

Making a Meaningful Difference

On a mission to improve the standard of care for difficult-to-treat diseases

Investor and Analyst Presentation

MARCH 2024

Nasdaq: ZYME | zymeworks.com

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This presentation and the accompany oral commentary include "forward-looking statements" or information within the meaning of the applicable securities legislation, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements in this presentation and the accompanying oral commentary include, but are not limited to, statements that relate to Zymeworks' anticipated cash runway and potential sources of its cash runway; preliminary and unaudited estimates of its cash, cash equivalents, and marketable securities; the timing of anticipated IND filings; Zymeworks' expectations regarding implementation of its strategic priorities; the anticipated benefits of the collaboration agreement with Jazz and BeiGene, including Zymeworks' ability to receive any future milestone payments and royalties thereunder; the potential addressable market of zanidatamab; the timing of and results of interactions with regulators; Zymeworks' clinical development of its product candidates and enrollment in its clinical trials; anticipated preclinical and clinical data presentations and publications: expectations regarding future regulatory filings and approvals and the timing thereof; potential therapeutic effects of zanidatamab and Zvmeworks' other product candidates; expected financial performance and future financial position: the commercial potential of technology platforms and product candidates; anticipated continued receipt of revenue from existing and future partners; Zymeworks' preclinical pipeline; anticipated sufficiency of cash resources and other potential sources of cash, including certain anticipated regulatory milestone payments, to fund Zymeworks' planned operations into 2H 2027; and Zymeworks' ability to execute new collaborations and partnerships; and other information that is not historical information. When used herein, words such as "plan", "believe", "expect", "may", "continue", "anticipate", "potential", "will", "progress", and similar expressions, or any discussion of strategy, are intended to identify forward-looking statements. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances. including any underlying assumptions, are forward-looking. All forward-looking statements are based upon Zymeworks' current expectations and various assumptions, including, without limitation, Zymeworks' examination of historical operating trends. Zymeworks believes there is a reasonable basis for its expectations and beliefs, but they are inherently uncertain. Zymeworks may not realize its expectations, and its beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements as a result of various factors, including, without limitation: any of Zymeworks' or its partners' product candidates may fail in development, may not receive required regulatory approvals, or may be delayed to a point where they are not commercially viable; Zymeworks may not achieve milestones or receive additional payments under its collaborations; regulatory agencies may impose additional requirements or delay the initiation of clinical trials; the impact of new or changing laws and regulations; market conditions; the impact of pandemics and other health crises on Zymeworks' business, research and clinical development plans and timelines and results of operations, including impact on its clinical trial sites, collaborators, and contractors who act for or on Zymeworks' behalf; clinical trials may not demonstrate safety and efficacy of any of Zymeworks' or its collaborators' product candidates; Zymeworks' assumptions and estimates regarding its financial condition, future financial performance and estimated cash runway may be incorrect; inability to maintain or enter into new partnerships or strategic collaborations; and the factors described under "Risk Factors" in Zymeworks' quarterly and annual reports filed with the Securities and Exchange Commission (copies of which may be obtained at www.sec.gov and www.sedar.com). Although Zymeworks believes that such forwardlooking statements are reasonable, there can be no assurance they will prove to be correct. Investors should not place undue reliance on forward-looking statements. The above assumptions, risks and uncertainties are not exhaustive.

Furthermore, we are in the process of finalizing our financial results for the fourth quarter and fiscal year 2023, and therefore our finalized and audited results and final analysis of those results are not yet available. The preliminary expectations regarding year-end cash, cash equivalents, and marketable securities are the responsibility of management, are subject to management's review and the actual results could differ from management's expectations. The actual results are also subject to audit by our independent registered public accounting firm and no assurance is given by our independent registered public accounting firm on such preliminary expectations. You should not draw any conclusions as to any other financial results as of and for the year ended December 31, 2023, based on the foregoing estimates.

Forward-looking statements are made as of the date hereof and, except as may be required by law, Zymeworks undertakes no obligation to update, republish, or revise any forward-looking statements to reflect new information, future events or circumstances, or to reflect the occurrences of unanticipated events.

Zymeworks: A Differentiated Product Pipeline Built on Unique Capabilities in Antibody Engineering and Medicinal Chemistry



Seeking to address unmet patient needs in HER2+ GI Cancers

zanidatamab

(HER2 bispecific antibody)

- Licensed to Jazz and BeiGene
- **BTC 2L**: rolling USA regulatory submission underway with breakthrough designation
- **GEA 1L**: Targeting pivotal Phase 3 top-line data readout in late 2024
- Additional ongoing and planned clinical studies beyond BTC and GEA

5 new INDs planned Focus on Gyn CA, Lung CA, & GI CA

- ZW171 (IND 2024) MSLN x CD3 bispecific antibody
- **ZW191 (IND 2024)** FRα TOPO1i ADC
- ZW220 (IND 2025) NaPi2b TOPO1i ADC
- ZW251 (IND 2025) GPC3 TOPO1i ADC
- Candidate5 TBD (IND 2026)
 Pre-clinical TriTCE candidate
 nomination expected in 2H 2024

Continuing to innovate and move beyond oncology

- Unique/differentiated platform to build nextgen ADC's and TriTCE's
- Therapeutic focus to be expanded into autoimmune and inflammatory disease (AIID)
- Research scope to potentially expand into multifunctional engineered cytokines and dual checkpoint inhibitors

Expanding product pipeline with potential near-term approval and launch of zanidatamab. Cash runway forecast into 2H 2027, with receipt of certain anticipated regulatory milestones.

1L: first-line (treatment); 2L: second-line (treatment); ADC: antibody-drug conjugate; BTC: biliary tract cancers; CD3: cluster of differentiation 3 protein complex and T cell co-receptor; Rra: folate receptor alpha; GEA: gastroesophageal adenocarcinoma; GI CA: gastrointestinal cancer; GPC3: glypican-3; Gyn CA: gynecological cancer; HER2: human epidermal growth factor receptor 2; IND: investigational new drug (application); Lung CA: lung cancer; MSLN: mesothelin; NaPi2b: sodiumdependent phosphate transporter 2b; NSCLC: non-small cell lung cancer; TOPOII: topoisomerase-1 inhibitor.

Unique Capabilities in Protein Engineering Provide Opportunity for Differentiated Pipeline of ADCs and Multispecific Antibodies





5 New INDs expected by 2026

DAR: drug to antibody ratio; ISAC: immune stimulating antibody conjugate; MOA: mechanism of action.

5x5 R&D Strategy: Diversified Portfolio Beyond Zanidatamab with Multiple Opportunities for Success

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TriTCE: trispecific t cell engager.

R&D Focus on Cancers With Highest Unmet Medical Need





CRC: colorectal cancer; SEER*Explorer, accessed 10 Oct 2022.

Extensive Expected News Flow over 2024 and 2025



1H 2024	2H 2024	2025
PIPELINE EVENTS		
 Expect to complete USA regulatory submission for zanidatamab in 2L BTC Initiation of Phase 3 confirmatory trial for zanidatamab in 1L BTC Expected IND submission for first 5x5 candidate 	 Pivotal Phase 3 top-line data readout in GEA 1L targeted in late 2024 Expected BLA submission in China for zanidatamab in 2L BTC Expected IND submission for second 5x5 Nomination of 5th product candidate in 5x5 	 Potential USA and China launch for zanidatamab in 2L BTC and initial royalty revenue from partners Jazz and BeiGene Expected IND submission for ZW220 (NaPi2b) Expected IND submission for ZW251 (GPC3)
PUBLICATIONS & CONFERENCES		
 ASCO GI (January 18-20) JSMO (February 22-24) World ADC London (March 12-15) AACR (April 5-10) PEGS (May 13-17) 	 ASCO (May 31-June 4) WCGQ (July 3-6) ESMO (September 13-17) EORTC-NCI-AACR (October 23-25) SITC (November 6-10) SABCS (December 10-14) 	

Manuscripts: Overview of ZD06519 (TOPO1i payload)

Illustrative. Key news flow only.

