

June 2, 2023

# Zanidatamab: Pivotal Phase 2b HERIZON-BTC-01 Results in Biliary Tract Cancers (BTC)

**Innovating to Transform the Lives  
of Patients and Their Families**



# Transforming Lives. Redefining Possibilities.

## Caution Concerning Forward-Looking Statements

This presentation contains forward-looking statements and financial targets, including, but not limited to, statements related to: the potentially broad opportunity for zanidatamab to treat additional indications; the potential for zanidatamab to be the first HER-2-targeted therapy to treat BTC planned or anticipated clinical trial events, including with respect to initiations, enrollment and data read-outs, and the anticipated timing thereof, including expectations of at least 3 late-stage readouts through 2024 and proof of concept of JZP441 in 2023; the Company's clinical trials confirming clinical benefit or enabling regulatory submissions; planned or anticipated regulatory submissions and filings, including for Rylaze, and the anticipated timing thereof; potential regulatory approvals, including for Rylaze; and other statements that are not historical facts. These forward-looking statements are based on the Company's current plans, objectives, estimates, expectations and intentions and inherently involve significant risks and uncertainties.

Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with: the successful completion of development and regulatory activities with respect to the Company's product candidates; the time-consuming and uncertain regulatory approval process, including the risk that the Company's current and/or planned regulatory submissions may not be submitted, accepted or approved by applicable regulatory authorities in a timely manner or at all, including the costly and time-consuming pharmaceutical product development and the uncertainty of clinical success, including risks related to failure or delays in successfully initiating or completing clinical trials and assessing patients; global economic, financial, and healthcare system disruptions and the current and potential future negative impacts to the Company's business operations and financial results; regulatory initiatives and changes in tax laws; delays or problems in the supply or manufacture of the Company's products and product candidates; complying with applicable U.S. and non-U.S. regulatory requirements; government investigations, legal proceedings and other actions;; and other risks and uncertainties affecting the Company, including those described from time to time under the caption "Risk Factors" and elsewhere in Jazz Pharmaceuticals' Securities and Exchange Commission filings and reports, including the Company's Annual Report on Form 10-K for the year ended December 31, 2022, as supplemented by the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, and future filings and reports by the Company. Other risks and uncertainties of which the Company is not currently aware may also affect the Company's forward-looking statements and may cause actual results and the timing of events to differ materially from those anticipated.



# Agenda



## INTRODUCTION

**Bruce Cozadd**

Chairman and Chief Executive Officer

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## RESULTS FROM PIVOTAL PHASE 2B HERIZON-BTC-01 TRIAL: ZANIDATAMAB IN PREVIOUSLY-TREATED HER2-AMPLIFIED BTC

**Shubham Pant, M.D., M.B.B.S.**

Dept. of Gastrointestinal Medical Oncology & Dept. of Investigational Cancer Therapeutics  
The University of Texas MD Anderson Cancer Center

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## ZANIDATAMAB PERSPECTIVES & JAZZ ONCOLOGY

**Kelvin Tan, M.D.**

Chief Medical Officer

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## Q&A

**Bruce Cozadd, Dr. Shubham Pant, Dr. Kelvin Tan, Abizer Gaslightwala** (U.S. Business Unit Head, Jazz Oncology)

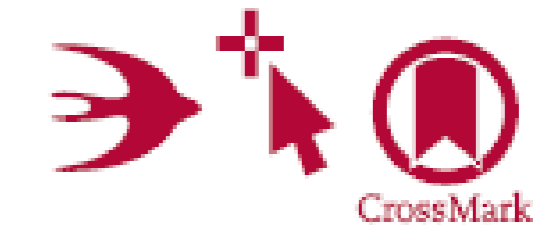


Pivotal HERIZON-BTC-01 Phase 2b data published in *Lancet Oncology*

# THE LANCET **Oncology**

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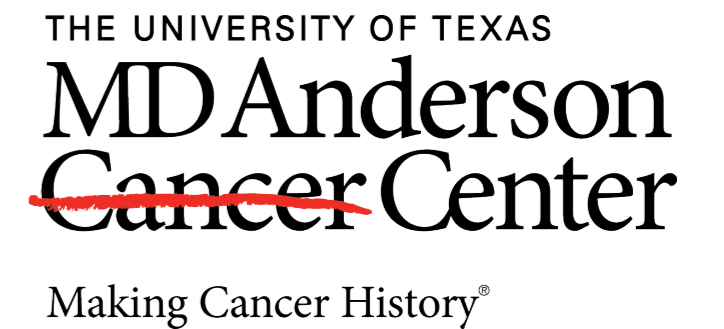
**Zanidatamab for *HER2*-amplified, unresectable, locally advanced or metastatic biliary tract cancer (HERIZON-BTC-01): a multicentre, single-arm, phase 2b study**



*James J Harding\*, Jia Fan\*, Do-Youn Oh, Hye Jin Choi, Jin Won Kim, Heung-Moon Chang, Lequn Bao, Hui-Chuan Sun, Teresa Macarulla, Feng Xie, Jean-Phillippe Metges, Jie'er Ying, John Bridgewater, Myung-Ah Lee, Mohamedtaki A Tejani, Emerson Y Chen, Dong Uk Kim, Harpreet Wasan, Michel Ducreux, Yuanyuan Bao, Lisa Boyken, Jiafang Ma, Phillip Garfin, Shubham Pant, on behalf of the HERIZON-BTC-01 study group†*



