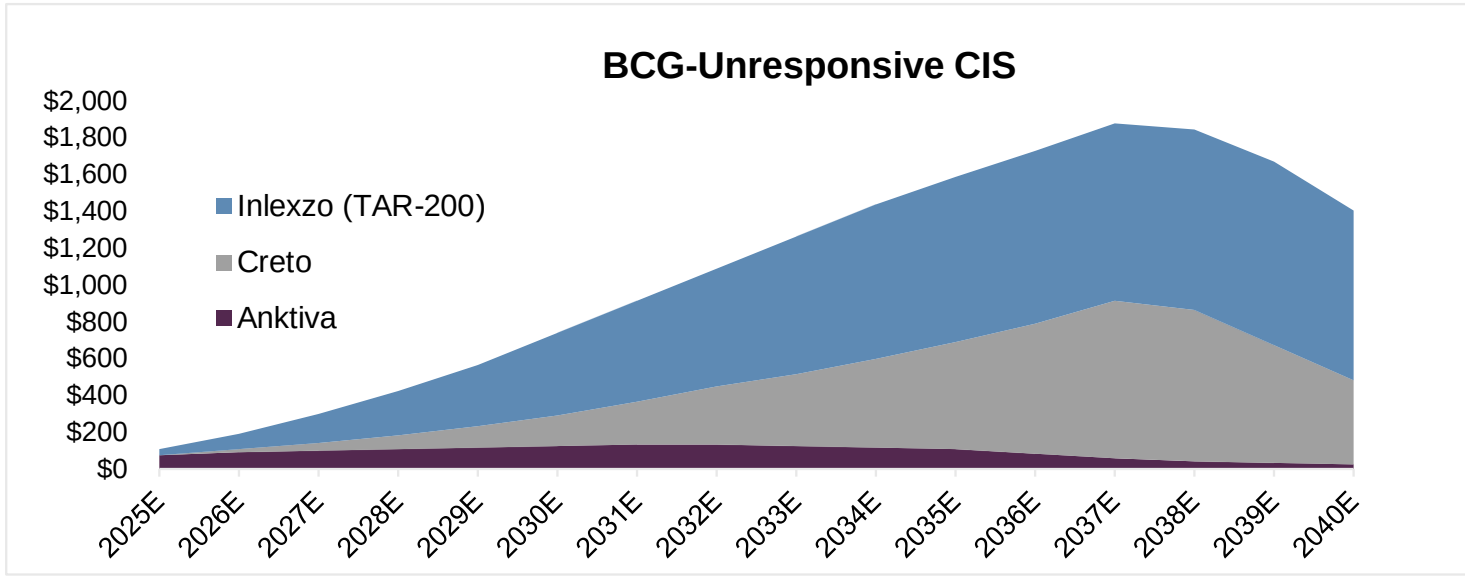
PoS-Adjusted US Sales By Indication: High Risk BCG-Naïve and BCG-Exposed