AACR: American Association for Cancer Research; ASC0: American Society of Clinical Oncology; ASC0 GI: ASC0 Gastrointestinal Cancers Symposium; BLA: biologics license application; EORTC-NCI-AACR; EORTC-NCI-AACR Symposium on Molecular Targets and Cancer Therapeutics; ESMO: European Society for Medical Oncology; JSMO: Japanese Society of Medical Oncology; PEGS: Protein Engineering Summit; SABCS: San Antonio Breast Cancer Symposium; SITC: Society for Immunotherapy of Cancer; World ADC: World Antibody Drug Conjugates Summit; WCGI: World Congress on Gastrointestinal Cancer.



Projected Cash Runway Supports R&D Priorities into 2H 2027



Current Financial Status:

- Cash resources¹ of approx. \$456.3M (as of December 31, 2023)
- Includes December 2023 private placement of \$50M to EcoR1 Capital
- Anticipated cash runway into 2H 2027, which includes certain anticipated regulatory milestones

Potential sources to extend cash runway into 2H 2027:

- Additional regulatory approval and commercial milestones for zanidatamab from Jazz and BeiGene
- Tiered royalties between 10-20% from Jazz and 10-19.5% from BeiGene sales (up to 20% when royalty reduction of 0.5% reaches cap in the low double-digit millions of dollars)
- Additional payments from legacy technology platform collaborations
- Potential new partnerships/collaborations to provide upfront payments and committed R&D funding





Antibody-Drug Conjugate (ADC) Program

Building Next-Generation ADCs

Core Competencies Utilized in Next-Generation ADC Design





- Focusing on validated targets provides opportunity for benchmarking in preclinical development and expected clinical differentiation; novelty of targets anticipated to increase over time
- Exploiting our proprietary TOPO1i payload (ZD06519) while exploring alternate mechanisms of action for longer-term development
- Leveraging validated peptide-cleavable linkers and stochastic conjugation. New chemistries under development to complement novel payloads
- Optimizing **antibody properties** for the ADC mechanism, such as target-mediated binding and **enhanced internalization**. Biparatopic and bispecific ADC formats may also provide future differentiated therapeutics
- Utilize 3D cancer cell line spheroid models to select optimal ADC antibodies based on tumor spheroid penetration and cytotoxicity

Multiple Proprietary Topoisomerase I inhibitor ADCs^{1,2} advancing towards the clinic with broad investment in ADC technologies to support future programs

1. Colombo R, Rich JR. Cancer Cell 2022 (40), 1255-1263; 2. Colombo R, Barnscher SD, Rich, JR. Cancer Res 2023, 83 (7). Abstract #1538 presented at AACR 2023.

Platform Design Criteria Draw on Well Validated ADC Technologies





Differentiated Development of Antibody-Drug Conjugates



Designing next-generation antibody-drug conjugates on targets with evidence of clinical activity and addressing areas of unmet therapeutic potential

Program	Potential Indication	Target(s)	Payload	DAR (Range)	Preclinical	Phase 1	Phase 2	Pivotal	Collaboration Partners
ZW191	Gynecological cancers, NSCLC, TNBC	FRα	Topoisomerase I Inhibitor (ZD06519)	8		On track for IN	ND filing in 2024		
ZW220	OVCA, NSCLC	NaPi2b	Topoisomerase I Inhibitor (ZD06519)	4	On tr	ack for IND filing	in 2025		
ZW251	Hepatocellular carcinoma	GPC3	Topoisomerase I Inhibitor (ZD06519)	4	On tr	ack for IND filing	in 2025		
Zanidatamab zovodotin	NSCLC	HER2	Auristatin (ZD02044)	2	NCT03821233	3			
XB002 (ICON-2)	Solid tumors	Tissue Factor	Auristatin (ZD02044)	4	NCT04925284				EXELIXIS ¹ mid-single digit royalty



Zymeworks Novel Camptothecin Payload Was Selected With ADCs In



Design of novel payloads enables incorporation of properties tailored for ADC mechanism

ADC: antibody-drug conjugate.

Making a Meaningful Difference



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Optimized Design³

- IgG1 antibody selected for its enhanced internalization and tumor penetration
- Novel moderate potency topoisomerase l inhibitor payload with bystander activity (ZD06519)
- Drug-to-antibody ratio ~ 8
- Validated peptide cleavable linker sequence



Differentiated Profile

- Differentiated anti-tumor activity in preclinical tumor models with a breadth of FR α expression¹
- Favorable safety profile in non-human primate toxicology studies³
- Opportunity to treat broader range of FRα-expressing cancers



Next Milestone

Expected IND filing in 2024

ZW191 FRα-targeting ADC

FR α is found in ~75% of high-grade serous ovarian carcinomas¹ and ~70% of lung adenocarcinomas²

ZW191: Key Design Considerations; On Track for Clinical Studies in 2024

Customized format for enhanced function



nM: nanomolar; ZLA: ZymeLink Auristatin Payload. Lawn S et al. Abstract # 2641 Presented at AACR 2023



ZW191 is well-tolerated in non-human primate (NHP) at 30 mg/kg

Dose mg/kg q3w x2	Tolerated?	Histopathology; Clinical Chemistry; Hematology	
30	Yes	Thymus, stomach; AST \uparrow ; ABRETIC \downarrow	
80	No	Thymus, kidney, testis, and brain; AST ↑; BUN ↑; ABRETIC↓; ABLYMP↓	

ZW191 has a favorable pharmacokinetic (PK) profile



- MTD ≥ 30 mg/kg in a 2-dose non-GLP NHP toxicology study
- Histopathology findings at 30 mg/kg were considered as background/low severity and not adverse
- Clinical chemistry and hematology findings at 30 mg/kg considered mild and/or non-dose responsive
- At 30 mg/kg, clinical observations were limited to fecal abnormalities, with no effect on body weight
- ZW191 displays favorable PK and is well tolerated in NHP at exposure levels above those projected to be efficacious
- GMP process development is underway to support an expected 2024 IND filing

Lawn S et al. ZW191, a novel FRa-targeting antibody drug conjugate bearing a topoisomerase-I inhibitor payload. Abstract # 2641 presented at American Association for Cancer Research annual meeting 2023

GMP: good manufacturing practices; MTD: maximum tolerated dose; NHP: non-human primates.

Differentiation is Critical for ZW191 in the Competitive FRα ADC Space for zymeworks TOPO1i

The right design to target $FR\alpha$

1. Potential best-in-class antibody

The ZW191 antibody was selected for enhanced internalization, payload delivery, and tumor penetration.¹

2. Topoisomerase l inhibitor (TOPO1i) payload mechanism TOPO1i containing ADCs have proven to be an effective mechanism to treat ovarian cancers.^{2,3}

3. Moderate payload potency

A moderate potency TOPO1i payload (ZD06519) was selected for ZW191 to enable a higher protein dose, which may be advantageous for target engagement, tumor penetration, and drug exposure.⁵ Exatecan is 3-10X more potent than the ZW191 payload.

