



# REIMAGINING THERAPEUTIC ANTIBODIES FOR THE TREATMENT OF CANCER

Bank of America Securities 2020 Health Care Conference



MAY 14, 2020

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This presentation may contain projections and other forward-looking statements regarding future events. All statements other than statements of historical facts contained in this presentation, including statements regarding our future financial condition, technology platform, development strategy, prospective products, preclinical and clinical pipeline and milestones, regulatory objectives, expected payments from and outcomes of collaborations, and likelihood of success, are forward-looking statements. Such statements are predictions only and involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These risks and uncertainties include, among others, the costs, timing and results of preclinical studies and clinical trials and other development activities; the uncertainties inherent in the initiation and enrollment of clinical trials; expectations of expanding on-going clinical trials; availability and timing of data from clinical trials; the unpredictability of the duration and results of regulatory review; market acceptance for approved products and innovative therapeutic treatments; competition; the potential not to receive partnership milestone, profit sharing or royalty payments; the possible impairment of, inability to obtain and costs of obtaining intellectual property rights; and possible safety or efficacy concerns, general business, financial and accounting risks and litigation. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. More information concerning us and such risks and uncertainties is available on our website and in our press releases and in our public filings with the U.S. Securities and Exchange Commission. We are providing this information as of its date and do not undertake any obligation to update or revise it, whether as a result of new information, future events or circumstances or otherwise. Additional information may be available in press releases or other public announcements and public filings made after the date of this presentation.

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# Company Highlights

Clinical-stage  
biopharmaceutical  
company advancing  
first-in-class and  
best-in-class  
cancer treatments with  
a novel therapeutic  
antibody platform:

**Probody®  
Therapeutics**

- Leader in field of “conditional activation” of therapeutic antibodies with broad platform and discovery engine
- Initial clinical proof of concept established for platform
- Pipeline advancing from Phase 1 to Phase 2
- Potential first-in-class programs against previously undruggable targets: Probody Drug Conjugates to CD166 (CX-2009) and CD71 (CX-2029)
- Potential best-in-class programs against validated targets: CX-072 (anti-PD-L1), BMS-986249, BMS-986288 (anti-CTLA-4)
- Major Partnerships (BMS, AbbVie, Amgen, Astellas)
- Strong balance sheet; \$248 million at end of Q1 2020; additional \$130 million in milestone and upfront payments achieved in Q1 and received in Q2

# Reimagining Therapeutic Antibodies for the Treatment of Cancer

## ANTIBODIES ARE A SUCCESSFUL CLASS OF THERAPEUTICS

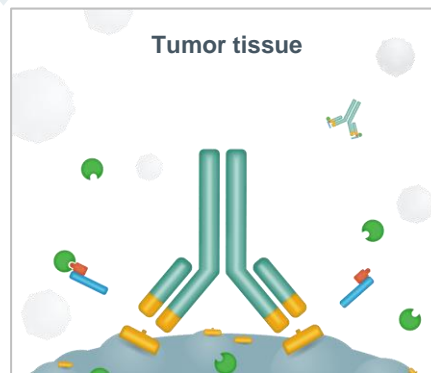
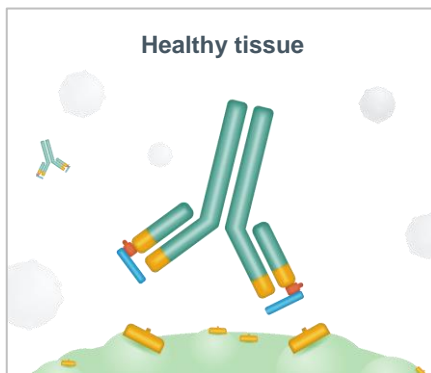
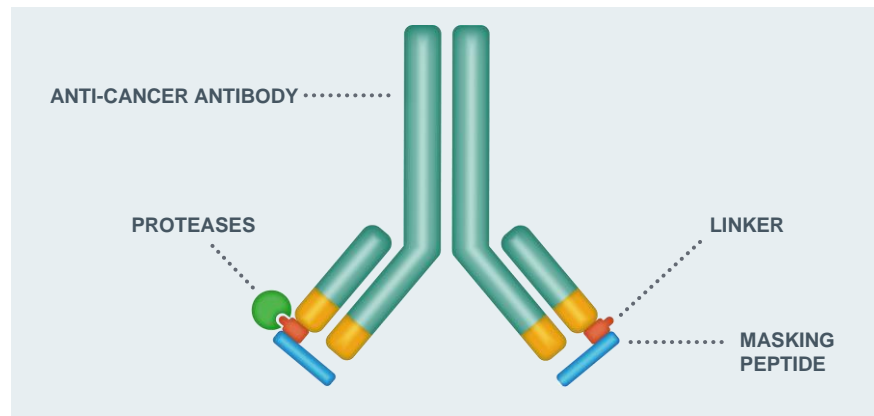
- Powerful, potent modalities; > \$110 billion WW sales 2019
- Potency can be a liability for widely distributed targets
- Major opportunity to improve targeting and localize antibody pharmacology