# Shubham Pant, M.D., MBBS



Dr. Shubham Pant is a Professor in the Department of Gastrointestinal Medical Oncology with a joint appointment in the Department of Investigational Cancer Therapeutics at The University of Texas MD Anderson Cancer Center in Houston, Texas. Dr. Pant is a key opinion leader in the fields of GI Cancers including pancreatic, biliary, gall bladder and Phase 1 trials. He also serves as the Director of Clinical Research and Associate Director for Early Phase Drug Development at the Sheikh Ahmed Bin Zayed Center. He has an expertise in Targeted therapy and Immunotherapy and has co-authored more than 100 peer-review articles and has presented research in national and international meetings including ASCO, AACR and ESMO.

Dr. Pant completed his fellowship from the James Cancer Hospital/Solove Research Institute at the Ohio State University where he was elected Chief Fellow. He has previously served as the Director of Clinical Trials, Section of Hematology/Oncology and was recipient of the Mai Eager Anderson Endowed Chair in Cancer Clinical Trials at the University Of Oklahoma.

He has been the recipient of ASCO/AACR Workshop Methods in Clinical Cancer Research and was selected for the American Society of Clinical Oncology (ASCO) Leadership Development Program. He has served as a member on the ASCO Annual Meeting Educational Committee (GI-Non Colorectal Track) and is a member of the ASCO Gastrointestinal Guidelines Committee. He has a keen interest in Global Health and held a grant through the Global Academic Program to study Gall Bladder Cancer in India and Chile. In his free time, Dr. Pant enjoys writing on diet and cancer, is the author of the Bestselling novel: Food Matters: The role your diet plays in the fight against cancer (Publisher: Harper Collins, In).

# Results from the Pivotal Phase 2b HERIZON-BTC-01 Study: Zanidatamab in Previously-treated HER2-amplified Biliary Tract Cancer (BTC)

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Corresponding Author: [spant@mdanderson.org](mailto:spant@mdanderson.org)

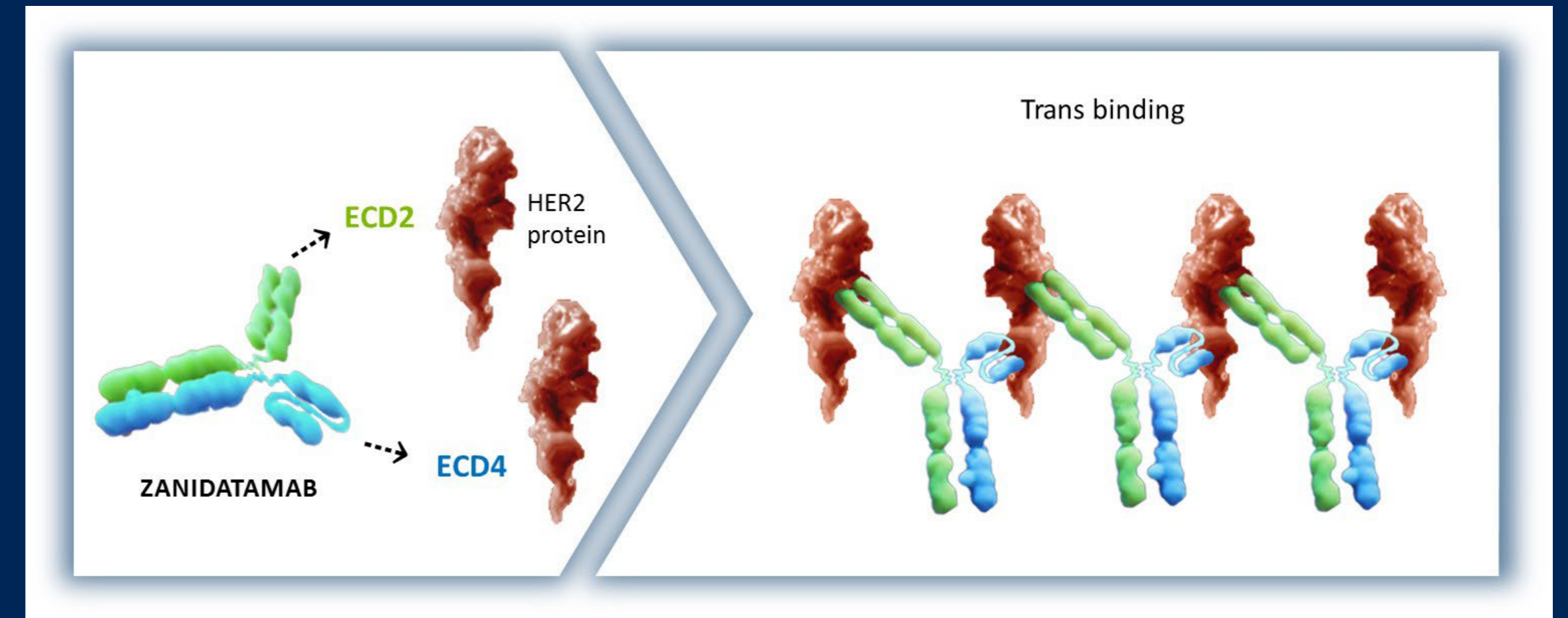
# Unmet Need in Patients with Biliary Tract Cancer (BTC)