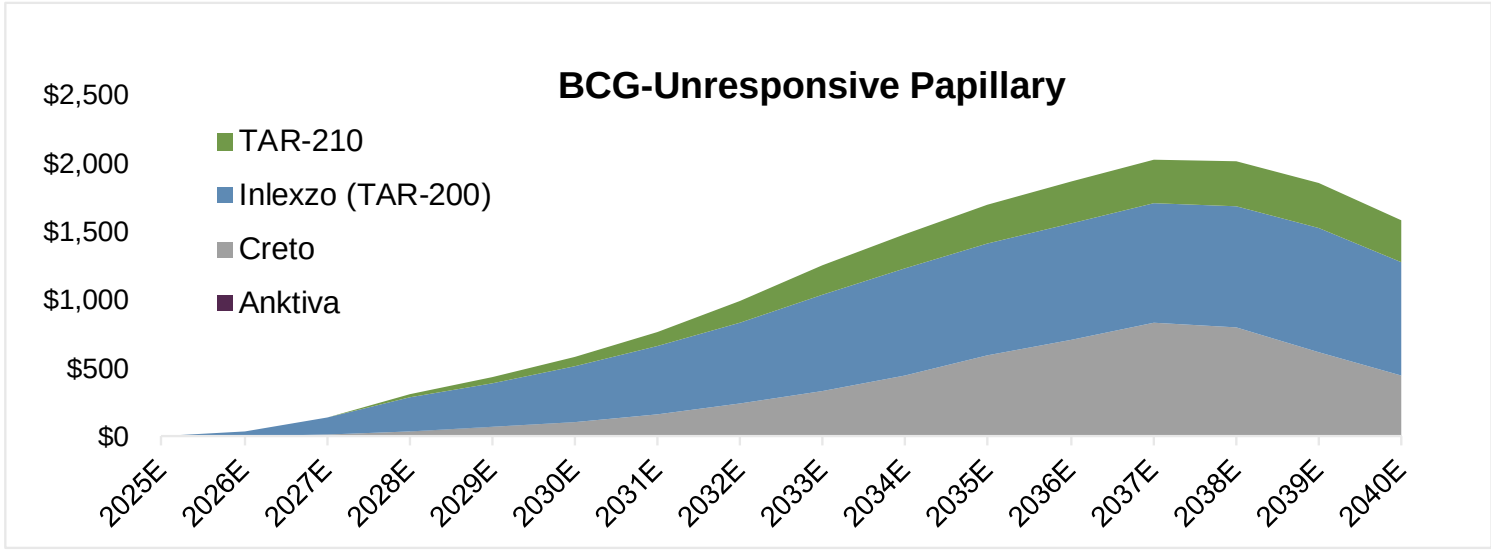


Source: Guggenheim Securities, LLC estimates and analysis

PoS-Adjusted US Sales By Indication: BCG-Unresponsive CIS and Papillary Only

US PoS-Adjusted Sales ($M)