## CYTOMX PROBODY PLATFORM IS DESIGNED TO LOCALIZE TARGET BINDING TO TUMOR









- Maintaining potency
- Reducing on-target side effects
- Enabling new target and format opportunities

## PROBODY PLATFORM BUILT ON A DECADE OF “HIGH SCIENCE” RESEARCH AT CYTOMX

- Deep knowledge of tumor microenvironment biology
- Innovative antibody engineering and deep Intellectual Property



# Probody Therapeutic Pipeline Advancing Across Multiple Stages of Development with Strong Progress in Wholly Owned and Partnered Programs

PRODUCT CANDIDATE	INDICATION	DISCOVERY	LEAD OPTIMIZATION	IND-ENABLING	PHASE 1	PHASE 2	COMMERCIAL RIGHTS
<b>CX-2009</b>	ER/PR Positive, HER2 Negative Breast Cancer	CD166 Probody Drug Conjugate					
<b>CX-072 + CX-2009</b>		Initiation in 2H 2020					
<b>BMS-986249</b>	Metastatic Melanoma	CTLA-4 Probody Immunotherapy					
<b>CX-2029</b>	Solid Tumors	CD71 Probody Drug Conjugate					
<b>BMS-986288</b>	Solid Tumors	CTLA-4 Probody Immunotherapy					
<b>CX-904</b>	TBA	EGFR-CD3 T Cell Bispecific					
<b>Preclinical EpCAM-PDC</b>	TBA	EpCAM Probody Drug Conjugate					
<b>Preclinical CD3-TCB</b>	TBA	CD3 T Cell Bispecifics					

 Wholly Owned

 Partnered

# Updates on Four Clinical-Stage Probody Programs

## Updated Phase 1 and PK Data for CX-2009 Targeting Undruggable Target CD166



CX-2009, A CD166-Directed PROBODY Drug Conjugate (PDC): Results From the First-in-Human Study in Patients With Advanced Cancer Including Breast Cancer

Preliminary Clinical Pharmacokinetics and Dose-Response to Support a Phase 2 Dose Selection for CX-2009: A Masked PROBODY Drug Conjugate to CD166

## First Clinical Data for CX-2029 Targeting Undruggable Target CD71



CX-2029, a PROBODY Drug Conjugate Targeting CD71 (Transferrin Receptor): Results from a First-in-Human Study (PROCLAIM-CX-2029) in Patients (Pts) With Advanced Cancer (Oral Presentation)

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## First Clinical Data for BMS-986249 Targeting CTLA-4



Anti-CTLA-4 Probody BMS-986249 Alone or in Combination with Nivolumab in Patients with Advanced Cancers: Initial Phase 1 Results

## Updated Phase 1/2 Data for CX-072 (anti-PD-L1)



PROCLAIM-CX-072: Analysis of Patients With Advanced Solid Tumors Receiving Long-Term Treatment With CX-072, a PD-L1 PROBODY Therapeutic, as a Single Agent or in Combination With Ipilimumab (Oral Presentation)

Preliminary Population Pharmacokinetics Supports Phase 2 Dose Selection for Masked Anti-PD-L1 Antibody CX-072  
Evidence of Intratumoral Localization, Activation, and Immunomodulatory Effect of CX-072, a PROBODY Therapeutic Targeting PD-L1, in a Phase 1/2 Trial