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- ~12,000 HER2+ BTC cases annually<sup>1</sup> in the U.S., Europe<sup>2</sup>, and Japan
- For patients with locally advanced/metastatic BTC, standard 2L+ offers limited clinical benefit
  - ORR 5 – 15%<sup>3,4</sup>
  - mPFS 4.0 mo<sup>3</sup>
- HER2 amplification/overexpression is observed in a subset of BTC
  - 19 – 31% of GBC, 17 – 19% of ECC, 4 – 5% of ICC<sup>5,6</sup>
- HER2-targeted therapies have clinical benefit in breast, gastric cancer and lung cancer. There are no approved HER2-targeted therapies for BTC.

# Zanidatamab is a HER2-targeted Bispecific Antibody with a Unique Mechanism of Action (MOA)

- Zanidatamab simultaneously binds 2 separate HER2 molecules in *trans*<sup>1</sup>
- Unique binding properties of zanidatamab to HER2 result in multiple MOAs<sup>1</sup>
- Preclinical studies demonstrate greater activity than trastuzumab ± pertuzumab<sup>1</sup>
- Zanidatamab has shown a manageable safety profile and encouraging antitumor activity in patients with HER2-expressing BTC in a Phase 1 trial<sup>2</sup>



ECD = extracellular domain

<sup>1</sup> Weisser NE, et al. Nature Commun 2023;14:1394. <sup>2</sup> Meric-Bernstam F, et al. Lancet Oncol 2022;23:1558–1570.



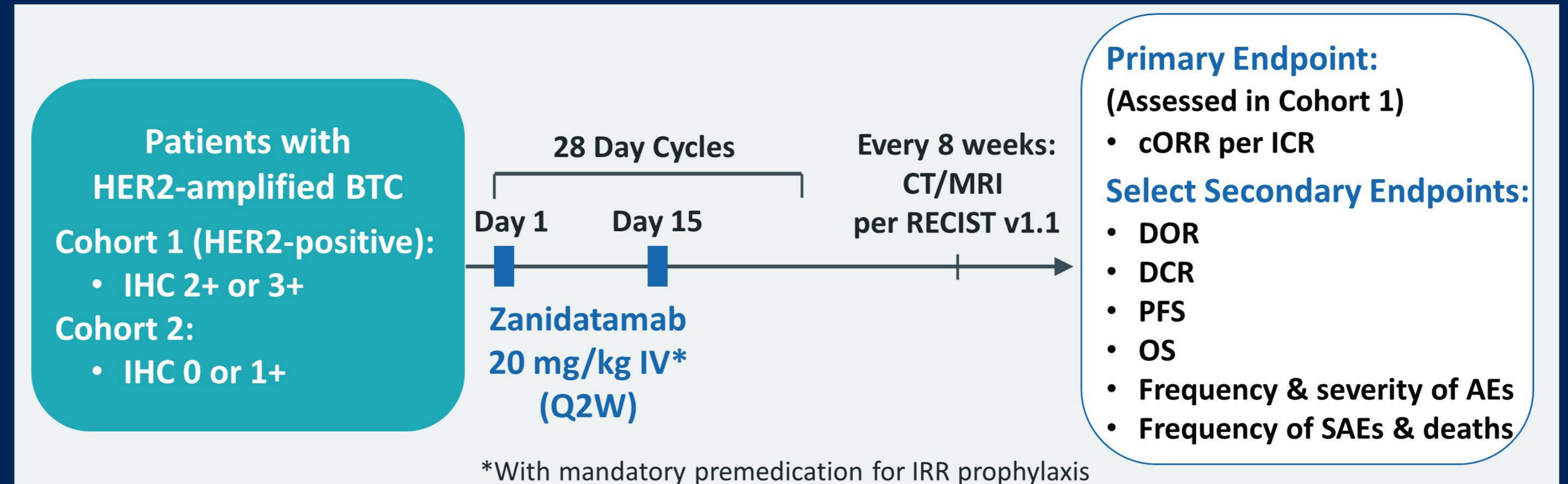
# HERIZON-BTC-01 Study Design

- Phase 2b study of zanidatamab monotherapy in patients with HER2-amplified BTC

## Key Eligibility Criteria

- Locally advanced or metastatic BTC<sup>1</sup>
- Tissue required to confirm HER2 status by central lab
- Progressed after treatment with a gemcitabine-containing regimen
- No prior HER2-targeted therapies
- ECOG PS of 0 or 1

<sup>1</sup> Excludes ampullary



AE = adverse event; cORR = confirmed objective response rate; CT = computed tomography scan; DCR = disease control rate; DOR = duration of response; ECOG PS = Eastern Cooperative Oncology Group performance status; ICR = independent central review; IHC = immunohistochemistry; IRR = infusion-related reaction; IV = intravenous; MRI = magnetic resonance imaging; OS = overall survival; Q2W = every two weeks; RECIST = Response Evaluation Criteria in Solid Tumors; SAE = serious adverse event.