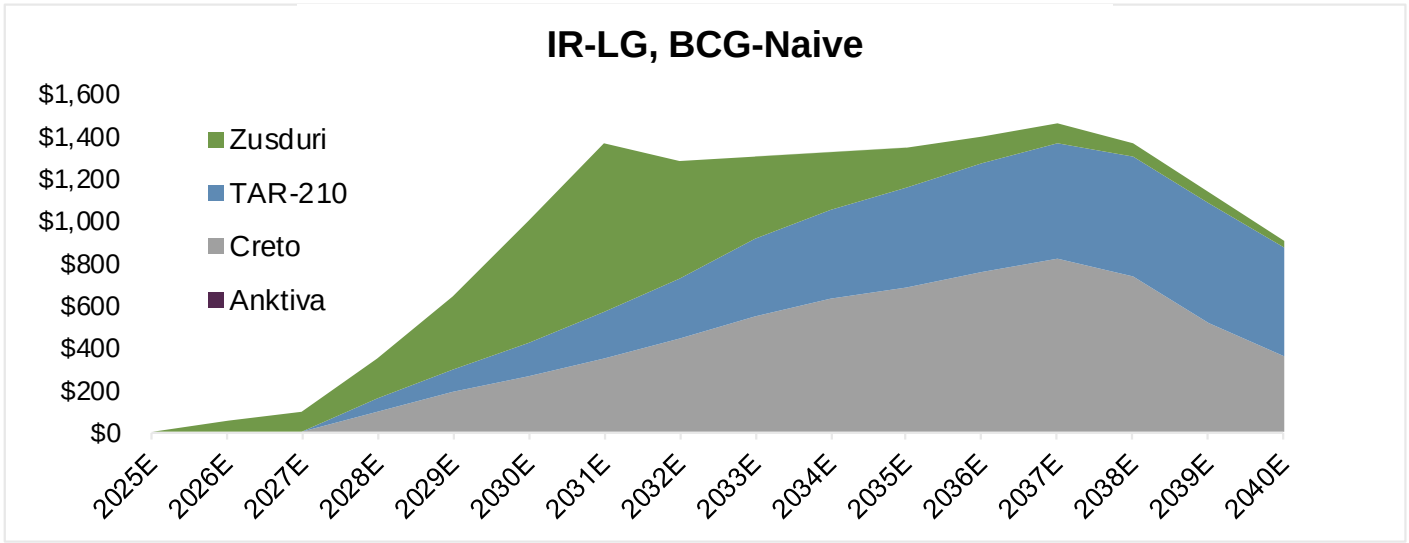


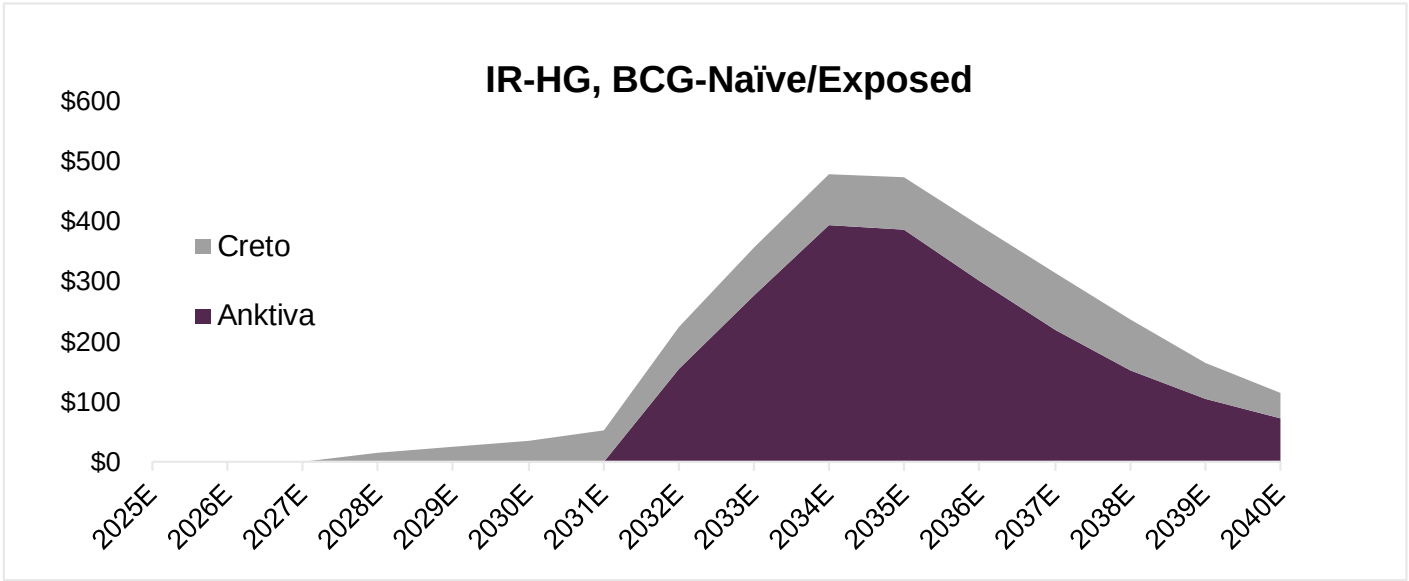


Source: Guggenheim Securities, LLC estimates and analysis

PoS-Adjusted US Sales By Indication: Intermediate Risk, Low Grade and High Grade

US PoS-Adjusted Sales ($M)





Source: Guggenheim Securities, LLC estimates and analysis

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Appendix

Companies Mentioned

Company	Ticker
Aura Biosciences Inc	AURA
AstraZeneca PLC	AZN-LON
Bristol-Myers Squibb Company	BMY
CG Oncology, Inc.	CGON
enGene Holdings Inc.	ENGN
Gilead Sciences, Inc.	GILD
ImmunityBio Inc	IBRX
Johnson & Johnson	JNJ
Merck KGaA	MRK-DE
Moderna, Inc.	MRNA
Pfizer Inc.	PFE
Roche Holding Ltd Dividend Right Cert.	ROG-SWX
Sanofi SA	SAN-PAR
Protara Therapeutics, Inc.	TARA
Theralase Technologies, Inc.	TLT-CA
Tyra Bioscience, Inc	TYRA
UroGen Pharma Ltd.	URGN

Source: Company data; FactSet; Guggenheim Securities, LLC estimates and analysis

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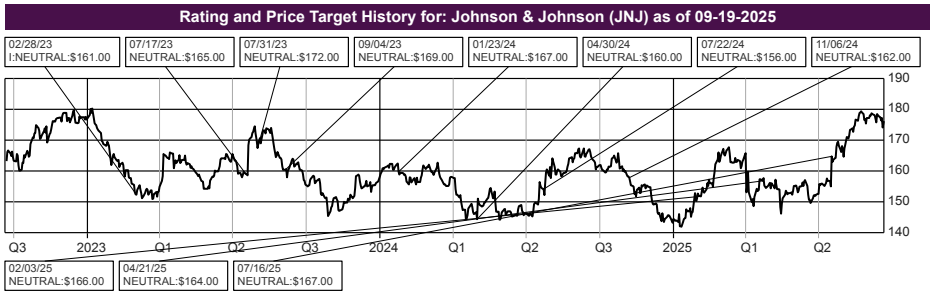

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