# Targeting Undruggable Targets With Probody Drug Conjugates

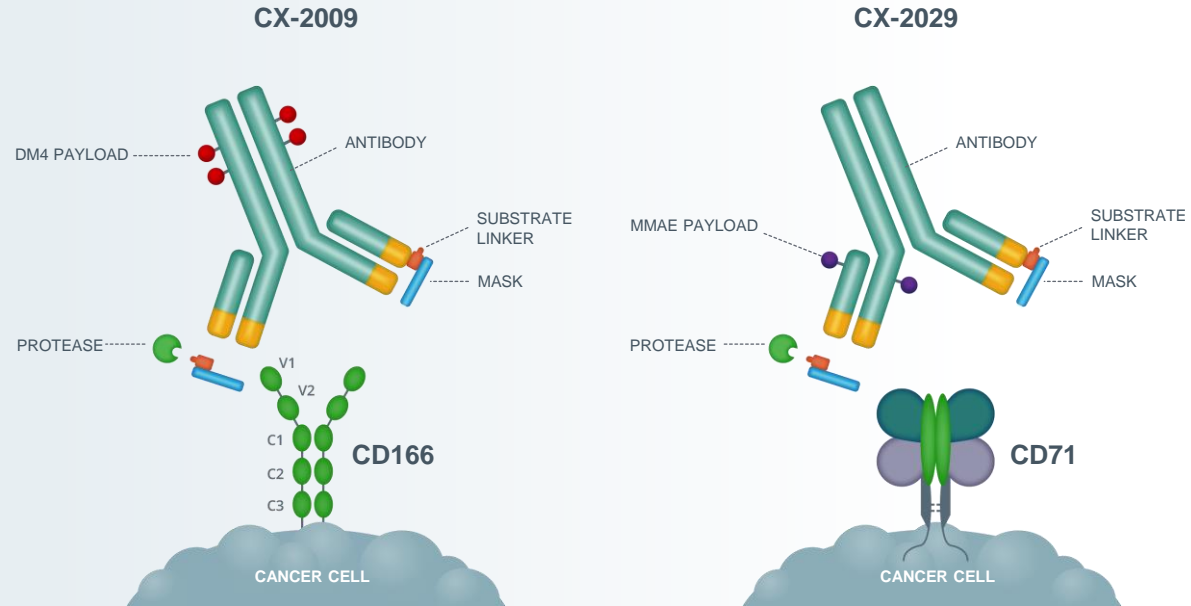
CX-2009 and CX-2029

*Potential First-in-Class Agents With  
Demonstrated Single-Agent Clinical Activity*



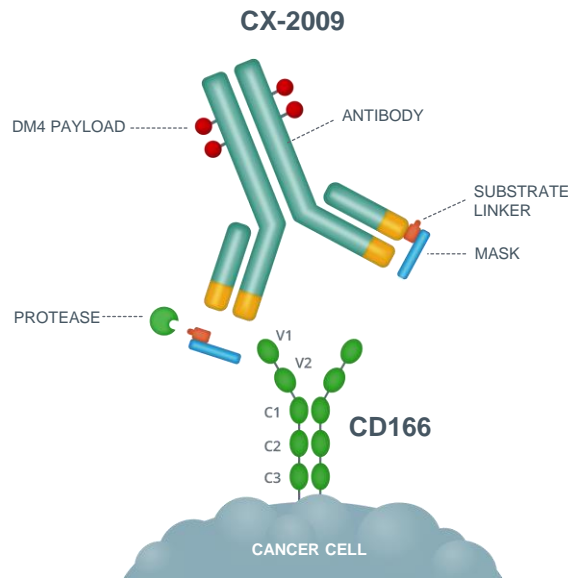
# Probody Drug Conjugates (PDCs): First-in-Class Drug Candidates Addressing Undruggable Targets

- Probody Drug Conjugates are designed to address novel tumor antigens
- Tumor-localized antigen binding follows antibody mask removal by tumor proteases
- Cytotoxic payload delivery into cell via Ab internalization
- Objective is to deliver therapeutic levels of payload without dose-limiting, on-target toxicities in normal tissues
- Payload is not masked, so typical payload toxicities still expected



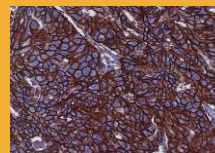


# CX-2009: A Probody Drug Conjugate Targeting CD166 (ALCAM)



- Highly expressed tumor antigen (e.g. breast, ovarian, head and neck, lung)
- Present at high levels on most normal tissues
- Probody technology applied to proprietary anti-CD166 antibody to engineer a Probody Drug Conjugate
- SPDB-DM4 maytansine payload
  - Microtubule inhibitor active vs. multiple cancers
  - Expected payload-related, off-target toxicities are well characterized and include ocular toxicity, neutropenia, peripheral neuropathy

CD166 BREAST CANCER



# Updated Phase 1 Data at ASCO 2020

## *Breast Cancer Strategy for Initial Phase 2 Expansions*

### PHASE 1 DOSE ESCALATION

Advanced metastatic disease  
Starting dose 0.25 mg/kg

Dose refinement

### PHASE 2 EXPANSIONS

ER/PR+/HER2- Breast Cancer (40pts)  
Initiation: Q4 2019 (paused due to COVID19)

Initiation 2H 2020:  
CX-072 + CX-2009 Combination in TNBC

#### ABSTRACT 526 / POSTER 18

#### **CX-2009, A CD166-Directed PROBODY Drug Conjugate (PDC): Results From the First-in-Human Study in Patients With Advanced Cancer Including Breast Cancer**