# Enrollment

- Enrollment: September 2020 – March 2022
- Sites: 32 in Asia, Europe, North America, & South America
- Data cutoff date for the primary analysis: 10 October 2022
- Study is ongoing but recruitment is complete: 87 patients treated
  - Cohort 1: 80 patients
  - Cohort 2: 7 patients



\* The focus of this presentation will be on HER2-positive BTC (Cohort 1), as Cohort 2 contained a small sample size and did not reveal any responses nor unique safety signals.

# Demographics and Baseline Disease Characteristics (Cohort 1)

		(N = 80)
Age, years, median (range)		64 (32, 79)
Sex: Female, n (%)		45 (56.3)
Race, n (%)	Asian	52 (65.0)
	White	23 (28.8)
	Other / Not Reported	5 (6.3)
ECOG PS, n (%)	0	22 (27.5)
	1	58 (72.5)
BTC Subtype, n (%)	GBC	41 (51.3)
	ICC	23 (28.8)
	ECC	16 (20.0)
HER2 Status, n (%)	IHC 2+	18 (22.5)
	IHC 3+	62 (77.5)

		(N = 80)
Disease stage at baseline, n (%)	Stage III	9 (11.3)
	Stage IV	71 (88.8)
Prior therapies in the locally advanced/metastatic setting, median (range)		1 (1, 7)
Regimen received, n (%)*	CISGEM	61 (76.3)
	Fluoropyrimidine-based	27 (33.8)
	PD-1 / PD-L1 inhibitor	21 (26.3)
	Other	5 (6.3)

CISGEM = cisplatin and gemcitabine; PD-1 = programmed cell death protein 1; PD-L1 = programmed death ligand 1.

\* Patients are counted at most once under each regimen type received and may be counted in multiple categories

# Disease Response in Patients with HER2-positive BTC (Cohort 1)

- 16 patients had ongoing responses at the time of data cutoff

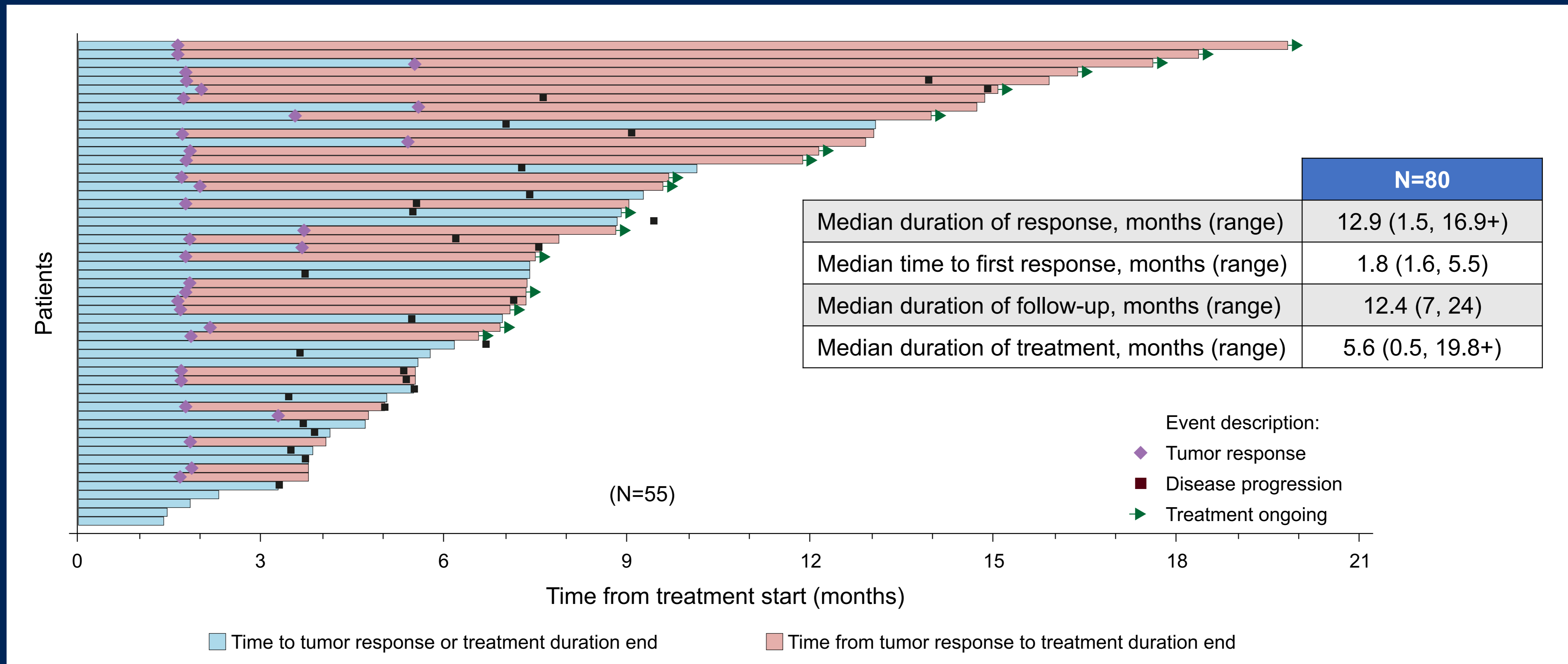
		By ICR Assessment (N = 80)	By Investigator Assessment (N = 80)
cORR, % (95% CI)		41.3 (30.4, 52.8)	41.3 (30.4, 52.8)
Confirmed BOR, n (%)	CR	1 (1.3)	4 (5.0)
	PR	32 (40.0)	29 (36.3)
	SD	22 (27.5)	21 (26.3)
	PD	24 (30.0)	25 (31.3)
	NE <sup>1</sup>	1 (1.3)	1 (1.3)
DCR [CR + PR + SD], % (95% CI)		68.8 (57.4, 78.7)	67.5 (56.1, 77.6)
CBR [CR + PR + (SD ≥ 6 months)], % (95% CI)		47.5 (36.2, 59.0)	47.5 (36.2, 59.0)