4. Moderate antibody-linker stability

A 'designed instability' approach was taken with ZW191; all approved ADCs feature an element of linker instability.⁴

5. Strong bystander activity

Strong bystander activity is beneficial when treating tumors with low and heterogenous expression of $FR\alpha$.¹

1. Lawn S et al. Abstract # 2641 Presented at AACR 2023; 2. Meric-Bernstam F, et al., Journal of Clinical Oncology 2023 41:17; 3. Moore K, et al., j.annonc.2023.09.1924; 4. Colombo R, Barnscher SD, Rich JR. Cancer Res 2023, 83 (7). Abstract #1538 presented at AACR 2023 5. Lawn S. ZW191: A Potential Best-in-Class TOPO11 ADC for Treatment of FRac-Expressing Solid Tumors, Presented at World ADC London 2023.

The balance between **drug-linker stability** and **payload potency** differentiates ZW191 from other FRα-TOPO1i ADCs







ZW220 NaPi2b-targeting ADC

NaPi2b is found in ~96% of ovarian serous adenocarcinomas¹ and ~87% of non-small cell lung adenocarcinomas¹



Design²

- IgG1 antibody selected for its strong binding and internalization
- Moderate potency topoisomerase I inhibitor payload with bystander activity (ZD06519)
- Intermediate drug-to-antibody ratio ~ 4
- Validated peptide cleavable linker sequence



Profile

- Strong preclinical activity in models with a breadth of NaPi2b expression¹
- Encouraging tolerability in repeat dose non-human primate toxicology studies²
- First-in-class ADC potential for NaPi2b-expressing solid tumors



Next Milestone

Expected IND filing in 2025

ZW220: Potential Utility in Multiple Cancers; On Track for Clinical Studies in H1-2025^{1,2}



Customized format for function with best-in-class and first-in-class potential

Efficient and Rapid Internalization



Growth Inhibition in Ovarian Cancer and NSCLC Models



Representative dose-response cytotoxicity curves for ZW220 DAR 4, relative to untreated, in a panel of NaPi2b^{+/-} tumor cell line spheroids.

Anti-Tumor Activity in Ovarian Cancer Models



Cell line spheroids with NaPi2b/Cell expressed: IGROV-1 (Ovarian) 1,770,00 expressed; HCC-78 (NSCLC) 820,000 expressed; TOV21G (Ovarian) 350,000 expressed; H441 (NSCLC) 41,000 expressed; EBC-1 (NSCLC) 0 expressed. 1. Hernandez Rojas A et al., Abstract #1533 presented at AACR 2023; 2. Hernandez Rojas A et al. Presentation at World ADC 2023.

ZW220: Novel and Proprietary TOPO1i Payload Well-Tolerated

40



ZW220 3	ZW220 3-dose non-GLP NHP toxicology study, Q3Wx3				
Test article	Dose	Tolerated?	Histopathology; Clinical Chemistry; Hematology	MTD	
	30 mg/kg	Yes	None		
ZW220	60 mg/kg	Yes	None	90 mg/kg	
	90 mg/kg	Yes	None		

- The MTD of ZW220 in NHPs is 90 mg/kg •
- No mortality or adverse pathology findings • were observed at high doses

ZW220 has a favorable pharmacokinetic (PK) profile



- ZW220 displays desirable PK characteristics and is well tolerated at high doses
- IND enabling activities are underway •



Hernandez Rojas A et al., Abstract #1533 presented at AACR 2023.

ZW220: Designed to Address Challenges Encountered With Other NaPi2b ADCs



The right design to target NaPi2b

- **1. Topoisomerase I inhibitor (TOPO1i) payload mechanism** TOPO1i containing ADCs have proven to be an effective mechanism to treat ovarian cancers.^{1,2}
- 2. Intermediate drug-antibody-ratio (DAR)

An intermediate DAR (~4) is desirable to enable a high protein dose to maximize target engagement, tumor penetration, and drug exposure.⁴ Additionally, an intermediate DAR may help to mitigate on-target off-tumor toxicities.

3. Strong, persistent bystander activity

Strong bystander activity is beneficial when treating tumors with low and heterogenous expression of NaPi2b.

- **4.** Potential best-in-class antibody with strong internalization The ZW220 antibody was selected for optimal internalization.³
- 5. Moderate antibody-linker stability

A 'designed instability' approach was taken with ZW220; all approved ADCs feature an element of linker instability.⁴

ZW220 combines a **bystander active TOPO1i payload** at a **DAR of 4** with a potential **best-in-class ADC antibody**



* Denotes strong bystander activity of payload

^ Denotes weak or transient bystander activity of the payload

1. Meric-Bernstam F, et al., Journal of Clinical Oncology 2023 41:17; 2. Moore K, et al., j.annonc.2023.09.1924; 3. Hernandez Rojas A et al., Abstract #1533 presented at AACR 2023; 4. Colombo R, Barnscher SD, Rich JR. Cancer Res 2023, 83 (7). Abstract #1538 presented at AACR 2023.





Design²

- An IgG1 antibody with enhanced ADC characteristics
- Topoisomerase I inhibitor mechanism of action
- Novel moderate potency payload with bystander activity (ZD06519)
- Intermediate drug-to-antibody ratio ~ 4
- Validated peptide cleavable linker sequence



Profile

- Strong preclinical activity in models with a breadth of GPC3 expression²
- Noteworthy tolerability in repeat dose nonhuman primate toxicology studies²
- First-in-class ADC potential for HCC
- Glypican 3 is expressed in 76% of hepatocellular carcinomas (HCC), with high expression observed in ~55% of HCC¹



Next Milestone

• Expected IND in 2025

ZW251 Glypican 3-targeting ADC

GPC3 is expressed in 76% of hepatocellular carcinomas (HCC)¹

ZW251: Potential Utility in Hepatocellular Carcinoma^{1,2}; On Track for Clinical Studies in 2025



ZW251 demonstrates target-mediated uptake and anti-tumor activity



CDX: cell derived xenograft. 1. Madera L et al., Abstract #2658 presented at AACR 2023; 2. Madera L et al, presentation at World ADC 2023.

ZW251: Novel and Proprietary TOPO1i Payload Well-Tolerated



Three Dose Non-Human Primate (NHP) Toxicology Study



Test Article	Doses		
ZW251 DAR 8	10 mg/kg	30 mg/kg	60 mg/kg
ZW251 DAR 4	20 mg/kg	60 mg/kg	120 mg/kg

- Minimal changes in body weight, hematology parameters, and clinical chemistry parameters in all treatment groups
- No mortality observed in any treatment group prior to necropsy

Madera L et al., ZW251, a novel glypican-3-targeting antibody-drug conjugate bearing a topoisomerase l inhibitor payload. Abstract # 2658 presented at American Association for Cancer Research annual meeting 2023.

Total IgG in Tg32 Mouse Serum



- ZW251 mAb exhibits comparable PK to a clinical-stage antibody comparator
- PK of ZW251 mAb unaffected by conjugation
- No mortality was observed in a repeat dose NHP toxicology study with doses up to 60 mg/kg (DAR 8) or 120 mg/kg (DAR 4)



Potential Therapeutic Agent with Alternative Mechanism for HCC Patients



HCC: Limited Treatment Options

- Globally, liver cancer is the sixth most common cancer and third most common cause of death from cancer¹
- In USA, 1L and 2L SOC provide < 9 months PFS



Standard of Care, ORR & PFS

As a potential first-in-class TOPO1i-based ADC for HCC, ZW251 offers the potential of a **new MOA** for patients and an **opportunity to improve upon the current standard of care**

- GPC3 highly expressed in HCC and being targeted by other modalities including TCEs and engineered T-cells.
- ADC approach provides alternate to counter limitations associated with immune-related suppressive HCC microenvironment and a potential therapeutic strategy amenable to combination with SOC.
- ZW251 drug design with potential first-in-class potential
 - Bystander active TOPO1i payload with tailored potency
 - Optimized drug-linker stability and intermediate DAR
 - Strong tumor growth inhibition across tumors displaying range of GPC3 expression

Finn RS et al NEJM 2020; Abou-Alfa GK et al NEJM Evid 2022; Yoo C et al Liver Cancer 2021

1. WHO. International Agency of Cancer Research. Cancer Today. 2020. Available at: https://gco.iarc.fr/today/home. Accessed October 2023 SEER. Cancer Stat Facts. National Cancer Institute. Available at https://seer.cancer.gov/statfacts/ .