**Presenter:** Valentina Boni, M.D., Ph. D., START  
Madrid – CIOCC, Madrid, Spain

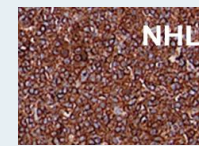
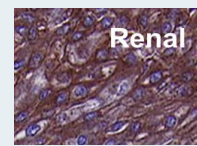
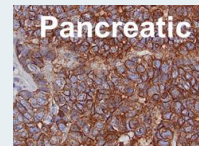
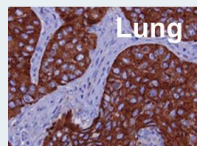
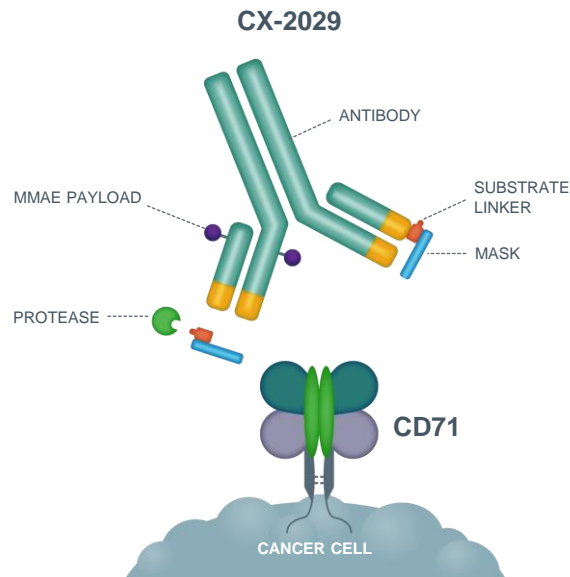
**Session Title:** Developmental Therapeutics—Immunotherapy

**Session Date & Time:** Friday, May 29, 2020 8:00 am EDT

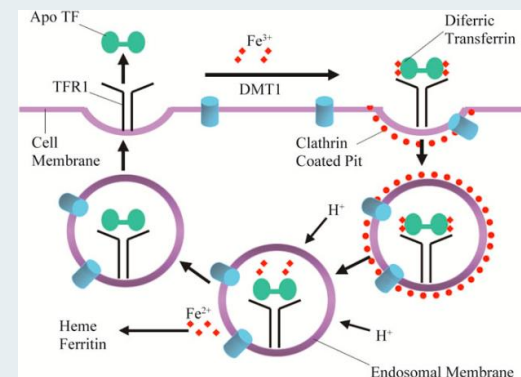
#### ABSTRACT DATA

- Total of 92 patients enrolled as of November 30, 2019
- Partial Responses in 8 patients (2 confirmed, both HR+/HER2- Breast Cancer) treated between 4-10mg/kg
- 21 patients with stable disease
- Dose dependent ocular toxicity mitigated by ocular prophylaxis up to 7mg/kg
- Recommended Phase 2 Dose is 7mg/kg Q3W

# CX-2029: A Probody Drug Conjugate Targeting CD71 (TfR1) Transferrin Receptor



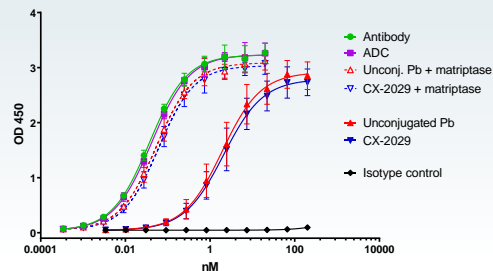
- Transmembrane glycoprotein that efficiently internalizes iron-bound transferrin
- Highly expressed in malignant cells
- Also expressed in healthy tissues with high iron requirement, notably dividing cells and erythrocyte precursors
- Considered 'undruggable' with traditional ADC technology
- CX-2029 is a masked form of a proprietary anti-CD71 antibody conjugated to the MMAE payload



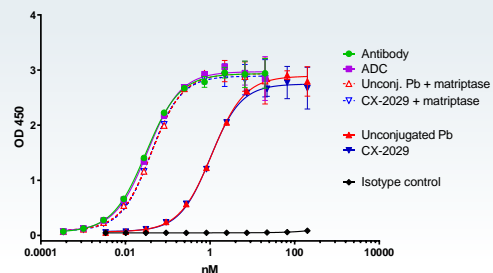
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# CX-2029 Is Active in Cell line-Derived and Patient-Derived Tumor Models in Mice

## HUMAN CD71



## CYNOMOLGUS CD71



CDX - cell line derived xenograft  
PDX - patient derived xenograft

- Parental anti-CD71 antibody binds equivalently to human and monkey CD71 (ELISA)
- Probody therapeutic shows reduced binding to CD71
- Protease activation of PDC restores binding activity
- Broad, potent activity in mouse tumor models

