Passion for Innovation.
Compassion for Patients.™





Science & Technology Day 2024 DAIICHI SANKYO CO., LTD.

December 16th, 17th 2024





Management strategies and plans, financial forecasts, future projections and policies, and R&D information that Daiichi Sankyo discloses in this material are all classified as Daiichi Sankyo's future prospects. These forward looking statements were determined by Daiichi Sankyo based on information obtained as of today with certain assumptions, premises and future forecasts, and thus, there are various inherent risks as well as uncertainties involved. As such, please note that actual results of Daiichi Sankyo may diverge materially from Daiichi Sankyo's outlook or the content of this material. Furthermore, there is no assurance that any forward-looking statements in this material will be realized. Regardless of the actual results or facts, Daiichi Sankyo is not obliged and does not have in its policy the duty to update the content of this material from the date of this material onward.

Some of the compounds under discussion are investigational agents and are not approved by the FDA or any other regulatory agency worldwide as a treatment for indications under investigation. Efficacy and safety have not been established in areas under investigation. There are no guarantee that these compounds will become commercially available in indications under investigation.

Daiichi Sankyo takes reasonable care to ensure the accuracy of the content of this material, but shall not be obliged to guarantee the absolute accuracy, appropriateness, completeness and feasibility, etc. of the information described in this material. Furthermore, any information regarding companies, organizations or any other matters outside the Daiichi Sankyo Group that is described within this material has been compiled or cited using publicly available information or other information, and Daiichi Sankyo has not performed in-house inspection of the accuracy, appropriateness, completeness and feasibility, etc. of such information, and does not guarantee the accuracy thereof.

The information described in this material may be changed hereafter without notice. Accordingly, this material or the information described herein should be used at your own judgment, together with any other information you may otherwise obtain.

This material does not constitute a solicitation of application to acquire or an offer to sell any security in the United States, Japan or elsewhere.

This material disclosed here is for reference purposes only. Final investment decisions should be made at your own discretion.

Daiichi Sankyo assumes no responsibility for any damages resulting from the use of this material or its content, including without limitation damages related to the use of erroneous information.

Science & Technology Day 2024 Presenters





Sunao Manabe Executive Chairperson & CEO



Ken Takeshita
Head of Global R&D

Mark Rutstein
Head of Global Oncology
Clinical Development



Dale Shuster
Head of Global
Precision Medicine





Hiroto Kashiwase Head of Global Technology

2024 Prix Galien USA Award





World ADC Awards





Most Promising Clinical Candidates

2019
HER2
Directed ADC

2020 TROP2 Directed ADC 2021
HER3
Directed ADC

CDH6 Directed ADC



All of the 5DXd ADCs have been awarded "Most Promising Clinical Candidate"

12 Breakthrough Therapy Designations







Agenda

- Opening
- 2 R&D Update
- Clinical Progress
- Translational Research
- ADC Manufacturing & Supply
- Q&A





Agenda

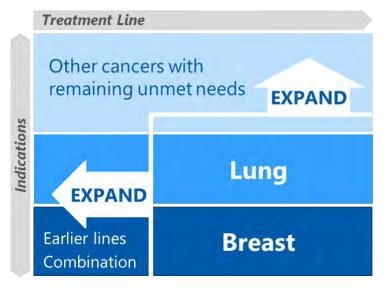
- **1** Opening
- 2 R&D Update
- **3 Clinical Progress**
- **4** Translational Research
- **5** ADC Manufacturing & Supply
- 6 Q&A



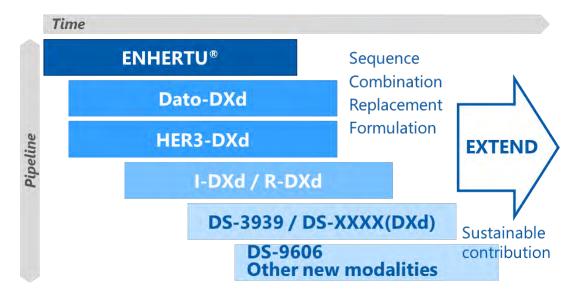
EXPAND & EXTEND to deliver our technology to more patients



EXPAND and **EXTEND**



- Establish and expand DXd ADC therapies in **Breast** and **Lung** cancers
- **Go Earlier:** explore early lines of therapy/ stage of diseases; replace chemotherapy
- **Go Wider:** into new diseases beyond currently focusing areas to serve more patient needs



- Address unmet needs **after ENHERTU**® treatment
- Seek effective treatment sequencing, novel combination, or formulation to enhance efficacy and improve treatment
- **Grow early pipeline** following 5DXd ADCs to contribute to more patients in the future

Our Breast Cancer Strategy





To deliver transformative therapies that extend and improve the lives of all patients with Breast Cancer

■ Elevate Treatment Standards

- Leverage current DXd ADC portfolio to improve outcomes for patients treated with cytotoxic therapies.
- Introduce the next generation of ADC platforms.

■ Expand the impact of our innovative pipeline

- Advance into patients segments currently not treated with cytotoxic therapies using combination strategies.
- Develop new technologies to address patient segments not eligible for cytotoxic therapies.