CBR = clinical benefit rate; CI = confidence interval; CR = complete response; DCR = disease control rate; NE = not evaluable; PD = progressive disease; PR = partial response; SD = stable disease.

<sup>1</sup> NE = one patient died prior to first post-baseline tumor assessment.



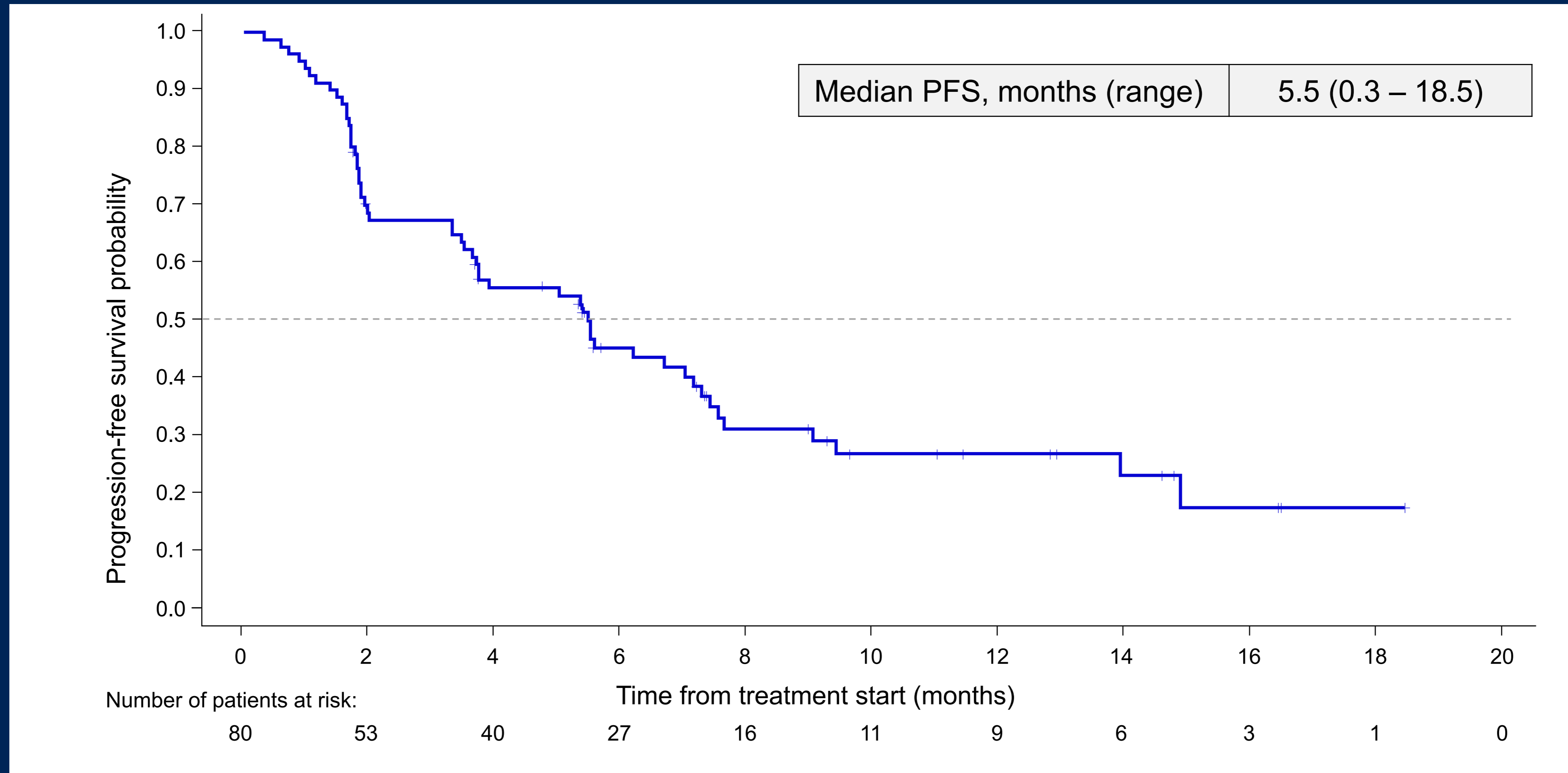
# Treatment Duration for Patients with Response (CR or PR) or Stable Disease per RECIST v1.1 by ICR (Cohort 1)



Note: Decisions to discontinue zanidatamab were based on investigator assessment. One patient with non-responding tumors was still on treatment.