### Model Type

### Regressions or Stasis

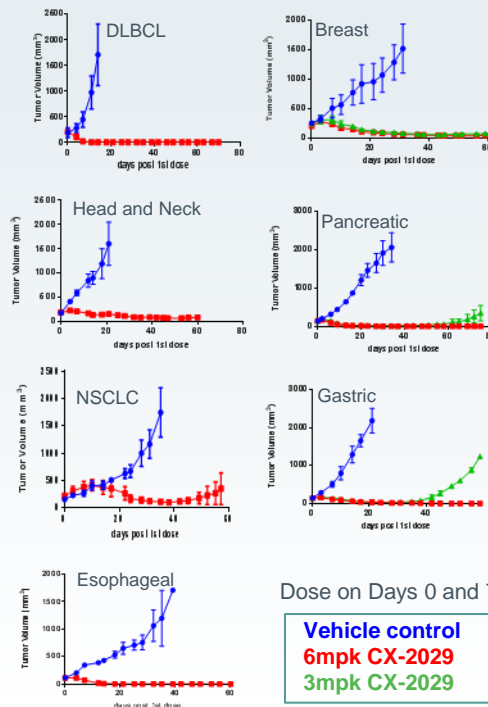
Cell line- derived (unselected)

15/21 (71%)

Patient-derived (high expressing)

30/36 (83%)

## EFFICACY IN PDX MODELS



# CX-2029 Was Tolerated at 10x Higher Dose Than CD71 ADC

## *Cynomolgus monkeys, DAR2*

Test Article	Dose (mg/kg)	Outcome	Hemoglobin*	Neutrophil count*
Vehicle	NA	--	13.1	4,693
CX-2029 (PDC)	6	Tolerated	10.1	347
CX-2029 (PDC)	12	Not tolerated	9.0	87
CX-2030 (ADC)	6	Not tolerated	6.6 (d10)	20 (d10)
CX-2030 (ADC)	2	Not tolerated	9.3 (d7)	70 (d7)
CX-2030 (ADC)	0.6	Tolerated	12.2	280

\*Average HGB (g/dL), d15 or as indicated; average neutrophil count (per ul) on Day 11 or as indicated

- Toxicity is hematologic: anemia and neutropenia
  - Consistent with either on-target (CD71-mediated) and/or off-target toxicity of MMAE
- Mortality at non-tolerated dose levels was attributed to bacterial infection

# Phase 1 Dose Escalation Data for CX-2029 to Be Presented at ASCO 2020

## PHASE 1 DOSE ESCALATION

## PHASE 2 EXPANSIONS

✓ *Achievement of dose escalation*

*Criteria and \$40M milestone from AbbVie Q1 2020*

Advanced Solid Tumors  
Starting Dose: 0.1 mg/kg

Initiation: 2H 2020  
Indications TBA

### ASCO20 ABSTRACT #350

**“CX-2029, a PROBODY Drug Conjugate Targeting CD71 (Transferrin Receptor): Results from a First-in-Human Study (PROCLAIM-CX-2029) in Patients (Pts) With Advanced Cancer”**

**Presenter:** Melissa L. Johnson, M.D., Sarah Cannon Research Institute at Tennessee Oncology, Nashville

**Session Title:** Developmental Therapeutics—Immunotherapy

**Session Date & Time:** Friday, May 29, 2020 8:00 am EDT

### ABSTRACT DATA

- 34 patients enrolled as of November 30, 2019
- Pharmacokinetics: Probody masking maintained in circulation (94% intact)
- Safety: Principal grade 3+ TRAEs anemia and neutropenia, consistent with preclinical observations
- Preliminary Clinical Activity: Confirmed Partial Response in squamous NSCLC, 9 patients with stable disease
- Additional patients and longer follow up as of April 2020 will be presented

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# Anti-CTLA-4 Programs

BMS-986249 and BMS-986288

*Probody Therapeutics With Best-in-Class Potential*



# Leveraging the Probody Platform for Potentially Safer and More Effective anti-CTLA-4 Therapy

- Ipilimumab Probody BMS-986249
  - Preclinical POC data presented previously
  - Phase 1 dose escalation +/- nivolumab complete
- Advanced by BMS into randomized 5 arm Phase 2 Expansion in 1L Metastatic Melanoma in Q1 2020
  - BMS-986249 + nivolumab vs. nivolumab +/- ipilimumab
- BMS also evaluating BMS-986288, a CytomX-designed Probody of modified version of Ipilimumab in an ongoing Phase 1 Dose Escalation study in Solid Tumors

## ASCO20 Poster Presentation on Phase 1 data

Gutierrez et al, Abstract #3058

### CONCLUSIONS:

- Overall data align with Probody mechanism of action and support expansion in melanoma and other tumors
- BMS-986249 ± Nivo had a manageable safety profile
- No new safety signals were reported
- BMS-986249 could be administered at higher dose equivalents than tested with IPI ± NIVO