Design¹

- Novel cross-linking binding designed to enhance internalization of payload and initializes immunogenic cell death (ICD)
- Delivery of novel auristatin payload (ZD02044) covalently linked via a protease cleavable linker in a DAR 2 configuration



Profile

 Differentiated format offers options to overcome potential points of resistance via geometry and cytotoxin; manageable low-grade adverse events; inducer of ICD markers and potential adaptive immune responses, which warrants investigation of its combination with checkpoint inhibitors^{2,3}



Next Milestone

• Zanidatamab zovodotin remains ready for a Phase 2 study; however, the initiation of the planned Phase 2 study has been deprioritized, pending more clarity from the evolving clinical landscape.

1. Hamblett, KJ et al., Abstract #3914 presented at AACR 2018; Cancer Res 2018;78(13S); 2. Barnscher Set al., Abstract #2633 presented at AACR 2023; 3. Jhaveri K et al., presented at ESMO 2022; #460MO Annals of Oncology 33(7).

Zanidatamab zovodotin A Bispecific HER2targeting ADC

Zanidatamab zovodotin: Summary of Key Potential Differentiators



Pre-clinical data demonstrates potential synergism to combine with immunotherapy. Safety profile from Phase 1 data supports focus in NSCLC population with a recommended dose of 2.5mg/kg Q3W.

Enhanced Internalization of Payload, with ICD

Biparatopic binding elicits internalization, auristatin-mediated cytotoxicity and strong hallmarks of immunogenic cell death^{1,2}



Stronger inducer across hallmarks when compared to trastuzumab based ADCs with DXd or MMAE payloads $% \left({{\rm AD}} \right)$

Antitumor Activity Across Solid Tumors Including NSCLC

Confirmed ORR of 30% In 2.5mg/kg Q3W cohort (N=30), median duration of response was 6.8 months with a range of 1.4 – 19.8 months⁴



Differentiated Safety Profile

In 67 patients, low grade, manageable adverse events with no ILD or pneumonitis reported³

- MTD not reached
- The PK of ADC and total antibody was comparable and appeared to be linear among the three dose regimens examined

Safety: 2.5mg/kg Q3W cohort, N=31⁴

- Gr≥3 TRAEs 16%
- Any grade keratitis of 45%; all cases ↓ to grade 1 or resolved
- Alopecia & IRR: any grade = 16%
- Diarrhea any grade = 29% (No Gr≥3)

Zanidatamab zovodotin is an investigational product that has not received FDA (or any regulatory authority) approval and has not been demonstrated safe or effective for any use.

IHMGB1: high mobility group box 1 protein; ICD: immunogenic cell death; ILD: Interstitial lung disease; IRR: immune related reaction; MMAE: Monomethyl auristatin E; Q3W: every three weeks; TRAE: treatment-related adverse event.

1. Hamblett, KJ et al., Cancer Res 2018;78(13 Suppl); 2. Barnscher S et al., Abstract #2633 presented at AACR 2023; 3. Jhaveri K et al., presented at ESMO 2022; 460MO Annals of Oncology 33(7) 4. Oh Y et al., Abstract# 33234 presented at AACR-NCI-EORTC 2023.





XB002 (ICON-2) A Novel Tissue Factor Targeting ADC



Design

- Novel antibody that recognizes a Tissue Factor epitope that does not interfere with Factor VII binding
- Delivery of Zymeworks novel auristatin payload (ZD02044) covalently linked via a protease cleavable linker in a DAR 3.8 configuration



Profile

• Differentiated ADC versus Tisotumab Vedotin on tolerability, exposure and combinability



Status

• Phase 1 studies in advanced solid tumors (JEWEL-101)



Multispecific Antibody Therapeutic (MSAT) Program

Driving The Evolution of MSATs

Differentiated Development of Multi-Specific Antibody Therapeutics _{zy}



Versatile multi-specific antibody therapeutics enhancing potency and precision with proven track record and robust clinical pipeline

Program	Potential Indication	Target(s)	Preclinical Phase 1 Phase 2 Pivotal	Collaboration Partners
Zanidatamab Bispecific	BTC	HER2 x HER2	HERIZON-BTC-01	Jazz Pharmaceuticals.
	GEA	HER2 x HER2	HERIZON-GEA-01	Jazz Pharmaceuticals.
	BC and other solid tumors	HER2 x HER2	8+ ongoing Phase 1 and Phase 2 trials (<u>view</u>)	Jazz Pharmaceuticals.
ZW171 Bispecific T-Cell Engager	Pancreatic, OVCA, CRC	MSLN x CD3 (2+1)	Expected IND filing in 2024	
TriTCE Co-Stimulatory Trispecific T cell engager	Under active evaluation	CLDN18.2 x CD3 x CD28	Pilot toxicology studies	
TriTCE Checkpoint Inhibition Trispecific T cell engager	Under active evaluation	TAA x PD-L1 x CD3	Pilot toxicology studies	
Selected Partnered Programs JNJ-78278343 Bispecific	Castration-Resistant Prostate Cancer	CD3 x KLK2	Azymetric™ EFECT™	Johmon-Johmon (HAROURTON

BC: breast cancer; CLDN: claudin; PD-L1: programmed cell death ligand 1; TAA: tumor associated antigen.

Zanidatamab: \$2B+ Peak Sales Potential*





Expect to enter market first in BTC (pending regulatory approval)¹

- Rolling BLA submission for accelerated approval in 2L BTC
- Confirmatory Phase 3 trial initiated in 1L metastatic BTC

Path to approval in 1L GEA with sBLA

- HER2+/PD-L1 negative: opportunity to address unmet need and replace trastuzumab
- HER2+/PD-L1 positive: opportunity to replace trastuzumab as HER2-targeted therapy of choice¹
- Opportunity to explore potential in neoadjuvant populations¹

Expanded opportunity across lines of Breast Cancer (BC)¹

Endometrial

Pancreatic

Bladder

- Early lines of therapy (neoadjuvant)
- Post T-DXd
 - Novel combinations¹

- Ongoing trials in early breast cancer:
- I-SPY2 Trial⁴
- MD Anderson collaboration



Represents larger patient opportunity with ~63,000 HER2+ cases annually² in USA, Europe³, and Japan

Represents ~12,000

In USA, Europe³, and

Japan

HER2+ cases annually²



Considerable market opportunity with more than 150,000 cases annually⁵ in USA, Europe³, and Japan

Broad potential beyond BTC, GEA, and BC in multiple HER2-expressing indications⁶

- Colorectal
- NSCLC
- Ovarian

- Salivary Gland
- Ampullary
 - And other HER2-expressing solid tumors

*Adapted from Jazz Pharmaceuticals' Guidance

FDA: U.S. Food and Drug Administration; HCP: healthcare provider; sBLA: supplemental biologics license application; T-DXd: trastuzumab deruxtecan. 1. Pending regulatory approvals, 2. Incidence sources: Kantar reports, ToGA surveillance report; SEER, cancer.gov; ClearView Analysis; GLOBCAN, Data on file, 3. Major markets, U.K, France, Germany, Spain, Italy, 4. NCT01042379; 5. Incidence source estimates derived from multiple sources: Decision Resources Group, Kantar Health, Jazz Market Research, data on file; 6. Funda Meric-Bernstam et al, Zanidatamab, a novel bispecific antibody, for the treatment of locally advanced or metastatic HER2-expressing or HER2-amplified cancers: a phase 1, dose-escalation and expansion study, The Lancet Oncology, Volume 23, Issue 12, 2022, Pages 1558-1570, ISSN 1470-2045, https://doi.org/10.1016/S1470-2045(22)00621-0.