# Progression-free Survival in Patients with HER2-positive BTC (Cohort 1)

- OS data not yet mature



# Adverse Events

	Cohort 1 (N = 80)		Total (N = 87)	
	Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3
Any TEAE, n (%)	78 (97.5)	46 (57.5)	84 (96.6)	52 (59.8)
Any TRAE, n (%)	61 (76.3)	15 (18.8)	63 (72.4)	16 (18.4)
Serious TRAE, n (%)	7 (8.8)	7 (8.8)	7 (8.0)	7 (8.0)
TRAEs leading to treatment discontinuation, n (%)	2 (2.5)	1 (1.3)	2 (2.3)	1 (1.1)
TRAEs leading to death, n (%)	0	0	0	0
TRAEs, any Grade occurring in ≥ 10% of patients or Grade ≥ 3 in ≥ 2 patients, n (%)				
Diarrhea	32 (40.0)	4 (5.0)	32 (36.8)	4 (4.6)
IRR	28 (35.0)	1 (1.3)	29 (33.3)	1 (1.1)
Ejection fraction decreased	8 (10.0)	3 (3.8)	8 (9.2)	3 (3.4)
Nausea	8 (10.0)	1 (1.3)	8 (9.2)	1 (1.1)
Anemia	4 (5.0)	2 (2.5)	4 (4.6)	2 (2.3)

- 2 TRAEs led to zanidatamab discontinuation:
  - 1 Grade 2 ejection fraction decreased
  - 1 Grade 3 pneumonitis
- 3 patients had TRAEs that led to dose reductions:
  - 1 Grade 3 diarrhea
  - 1 Grade 3 diarrhea and Grade 3 nausea
  - 1 Grade 2 weight decreased
- No serious TRAEs occurred in more than 1 patient
- No Grade 4 TRAEs; no treatment-related deaths

IRR = infusion-related reaction; TEAE = treatment-emergent adverse event; TRAE = treatment-related adverse event.



# Adverse Events of Special Interest (AESI)

		Cohort 1 (N = 80)		Total (N = 87)	
		Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3
AESI, n (%)	IRR	28 (35.0)	1 (1.3)	29 (33.3)	1 (1.1)
	Confirmed cardiac events	5 (6.3)	3 (3.8)	5 (5.7)	3 (3.4)
	Non-infectious pulmonary toxicities	1 (1.3)	1 (1.3)	1 (1.1)	1 (1.1)
Select AE, n (%) <sup>1</sup>	Diarrhea	38 (47.5)	6 (7.5)	38 (43.7)	6 (6.9)

<sup>1</sup> AESIs that occurred in at least 1 patient

- IRR events: all events resolved, generally within 1 day; most occurred with the first cycle of treatment (26/29); most had no recurrence (26/29)
- Confirmed cardiac events: decreased LVEF in 5 patients (5.7%). Patients were clinically asymptomatic, and the events were confounded by pre-existing or concurrent conditions.
- Diarrhea: all but 2 events (both Grade 3) were managed in the outpatient setting, typically with loperamide; most events (87/99) were resolved at the time of data cutoff; median time to resolution of 2.0 days (range, 1 – 267)

# Conclusions

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- Zanidatamab demonstrated antitumor activity, including rapid and durable responses, in patients with treatment-refractory HER2-positive BTC
  - cORR per ICR of 41.3%; most responses were identified at first disease assessment
  - Median PFS: 5.5 months
  - Median DOR: 12.9 months
- Zanidatamab demonstrated a manageable and tolerable safety profile
  - Few events led to treatment discontinuation
  - No Grade 4 TRAEs; no deaths were treatment-related
  - Most common AEs were IRRs and diarrhea; predominately low-grade and reversible
- These results support zanidatamab having meaningful clinical benefit and potential as a future treatment option in HER2-positive BTC
  - Additional studies are both planned and active, including zanidatamab in combination with CISGEM

CISGEM = cisplatin and gemcitabine

# Acknowledgement, Disclosure

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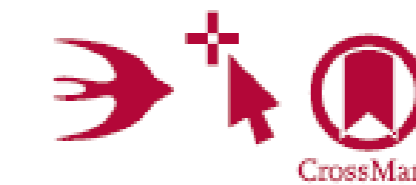
We sincerely thank all patients and their caregivers. Thanks to all the investigators, clinical trial researchers, personnel and staff who contributed to the trial in any way.

The HERIZON-BTC-01 study is funded by Zymeworks BC Inc., Jazz Pharmaceuticals, Inc., and BeiGene Ltd.

# Full Publication – *The Lancet Oncology*

Articles

## Zanidatamab for *HER2*-amplified, unresectable, locally advanced or metastatic biliary tract cancer (HERIZON-BTC-01): a multicentre, single-arm, phase 2b study



*James J Harding\**, *Jia Fan\**, *Do-Youn Oh*, *Hye Jin Choi*, *Jin Won Kim*, *Heung-Moon Chang*, *Lequn Bao*, *Hui-Chuan Sun*, *Teresa Macarulla*, *Feng Xie*, *Jean-Phillippe Metges*, *Jie'er Ying*, *John Bridgewater*, *Myung-Ah Lee*, *Mohamedtaki A Tejani*, *Emerson Y Chen*, *Dong Uk Kim*, *Harpreet Wasan*, *Michel Ducreux*, *Yuanyuan Bao*, *Lisa Boyken*, *Jiafang Ma*, *Phillip Garfin*, *Shubham Pant*, on behalf of the HERIZON-BTC-01 study group†