 Bristol Myers Squibb™

  
CYTOMX  
THERAPEUTICS



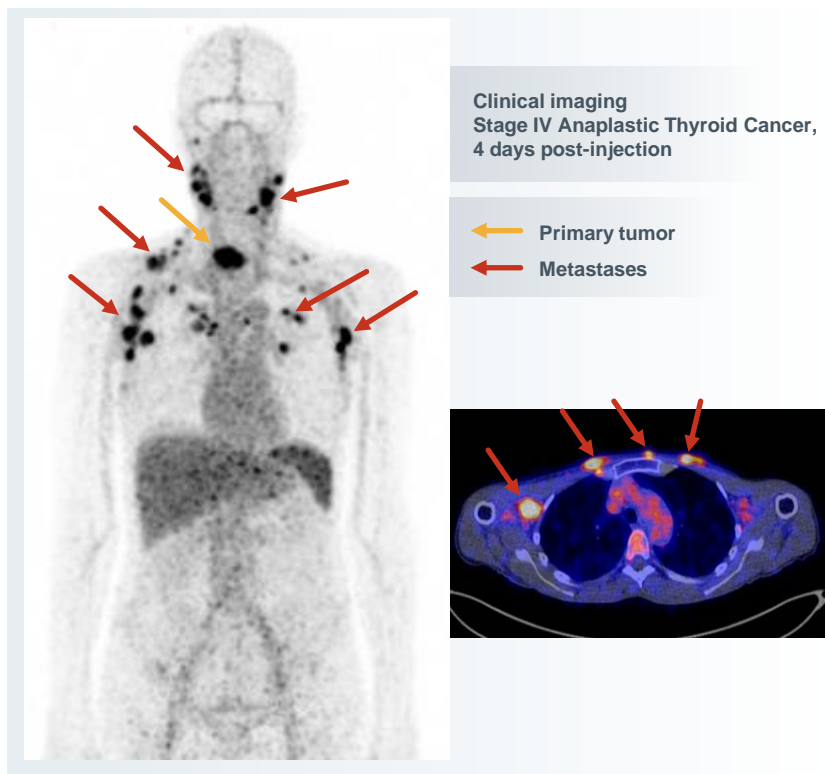
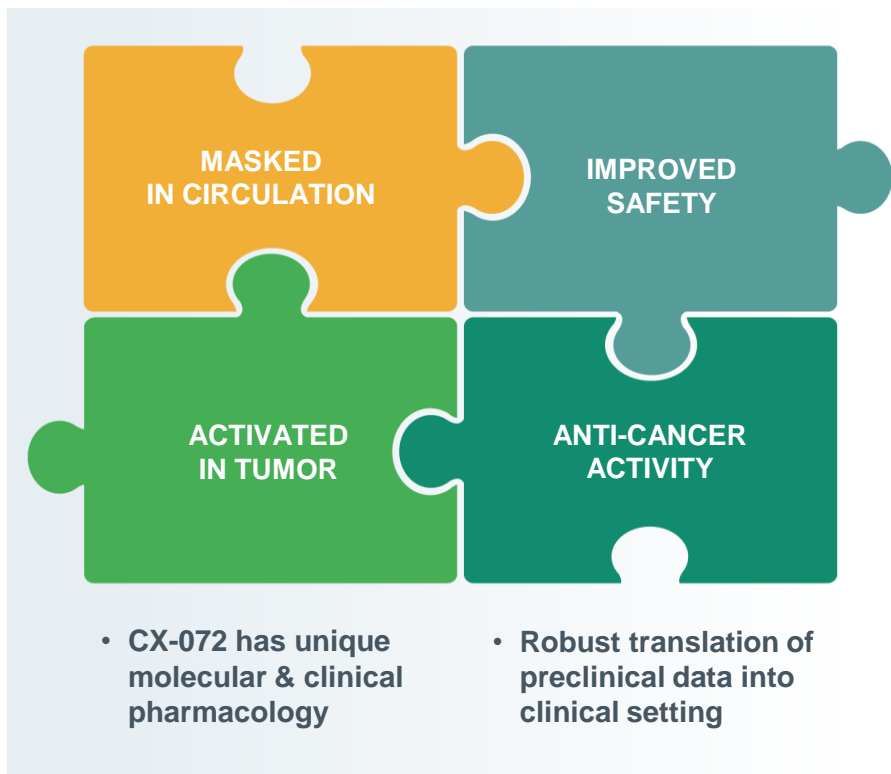
# CX-072 Anti-PDL1 Probody

*Potentially Best-in-Class Checkpoint Inhibitor Combination Agent*



# Previous CX-072 Phase 1/2 Data Support Proof of Concept for Probody Platform

## *Updated Clinical, Translational and Pharmacokinetic Data at ASCO 2020*



Autio KA et al. Poster 3071. ASCO 2018, Jun 1-5, Chicago, Illinois.  
Boni V et al. Poster 435P. ESMO 2018, Oct 19-23, Munich, Germany.  
Lyman SK et al. Poster P87. SITC; 2018 November 7-11, Washington, D.C.