Zanidatamab

A Bispecific Antibody for HER2-Expressing Cancers

Zanidatamab's Unique Format

- Ability to target two distinct HER2 epitopes which results in HER2 binding across a range of expression levels (low to high)¹
- HER2-receptor cross-linking, enhanced receptor clustering, internalization, and receptor downregulation¹
- Inhibition of cellular proliferation
- Fc-mediated cytotoxicity: ADCC, ADCP, CDC¹
- FDA Breakthrough Designation

Biparatopic HER2-Binding of Zanidatamab Drives Multiple Mechanisms of Action



The geometry of zanidatamab prevents it from binding to the same HER2 molecule¹

Zanidatamab: Summary of Clinical Development Program for BTC and GEA



Clinical Data

Differentiated tolerability profile amongst HER2-targeted therapies; majority of adverse events low grade

Single Agent Activity in Second-Line BTC Pivotal Study

 41.3% ORR (51.6% in the IHC3+ patients), 12.9 months mDoR¹

Combination Activity in First-Line GEA studies

- 79% ORR with a mDOR of 20.4 months and 84% 18-month OS rate²
- 75.8% ORR with mDOR 22.8 months and mPFS 16.7 months³

Pivotal Trials

HERIZON-BTC-01 A Global Pivotal Study in Second-Line HER2-Amplified BTC

 Results presented at ASCO 2023 with concurrent publication in The Lancet Oncology¹

HERIZON-GEA-01

A Global Pivotal Study in First-Line HER2-Positive GEA⁴

 Supported by promising Phase 2 clinical data presented at ASCO GI 2023² and Phase 1b/2 data at ESMO 2023³

Upcoming Milestones

- Rolling USA regulatory submission underway in 2L BTC with breakthrough designation
- Confirmatory Phase 3 trial initiated in 1L metastatic BTC
- Topline data for the Phase 3
 HERIZON-GEA-01 trial expected in late
 2024

Collaboration Partners:



💆 BeiGene

mDOR: median duration of response; ORR: overall response rate; OS: overall survival; mPFS: median progression-free survival.

1. Harding et al., Lancet Onco 2023; 2. Elimova E et al., Abstract #347 presented at ASCO GI 2023, JCO 41(4S); 3. Lee KW et al., Abstract #3088 presented at ESMO 2023; 4. NCT05152147.

Zanidatamab: Licensing Agreement with Jazz



	Licensing Agreement Terms ¹
Counterparty	Jazz Pharmaceuticals.
Upfront Payments	\$375M received in 4Q22
Regulatory Milestones	Up to \$525M
Commercial Milestones	Up to \$862.5M
Royalties	Tiered royalties of 10 to 20% of net sales
Territories	USA, EU, Japan and all other territories except those in APAC covered by BeiGene agreement
Future R&D Spend	Jazz to fund 100% of costs of future zanidatamab studies

Key Benefits to Zanidatamab Licensing Agreement

- Meaningful improvement to financial position and reduction in future expenditures allows focus on growth of exciting early-stage pipeline while zanidatamab advances to commercialization
- Accelerate and expand R&D programs (5x5 and ADVANCE) while maintaining anticipated cash runway into 2H 2027 with a goal of advancing 5 new programs into clinical studies by 2026
- Continued development of zanidatamab program managed by Jazz
- Substantial potential milestone payments based on global regulatory milestones for zanidatamab in BTC and GEA with further upside from royalties and commercial milestones
- Leverage Jazz's global commercial infrastructure together with BeiGene's complementary strengths in APAC regions to optimize commercialization of zanidatamab without requirement for investment in commercial infrastructure within Zymeworks

APAC: Asia Pacific. 1. All dollar values in US Dollars.

Zanidatamab: Licensing Agreement with BeiGene for Asia Pacific



	Licensing Agreement Terms ¹
Counterparty	🔁 BeiGene
Upfront Payments	\$40M
Development and Commercial Milestones	Up to \$195M
Royalties	Tiered royalties of up to 19.5% of net sales in BeiGene territories (up to 20% when royalty reduction of 0.5% reaches cap in the low double-digit millions of dollars)
Territories	Asia-Pacific region (excluding Japan and India)*
Co-development Funding	Currently for BTC and GEA global development

Additional Details

- Received approx. \$40M upfront payment in 2018 and approx. \$20M in milestones to date
- BeiGene has development and commercial rights to zanidatamab
- Collaborate on certain global studies including HERIZON-BTC-01 and HERIZON-GEA-01 with BeiGene responsible for clinical and regulatory activities in their territory
- Co-development funding agreed for any global studies

1 All dollar values in US Dollars.

* Zymeworks BC granted BeiGene a royalty-bearing exclusive license for the research, development and commercialization of zanidatamab zovodotin in Asia (excluding Japan but including the People's Republic of China, South Korea and other countries), Australia and New Zealand (collectively, the "Territory").



Zanidatamab: Details on Pivotal Studies in BTC and GEA





HERIZON-BTC-01

A Global Pivotal Study in Second-Line HER2-Amplified BTC

Population: PATIENTS WITH HER2-AMPLIFIED BTC WHO RECEIVED PRIOR GEMCITABINE N = 100 Cohort 1: 75 with IHC 2+ or 3+ Cohort 2: 25 with IHC 0 or 1+

Regimen: 28 Day Cycles Day 1: Zanidatamab, 20 mg/kg IV Day 15: Zanidatamab, 20 mg/kg IV Imaging every 8 Weeks

Locations: Canada, USA, Chile, France, Italy, Spain, United Kingdom, China, South Korea

Primary End Points: ORR (RECIST 1.1 by ICR1)

Secondary End Points: Proportion of patients with DOR ≥16 weeks, DOR, DCR, PFS, OS, safety

Additional Details: Meaningful clinical benefit demonstrated including ORR of 41.3%, median DOR of 12.9 months with a mPFS of 5.5 months presented at ASCO 2023, concurrent publication in The Lancet Oncology².

HERIZON-GEA-01

A Global Pivotal Study in First-Line HER2-Positive GEA

Population: PATIENTS WITH HER2-POSITIVE ADVANCED OR METASTATIC GEA N = 918

Regimen: 21 Day Cycles ARM 1: Trastuzumab + SOC chemotherapy³, N=238 ARM 2: Zanidatamab + SOC chemotherapy, N=238 ARM 3: Zanidatamab + tislelizumab + SOC chemotherapy, N=238 Imaging every 6 weeks for first 54 weeks, every 9 weeks thereafter

Locations: Australia, China, India, Malaysia, South Korea, Singapore, Taiwan, Thailand, Belgium, Czech Republic, Estonia, France, Italy, Georgia, Germany, Greece, Ireland, Netherlands, Poland, Portugal, Romania, Serbia, South Africa, Spain, Turkey, Ukraine and United Kingdom, Canada, Mexico, Guatemala, Argentina, Brazil, Chile, Peru

Primary End Points: PFS, OS (RECIST 1.1 by BICR¹)

Secondary End Points: ORR, DOR, Safety, HRQoL

Additional Details: Anticipate topline readout in H2 2024

BICR: blinded independent central review; DCR: disease control rate; HRQoL: health-related quality of life; ICR: independent central review; IHC: immunohistochemistry; mPFS: median progression-free survival; ORR: overall response rate; RECIST: response evaluation criteria in solid tumors; SOC: standard of care.