- [www.thelancet.com/oncology](http://www.thelancet.com/oncology)
- Published online June 2, 2023 [https://doi.org/10.1016/S1470-2045\(23\)00242-5](https://doi.org/10.1016/S1470-2045(23)00242-5)

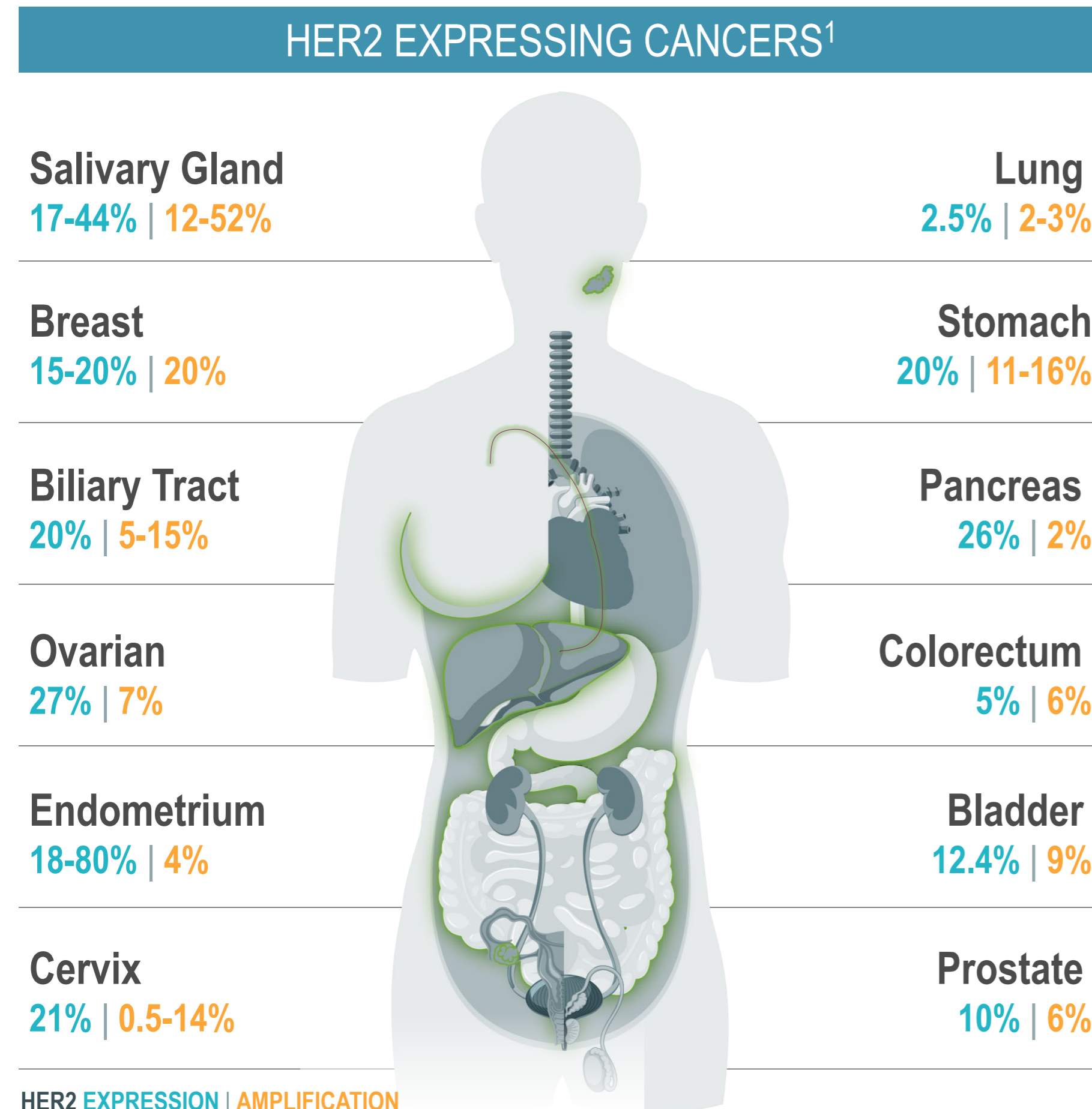
# Jazz Oncology

Kelvin Tan, M.D.  
Chief Medical Officer



# Zanidatamab: Broad Opportunities in HER2-Targeted Therapy

## Initial focus on GEA and BTC; Broad opportunity for additional indications



**BTC**

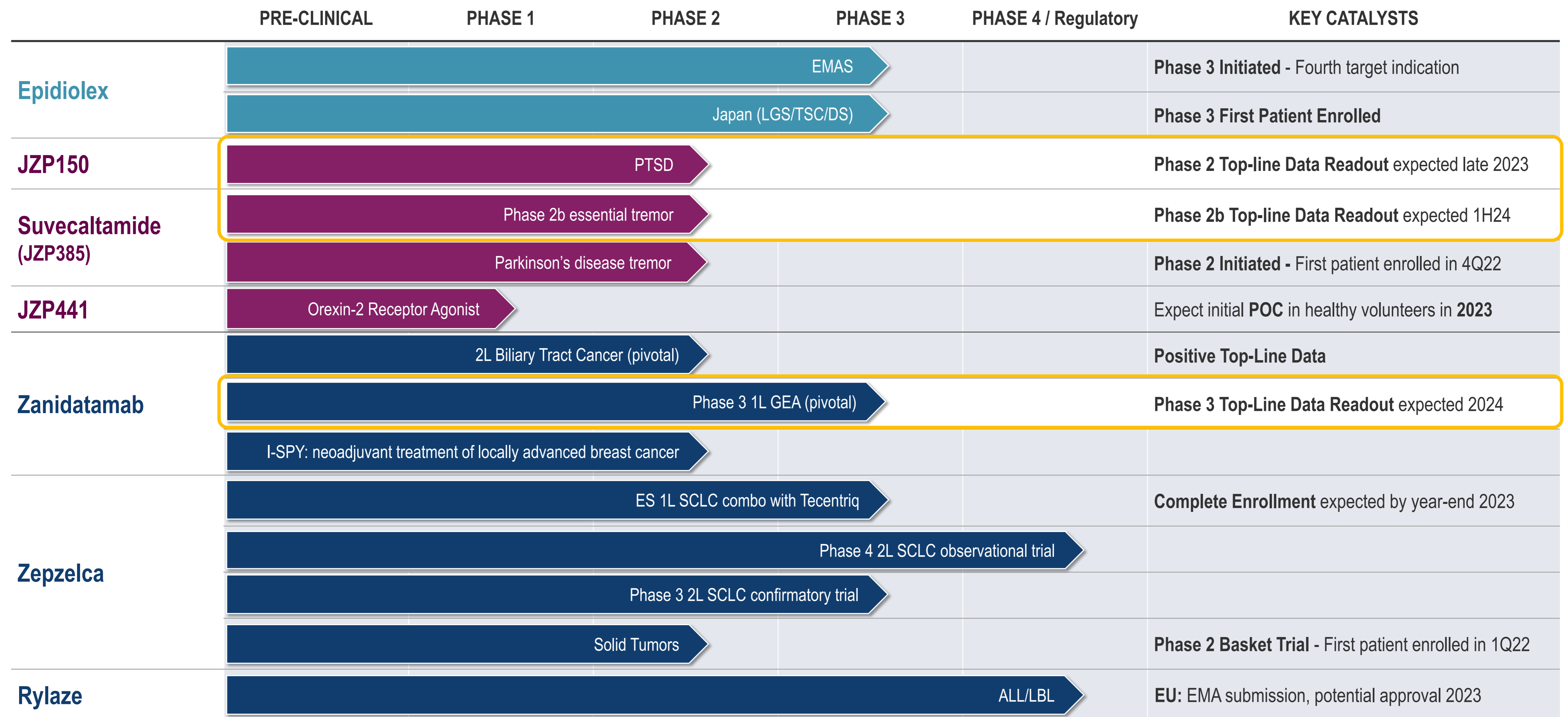
- Heterogeneous group of aggressive malignancies in the biliary tract classified according to cancer origin
- Most patients are diagnosed with **advanced or metastatic** disease
- Significant unmet need: global 5-year survival rate of **<20%**<sup>5</sup>
- **~12,000 HER2+ cases annually**<sup>3</sup> in the U.S., Europe<sup>4</sup>, and Japan
- **Overall incidence** expected to **increase** over the next decade<sup>2</sup>
- Zanidatamab - potential to be the first HER2-targeted therapy for patients with BTC<sup>5</sup>

**GEA**


- GEA encompasses gastric (stomach), gastroesophageal junction and esophageal adenocarcinomas
- Most patients present at a late stage of disease
- Significant unmet need; global 5-year overall survival rate of **~20%**<sup>2</sup>