Collaboration with E. G. E. de Vries,  
University Medical Center Groningen, The Netherlands

# Updated Phase 1/2 CX-072 Data at ASCO 2020: Long-Term Treatment in Solid Tumors

## PHASE 1 DOSE ESCALATION

PD naive, unselected cancer types (+/- ipilimumab)

## PHASE 2 INITIAL COHORT EXPANSIONS

TNBC, UPS, cSCC, Anal SCC, SBA  
Thymus and hTMB cancers

### ABSTRACT #3005

**PROCLAIM-CX-072: Analysis of Patients With Advanced Solid Tumors Receiving Long-Term Treatment With CX-072, a PD-L1 PROBODY Therapeutic, as a Single Agent or in Combination With Ipilimumab**

**Presenter:** Fiona C. Thistlethwaite, MB, MChir, Ph.D,  
The Christie NHS Foundation Trust, University  
of Manchester, United Kingdom

**Session Title:** Developmental Therapeutics—Immunotherapy

**Session Date & Time:** Friday, May 29, 2020 8:00 am EDT

### CONCLUSIONS:

- Durable clinical responses to CX-072 are consistent with activation of the Probody therapeutic and with checkpoint inhibition
- The tolerability of CX-072 compares favorably to historical data with other checkpoint inhibitors alone or in combination with ipilimumab
- Additional analysis of tolerability in patients on long term treatment to be presented



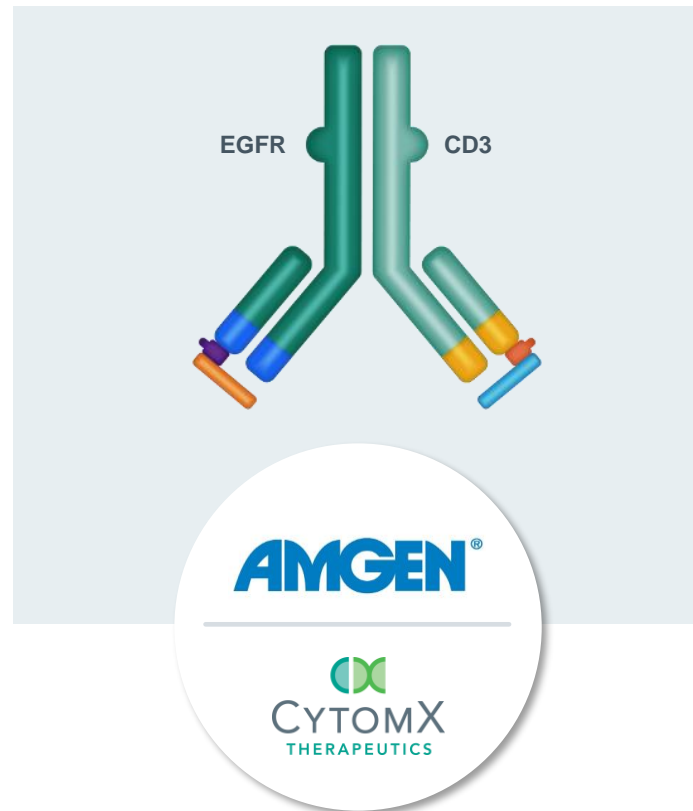
# Targeting Undruggable Targets with Probody T-Cell Engaging Bispecifics

*R&D Alliances with Amgen and Astellas*



# CX-904: First Probody T-Cell Bispecific Advanced Into IND Enabling Studies

- TCBs are highly potent therapeutics that direct the activity of cytotoxic T cells to tumors
- Ability to turn immunologically “cold” tumors “hot,” , thereby increasing their potential for therapeutic response
- On-target toxicity of “unmasked” TCBs addressed via Probody masking, opening target space, e.g. Epidermal Growth Factor Receptor (EGFR)
- Co-development with Amgen of a Probody T-cell engaging bispecific against EGFR and CD3
- CytomX leading early stage development including the IND filing, targeted for late 2021, and for early clinical development
- Opt-in to U.S. profit split; ex-U.S. royalties