1. Response assessments until progression (per ICR or BICR) or withdrawal of consent; 2. Harding et al., Lancet Onco. 2023 24(7) 772-782; 3. CAPOX (capecitabine and oxaliplatin) or FP (5-fluorouracil and cisplatin).

Zanidatamab: Epidemiology of Biliary Tract Cancer



Biliary Tract Cancers (BTC) are molecularly diverse tumors which include gallbladder cancer (GBC), intrahepatic cholangiocarcinoma (ICC), and extrahepatic cholangiocarcinoma (ECC).¹ Gall bladder cancer is the more prevalent diagnoses among BTC cases.²

Epidemiology (World)

Incidence varies globally:

- Globally, it was estimated ~210,878 new cases of BTC in 2017, increasing to 219,420 in 2018.³
- Occurs at rate between 1-4 cases per 100,000 people / year in most regions; yet some regions exceed this agestandardized annual incidence rate ^{4,5}
- Chile had the highest incidence, followed by Japan and South Korea (10.83, 8.88, and 8.55/100,000, respectively)⁶



of all estimated new GBC cases occurred in Asia, with 10% (~12,570) in Europe in 2020⁷

Epidemiology (United States)

Most cases are diagnosed at an advanced stage:

 BTC is reported to occur at a rate of 1.2 (GBC), 1.7 (ICC), 1.8 (other) per 100,000 people per year in the United States⁸ which is estimated to be ~15,000 patients per year

Cases by stage at diagnosis 9, 10



Progression

Second-line:

- Survival from first-line treatment is modest, ~35% of patients get second-line, but it ranges by geographical region^{11, 12, 13}
- 2L chemotherapy yields response rates of < 10%; mOS of patients is often < 6 months¹⁴ with a recent phase II trial reporting 8.6 months¹⁵
- ~40-60% of BTC patients have possible targetable alterations with differences between anatomical subgroups^{9,16}



1. Bogenberger JM et al., Precision Oncol. 2018; 2. Lazcano-Ponce EC et al., CA: Cancer J Clin. 2001; 3. Ouyang G et al., Cancer 2021; 4. Tam V et al., Curr. Oncol. 2022; 5. Miranda-Filho A et al., Int. J. Cancer 2020; 6. Zhang Y et al., Cancer Epidemiology. 2021; 7. GLOBOCAN. World fact sheets (GallBladder), 2020; 8. NCI. SEER. SEER*Explorer: Access Feb 2023. conditions included intrahep,Gallb,other; 9. Gómez-España MA, et al., Clin Transl Oncol. 2021; 10. Banales JM et al., Nat Rev Gastroenterol Hepatol. 2020; 11. Rizzo A et al., Anticancer Research, 2019; 12. Chiang N-J et al., Biomolecules. 2021; 13. Fornaro L et al., Br J Cancer. 2014; 14. Lamarca A et al., J Clin Oncol. 2019; 15. Yoo C et al., Final results (NIFTY) abstract 55P presented at ESMO Congress 2022; 16. Bridgewater JA et al., Am Soc Clin Oncol Educ Book. 2016; 17. Galdy S et al., Cancer Metastasis Rev. 2017.

Zanidatamab: Targeted Treatment Options are Rapidly Evolving in BTC



Actionable driver mutations have been identified and are generally mutually exclusive from one another (including FGFR pathway, IDH1, BRAF, NTRK, ERBB2 (HER2) MSI-high or MMR deficiency)¹

Advanced / Metastatic Biliary Tract Cancers

First-line treatment options²

Guideline option from the ABC-02 trial³ gemcitabine + cisplatin ORR = 26%, mPFS = 8.4 months, mOS = 11.7 months

Guideline option from the TOPAZ-1 trial ^{4,5}

cisplatin + gemcitabine + durvalumab ORR = $26.7\%_{IA}$, mPFS = 7.2 months, mOS = 12.9 months

Recent option from the KN-966 trial⁶

cisplatin + gemcitabine + pembrolizumab ORR = $29\%_{BICR}$, mPFS = 6.5 months, mOS = 12.7 months

Rev Med 2023; 9. TIBSOVO US PI Aug 2021; 10. Lee, C-K et al., Lancet Gastroenterol. Hepatol. 2023; 11. Ohba A et al., J Clin Oncol 2022 v40, no.16_suppl; 12. Javle M et al., Lancet Oncol 2021.

Progression in Metastatic Biliary Tract Cancers

Second-line treatment options²

Guideline option from the ABC-06 trial⁷ FOLFOX ORR= 5%, mPFS= 4.0 months, mOS = 6.2 months

Is Targeted Treatment More Effective Than Chemotherapy?

FGFR2 fusions+: mPFS= 7.0 - 9.0, mOS= 17.5 - 21.7 months⁸ IDH1 mutation: mPFS = 2.7 months, mOS = 10.3 months⁹

Ongoing Results from HER2 Targeting Agents in 2L+ Trials*

trastuzumab + FOLFOX mPFS = 5.1 months, mOS = 10.7 months¹⁰ TDXd (HERB trial) mPFS = 5.1 months, mOS = 7.1 months¹¹ trastuzumab + pertuzumab (MyPathway) mPFS = 4.0, mOS = 10.9 months¹²

BRAF: activating serine/threonine-protein kinase B-raf kinase; ERBB2: receptor tyrosine-protein kinase erB-2; FGFR2 fusions+: fibroblast growth factor receptor 2 fusions and alterations; FOLFOX: folinic acid, fluorouracil, and oxaliplatin; IDH1: isocitrate dehydrogenase 1; MMR: mismatch repair, MSI: microsatellite instability; NTRX: neurotrophic receptor tyrosine kinase. * have not received FDA (or any regulatory authority) approval for BTC 2L indication. 1. Valle JW et al., Lancet 2021; 2. Vogel A et al., ESM 2010; 4. On D-Y et al., NEJM 2010; 4. On D-Y et al., Annals of Oncol 2022 (33 suppL7): 6. Kelley K et al., Lancet 2023; 7. Lamarca et al., J Clin Oncol 2019; 8. Vogel A et al., Annu

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Zanidatamab: Epidemiology of Gastroesophageal Adenocarcinoma



- Gastroesophageal adenocarcinoma (GEA) encompasses gastric (stomach), gastroesophageal junction (GEJ) and esophagus
 adenocarcinomas
- As of 2020, global incidence rate of gastric cancer is estimated to be 5.6%, while esophageal cancer is 3.1%¹
- There is a wide geographic variation incidence: 15- to 20-fold difference between high- and low-incidence regions⁴
- Most patients present at a late stage of disease^{1,2,3}

Gastric Cancer^{1,2}

Globally, ~1.1 million patients diagnosed with an estimated increase of 62% to 1.77 million by 2040

 Majority of gastric cancers are adenocarcinomas (~95%)⁵



of all estimated new gastric cancer cases occurred in Asia in 2020

Incidence rates¹¹

USA	Europe	Japan
1.2%	3.1%	13.5%

Esophageal Cancer^{1,3}

Globally, 604,100 patients diagnosed annually, with an estimated increase by 58.4% to ~957,000 by 2040

 85,672 esophageal cancer patients were diagnosed with esophageal adenocarcinoma (EAC)



of those patients were diagnosed with EAC in high developed countries in 2020

Incidence rates¹¹

USA	Europe	Japan
0.8%	1.2%	2.6%

HER2-Positivity

HER2+ in GEA ranges 7-34%6,7

- Men > Women
- Moderate > Poor differentiated
- GEJ (32.2%) > Gastric (21.4%)
- Intestinal > Diffuse subtype

Prognostic significance of HER2 is unclear,⁸ and influenced by:

- Intra-tumoral heterogeneity
- Treatment line
- Clonal evolution^{8,9,10}

1. Sung H et al., (Globocan 2020) CA Cancer J Clin. 2021; with factsheet https://gco.iarc.fr/today/fact-sheets-populations; 2. Morgan E et al., Lancet 2022; 3. Morgan E et al., Gastroenterology 2022; 4. Sitarz R et al., Cancer Manag Res 2018; 5. Ajani JA, et al., Nat Rev Dis Primers 2017; 6. Gambardella V et al., Ann Oncol 2019; 7. Van Custem E et al., Gastric Cancer, 2015; 8. Ajani JA, et al., J Atl Compr Canc Netw 2022; 9. Zhao D et al., J Hematol Oncol 2019; 10. Janijgian YY et al., Cancer discover 2018; 11. Incidence rates as a percent of global cancer cases.