- **~63,000 HER2+ cases annually**<sup>3</sup> in the U.S., Europe<sup>4</sup>, and Japan
- **Overall incidence** expected to **increase** over the next decade<sup>2</sup>

<sup>1</sup>Oh D-Y & Bang Y-J 2019 Nat Rev Clin Onc; <sup>2</sup>Data on file, survival rates vary by geography; <sup>3</sup>Incidence sources: Kantar reports; ToGA surveillance report; SEER, cancer.gov; ClearView Analysis; GLOBOCAN, Data on file; <sup>4</sup>Major markets, U.K, France, Germany, Spain, Italy; <sup>5</sup>Baria K et al., Worldwide Incidence and Mortality of Biliary Tract Cancer, Gastro Hep Advances, 2022.. BTC = biliary tract cancer; GEA = gastroesophageal adenocarcinoma; HER2 = human epidermal growth factor receptor. <sup>5</sup>Pending regulatory approvals.

# At Least Three Late-Stage Data Readouts Expected Through 2024



■ Cannabinoids 
 ■ Neuroscience 
 ■ Oncology


 1L = first line; 2L = second-line; ALL/LBL = acute lymphoblastic leukemia/lymphoblastic lymphoma; DS = Dravet syndrome; EMA = European Medicines Agency; EMAS = epilepsy with myoclonic-atonic seizures; ES = extensive-stage; GEA = gastroesophageal adenocarcinoma; LGS = Lennox-Gastaut syndrome; POC = proof of concept; PTSD = post-traumatic stress disorder; SCLC = small cell lung cancer; TSC = Tuberous sclerosis complex.

# Q&A