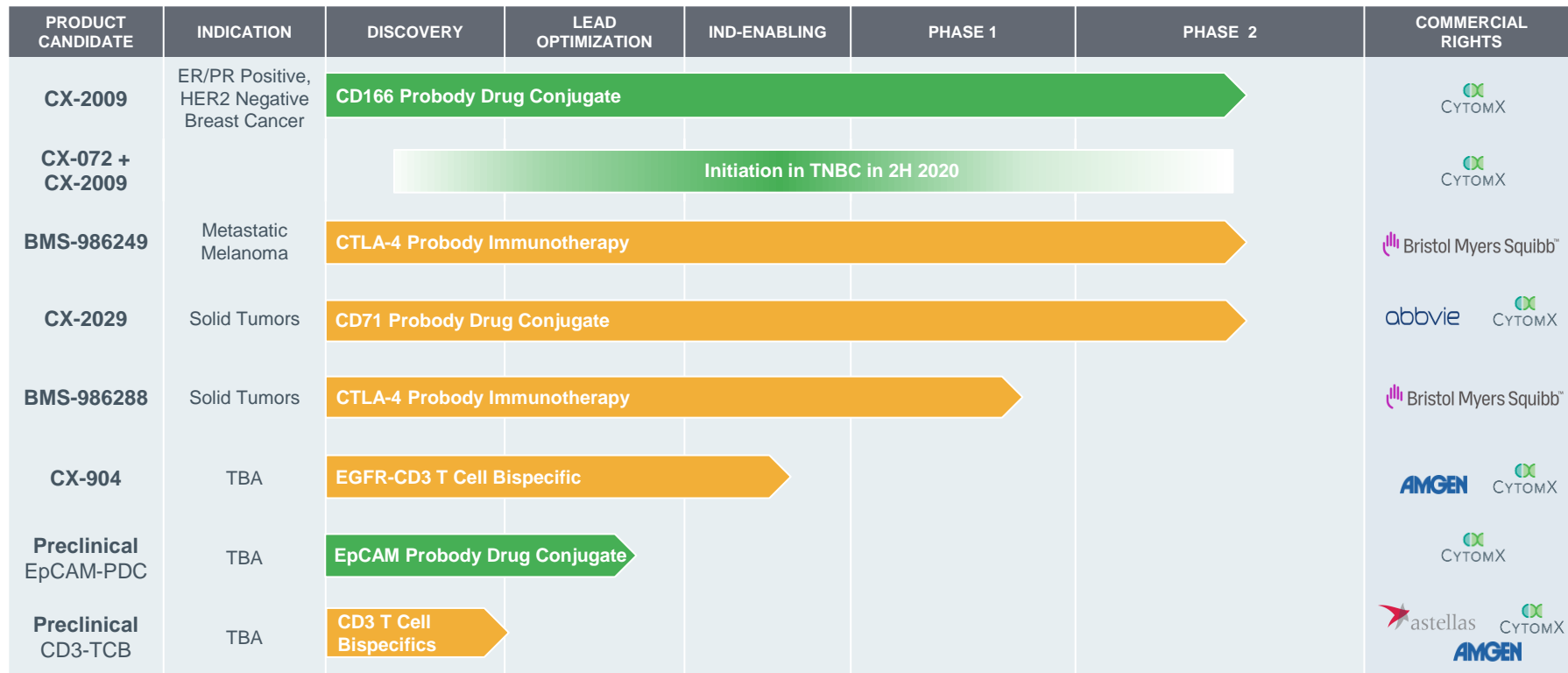
# New Strategic Collaboration Announced in March 2020 in Probody T-Cell Bispecific Therapeutic Space

- Strategic collaboration to develop and commercialize novel Probody T-cell engaging bispecific antibodies targeting CD3 and tumor cell surface antigens
- CytomX leads preclinical research and discovery activities up to clinical candidate selection for up to four initial targets. Astellas leads and funds all pre-clinical and clinical development activities.
- Astellas will be responsible for commercialization. CytomX retains commercial opt-in rights to select programs with co-funding mechanism

**CytomX received  
\$80M upfront;**  
eligible for more than  
\$1.6B in potential future  
preclinical, clinical and  
commercial milestones



# Probody Therapeutic Pipeline Advancing Across Multiple Stages of Development with Strong Progress in Wholly Owned and Partnered Programs



 Wholly Owned

 Partnered

# Recent Achievements and Future Milestones

## 2020 ACHIEVEMENTS

- ✓ BMS Milestone
  - BMS-986249 Phase 2 Advancement; \$10M
- ✓ AbbVie Milestone
  - CX-2029 Phase 2 Advancement; \$40M
- ✓ Astellas Alliance
  - Strategic Collaboration; \$80M Upfront
- ✓ Amgen Alliance
  - CX-904 Advancement
- ✓ Team Additions
  - CFO, CDO and CMO Joining Leadership Team

## FUTURE MILESTONES

- ASCO 2020 Presentations
- CX-2009 Phase 2 Breast Cancer readout
- CX-2009 + CX-072 TNBC Phase 2 initiation
- CX-2029 Ph2 expansion readouts
- BMS-986249 randomized Phase 2 readout
- CX-904 IND Advancing into Phase 1





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