Zanidatamab: Targeted Treatment Options For Patients with HER2+ GEA



Summary: First-line treatment guidelines for patients with HER2+ Gastric and GEJ adenocarcinoma^{1,2,3,4}

Advanced / Metastatic HER2+ Gastric or GEJ Adenocarcinoma

Guideline option based on the ToGA trial⁴

Doublet chemo (fluoropyrimidine + platinum) ± trastuzumab

> ORR = 47 vs 35% mDOR = 6.9 vs 4.8 months mPFS = 6.7 vs 5.5 months mOS = 13.8 vs 11.1 months NCT01041404

Advanced / Metastatic HER2+ Gastric or GEJ Adenocarcinoma

Guideline option for patients based on Keynote 811 trial⁵ (*CPS* \geq 1 and if no contraindications exist for immunotherapy)

Doublet chemo (fluoropyrimidine & platinum)+trastuzumab ±pembrolizumab

> ORR = 73.2 vs 58.4% mDOR = 11.3 vs 9.5 months mPFS = 10.9 vs 7.3 months mOS = 20.5 vs 15.6months

ITT OS was not significant. Early ITT data led to accelerated approval by FDA (ORR: 74vs 52%) May 2021. FDA and EMA approval for PD-L1 CPS ≥1 with *dataset from second and third interim analyses*

NCT03615326

Options for patients with esophageal adenocarcinoma: ToGA (and many other HER2-directed trials in the advanced setting) <u>excluded</u> esophageal adenocarcinoma: in clinic, these patients can be treated with chemotherapy (capecitabine + cisplatin or fluorouracil + cisplatin) + trastuzumab in the first-line setting^{1,2}

CPS: combined positive score; GEJ: gastroesophageal junction'; HER2+: epidermal growth factor receptor 2 positive; ITT: intention-to-treat population; mOS: median overall survival. 1. Catenacci et al., ESMO Open 2022 7(1) 2. Ajani JA et al., J Natl Compr Canc Netw 2022; 3. Lordick F et al., Ann Oncol 2022; 4. Bang et YJ, Lancet 2010- TOGA updated OS (13.1 vs 11.7months) reported in FDA label, accessed https://www.accessdata.fda.gov/drugsattda_docs/label/2010/10379255250bl.pdf; 5. Janijgian Y et al., Lancet 2023.

Zanidatamab: Regulatory Designations and Exclusivity



Designation	Indications/ Patent description	Company	Territory	Status
Breakthrough therapy	BTC that has failed prior systemic therapies	BeiGene	China	Granted
Breakthrough therapy	Previously treated HER2 gene-amplified locally advanced /unresectable or metastatic BTC	Zymeworks	USA	Granted
Fast Track	HER2-overexpressing GEA (in combination with standard of care chemotherapy) and previously treated or recurrent gene-amplified BTC	Zymeworks	USA	Granted
Orphan drug	BTC	Zymeworks	USA EU	Granted
Orphan drug	Gastric Cancer HER2 expressing Gastric Cancer	Zymeworks	USA EU	Granted
Key patents	Bispecific antigen binding constructs targeting HER2	Zymeworks	USA	Granted

1. Patent end date includes certain regulatory extensions including term extensions and supplementary production certificates.





Design¹

- Optimized 2+1 avidity driven geometry incorporating novel low affinity CD3 binder to direct T-cell targeting of MSLN expressing tumors
- Engages immune system via MSLN-dependent T-cell activation to direct efficient tumor killing with limited cytokine release



Profile¹

 Enhanced anti-tumor activity and safety profile in preclinical models supports opportunity to overcome clinical limitations of prior MSLN-directed therapies



Next Milestone

Expected IND filing in 2024

scFV: single-chain variable fragment. 1. Afacan N et al., Abstract #2942 presented at AACR 2023. 2. Weidemann, S. et al. Biomedicines 2021, Apr 7;9(4):397.

ZW171 MSLN x CD3 Multispecific

MSLN has strong expression in ovarian cancer (\sim 84%)², with moderate to strong expression levels across mesothelioma (\sim 56%)² and NSCLC (\sim 36%)²





T cell engager antibody design is critical for a widened therapeutic index and optimal T cell synapse formation



Unique Azymetric[™] Platform Underpinned by Protein Engineering Core Competency Enable Parallel Screening of Multiple Parameters





- Core competency of protein engineering harnessed to engineer and optimize multiple parameters in silico
- Flexibility of Azymetric[™] platform enabled extensive screening of antibodies based on valency, geometry, and affinity



ZW171: Differentiated Drug Design With Best-In-Class Potential



Mesothelin (MSLN):

- Highly expressed in multiple tumor types including Ovarian, Lung, Pancreatic and Colorectal cancers¹
- Clinically amenable to T-cell mediated therapy (e.g. Gavo-cel²) but limited success with other systemic therapy (e.g. ADCs³⁻⁵, immune toxins⁶, prior TCEs^{7,8})

Designed to overcome limitations of prior targeted therapies

- Avidity dependent MSLN binding enable selective binding and cytotoxicity of high/moderate MSLN expressing cancer cells and spares normal tissue⁹
- Novel CD3 paratope employed to limit cytokine release while supporting effective tumor cell killing⁹
- Format and paratope affinities empirically selected for optimal anti-tumor activity *in vivo⁹*



ZW171 drives antitumor activity through MSLN and T-cell co-engagement No T-cell activity on normal tissue or periphery as no MSLN engagement

1. Weidemann, S. et al. Biomedicines 2021, Apr 7;9(4):397; 2. Hassan, R., et al. Nat Med 2023, 29, 2099–2109; 3. Kindler et al. Lancet Oncol 2022. 23(4):540-552; 4. Rottey et al. Clin Cancer Res 2022. 28(1):95–105; 5. Weekes et al. Mol Cancer Ther. 2016 15(3):439–447; 6. Hassan et al. Cancer 2020. 126(22):4936-4947; 7. Harpoon Therapeutics Investor Presentation February 2022; 8. Molloy M., et al. Clin Cancer Res. 2021.27(5):1452–1462 9. Piscitelli S. Engineering and Preclinical Development of ZW171: A 2+1 Format Anti-MSLN T Cell Engager, presented at PEGS Boston Summit 2023.



ZW171: Key Design Considerations; On Track for Clinical Studies in 2024





bsAb: bispecific antibody; gen: generation.

1. Afacan N et al., Abstract #2942 presented at AACR 2023; 2. Cytokine release from T cell dependent cytotoxicity assay with pan T cells and H292 tumor cells at 5:1 E:T.



Multispecific Antibody Therapeutic Development

TriTCE Co-Stimulatory Therapeutic Program

Zymeworks Trispecific Co-Stimulatory TCE: Overcoming Lack of Efficacy and Durability of Responses in Solid Tumors by Optimization of Signal 1 and 2



Low T cell infiltration and T cell anergy remain challenges in the treatment of solid tumors



Zymeworks Trispecific Co-stimulatory Program



Provides Signal 1 (CD3) and Signal 2 (CD28) in one molecule to increase T cell activation and proliferation

Engineered to balance signal 1 and 2 for optimized **TAAdependent T cell activation** and expansion

TriTCE Co-stim have the potential **to provide more durable responses** and reinvigorate T cell responses in 'cold' tumors with lower T cell infiltration

Arvedson T et al. Ann Rev Cancer Biol 2022.



Novel Engineering and Screening Approach Identifies Co-stimulatory Trispecifics with Greater Anti-tumor Activity and Target-Dependent T Cell Activation



Co-stimulatory trispecific TCEs (TriTCE Co-stim) have the potential to provide more durable responses and re-invigorate 'cold' tumors with lower T cell infiltration



Novel screening approach enables identification of optimal TriTCE format and paratope affinities for robust 'Signal 1' + 'Signal 2' T cell activation and synapse formation



- Engineering solutions employed to optimize signal strength for T cell activation and anti-tumor activity, including modifications to paratope affinities and antibody format geometries
- In vitro screening identified TriTCE Co-stim molecules with enhanced TAA-dependent anti-tumor activity compared to a bispecific TCE, and transferability across TAA targets

CD28: cluster of differentiation 28 protein complex and T cell co-receptor

Newhook L et al., TriTCE Co-stim, next generation costimulatory trispecific T cell engagers for the treatment of solid tumors. Abstract #5121 presented at American Association for Cancer Research annual meeting 2023.

TriTCE Co-Stim Mediates Enhanced *in vitro* and *in vivo* Anti-tumor Activity Compared to Bispecific TCE and Clinical Benchmark



TriTCE Co-Stim mediates enhanced *in vitro* cytotoxicity and CD28-mediated cytokine activity



TriTCE Co-Stim mediates superior *in vivo* anti-tumor activity and enhanced intertumoral T cell expansion compared to bispecific clinical benchmark



TriTCE Co-Stim enhances T-cell proliferation and survival



Newhook L., et al. 2023. AACR. Orlando, FL; Newhook L., et al. 2023. SITC. San Diego, CA.

TriTCE Co-Stim is well tolerated in a humanized mouse model of CRS



TriTCE Co-Stim: Differentiated Co-Stimulatory (CD28) Platform vs. Clinical Competitors



Co-stimulatory (CD28) TCE Strategies	Zymeworks' Advantage and Limitations of Alternative Strategies
Zymeworks TriTCE Co-stim ^{1,2}	 Zymeworks TriTCE Co-Stim provides balanced CD3 and CD28 activation to prevent overactivation of T cells^{1,2} No CD28 binding in absence of CD3 engagement, potentially low risks of CD28-mediated immune related adverse events (irAEs) and demonstrated safety in in vitro and in vivo CRS models ^{1,2} Platform optimized for TAA-dependent activity including low T cell binding and no T cell activation in periphery ^{1,2}
CD28xTAA Bispecific (e.g. Regeneron, Xencor)	 Optimized for strong CD28 agonism, potentially difficult to optimize by dose adjustment^{3,4} Dependent on presence of signal 1 primed T-cells in TME^{3,4} Potential for severe irAEs in combination with anti-PD-1, similar to CPI toxicities^{5,6,7,8,9}
CD3xTAA + CD28xTAA Bispecific Combinations (e.g. Regeneron, Janssen, Roche)	 Increased development and challenging dose optimization requirements for two molecules¹⁰ Potential for CD28 bispecific irAEs⁶ Challenging TAA pairs or non-overlapping epitope targets requirements³
CD28xCD3xTAA Trispecific (Sanofi)	 High affinity CD3 and CD28 paratopes, activation of peripheral T cells^{11,12} T cell binding and TMDD observed in the periphery^{11,12} CD28 paratope based on CD28 super-agonist, potentially limiting application^{11,12}

1. Newhook et al., Cancer Res. (2023); 2. Newhook et al., JITC (2023); 3. Skokos et al., Sci. Transl. Med. (2020); 4. Dragovich et al., Cancer Research (2023); 5. Stein et al., Journal Clinical Oncology (2023); 6. Martins et al., Nature Reviews Clin Oncol (2019); 7. Eastwood et al., BJP (2010); 8. Roemer et al., Blood (2011); 9. Hui et al., Science (2017); 10. Humphrey et al. (2011) J Natl Cancer Inst. 11. Seung et al., Nature (2022); 12. Promsote et al., Nature Communications (2023).



Next Generation CD28 Co-stimulatory Trispecific T cell Engager

Designed to provide more durable responses in solid tumors and superior activity in 'cold' tumors



Therapeutic Rationale

 Next Gen TriTCE Co-stim can provide increased T cell fitness, activation, and proliferation via tumor-dependent T cell co-stimulation



Product Differentiation

- Novel approach of modular geometry and avidity screening of trispecifics to optimize T cell activation by Signal 1 and Signal 2
- TriTCE Co-stim show superior anti-tumor activity to bispecific benchmarks and exhibit no activation of T cells in absence of tumor cells



Next Milestones

- Pilot toxicology studies and PK analyses with lead CLDN18.2 TriTCE Co-stim
- Expand utility to additional tumor targets

Expansion of R&D Strategy Beyond "5x5"





Long-Term R&D Strategy ("ADVANCE")

- Focus on developing new product candidates with the potential for two new IND's annually from 2027+
- Therapeutic focus to be expanded into autoimmune and inflammatory disease
- Expand research interests in multifunctional engineered cytokines and immune modulators



Therapeutic Optionality

- ADC development to focus on novel payloads and bispecific/biparatopic binding
- MSAT development to focus on novel trispecific platforms, including dual TAA's



Financial Structure

Combination of internally-funded and partnered development programs

ADVANCE Portfolio Framework



Advancing design of ADCs and Multi-specifics to address complex disease states Continue to apply technology to hard-to-treat cancers and expand utility to additional therapeutic applications



Potential for 2 IND-Ready Molecules Per Year From 2027+



Differentiated, Multifunctional Antibody Therapeutics for Oncology and Other Potential Diseases with the Greatest Unmet Patient Need





On A Mission to Improve the Standard of Care For Difficult to Treat Diseases

Committed to transform current standard of care for cancer patients with poor prognosis (e.g., lowest 5year overall survival)

Potential to expand beyond oncology to AIID patients



Integrated R&D Engine

5x5 portfolio provides diversity and multiple opportunities for success with 5 new IND's expected by 2026

ADVANCE provides opportunity for further innovation and broader R&D scope with 2 potential IND's annually from 2027+



Desired Product Profile

First and second-line market opportunities

Pursuing products with global peak sales potential >\$1 BN

Strategy to retain US commercial rights and collaborate in ex-US markets

1. Combinable proprietary technologies include: Azymetric[™]; EFECT[™]; ADC Platform includes cysteine insertion technology and novel payloads.

Milestone Opportunities in 2024 & 2025





Cash resources as of December 31, 2023 **\$456.3M***



Several opportunities for business development with global rights for novel compounds



Current cash runway projected to support development goals into the second half of **2027 and potentially beyond**



Multiple value generating opportunities expected in 2024 and 2025, with **5 IND submissions expected by 2026**



Potential to nominate 2 candidates every year from in-house drug discovery platform



- Top-line data from HERIZON-GEA-01 targeted for late 2024
- Potential U.S. and China approval for zanidatamab in 2L BTC during or before 2025

*includes cash, cash equivalents and marketable securities.



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