■ Personalize Patient Care

 Leverage innovative technologies to tailor therapies for diverse patient subgroups to ensure personalized and effective treatment options



Major Progress since R&D day 2023



EXPAND & EXTEND

Pioneer & lead in HER2 low and ultralow BC



- DESTINY-Breast06 met its primary endpoint
 PFS in HR+/HER2 low BC (chemo naïve) in Apr
 2024
- ENHERTU® demonstrated clinically meaningful PFS also in HER2 ultralow BC
- Under regulatory review in Japan, US and EU (US PDUFA date: February 1, 2025)

Go earlier

EXPAND

- TLR anticipated in FY2024 for TROPION-Breast02
- TLR anticipated in FY2025 H1 for DESTINY-Breast11
- TLR anticipated in FY2025 for DESTINY-Breast05 and DESTINY-Breast09

Proceed with Dato-DXd in HR+/HER2- BC 2L+ as primary indication **EXPAND**

- Disclosed TROPION-Breast01 OS in Oct 2024
- Under regulatory review in Japan, US, EU and China

(US PDUFA date: January 29, 2025)

Enhance pipeline value by combining with in-house assets

EXTEND

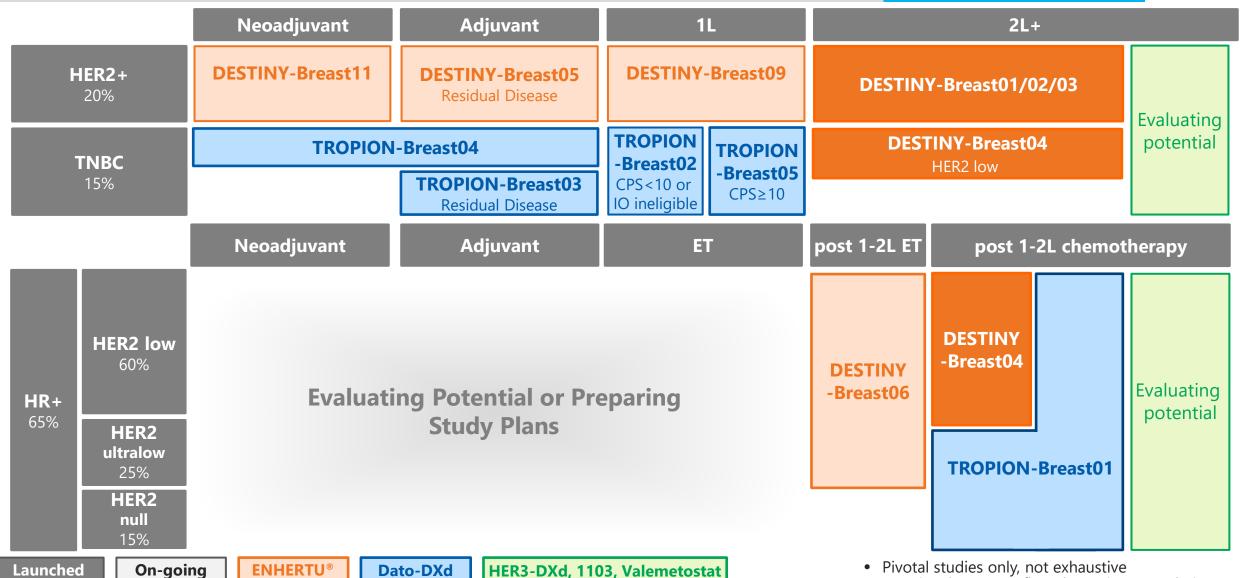
- DXd ADCs and valemetostat*
- ENHERTU® and DS-1103

*combination studies in other cancers are also ongoing

5DXd ADCs

Establish and Expand DXd ADCs to Address the Broader Spectrum of Breast Cancer





CPS: combined positive score; ET: endocrine therapy; HR: hormone receptor; IHC: immunohistochemistry, IO: immune oncology, TNBC: triplenegative breast cancer

• Pivotal studies only, not exhaustive

Box size does not reflect the patient population

• Box indicates current potential target segment

Our Lung Cancer Strategy





Deliver practice-changing medicines to meet evolving unmet needs in lung cancer for a broad set of distinct patient types by harnessing the depth of the Daiichi Sankyo portfolio

- Provide superior 2L+ treatments and differentiated combinations in metastatic
 NSCLC with DXd ADCs as the foundational treatment
- Leverage the innovation in DXd ADCs to move into biomarker-selected patients and early-stage NSCLC
- Identify novel therapeutic approaches for extensive-stage SCLC to address significant unmet need



Major Progress since R&D day 2023



EXPAND & EXTEND

Be the first TROP2 directed **ADC in NSCLC**

EXPAND

- Announced TROPION-Lung01 OS in May 2024
- Withdrawal of the application for NSQ NSCLC 2/3L based on TROPION-Lung01 in the US
- New submission for accelerated approval for EGFRm NSCLC based on pooled TROPION-Lung05, TROPION -Lung01 and TROPION-PanTumor01 in US in Nov 2024
- Granted Breakthrough Therapy Designation for EGFRm NSCLC in the US in Dec 2024

Add HER3-DXd as a potential new treatment option for **EGFR mutated NSCLC**

EXPAND

- Received CRL for HERTHENA-Lung01 from FDA in Jun 2024 and working closely with FDA and manufacturer to solve the issues
- HERTHENA-Lung02 met its primary endpoint in Sep 2024

Maximize value with new combination studies

EXTEND

- **NSCLC**: Combination with alliance partner's assets looking ahead to future SOCs (TROPION-Lung10, TROPION-Lung12, TROPION-Lung14 and TROPION-Lung15)
- **SCLC**: Collaboration with US Merck* for MK-6070 and started combination study with I-DXd

Initiated pivotal study for I-DXd EXPAND

IDeate-Lung02 (Ph3, ES-SCLC, FSD: Aug 2024)

Go earlier

EXPAND

- DESTINY-Lung04: TLR anticipated in FY2025
- AVANZAR: TLR anticipated in CY2025 H2

CRL: complete response letter, ES-SCLC: extensive-stage small cell lung cancer, FSD: first subject dosed, NSCLC: non-small cell lung cancer, NSQ: non-squamous, OS: overall survival, SOC: TLR: top line results * Merck & Co., Inc., Rahway, NJ, USA

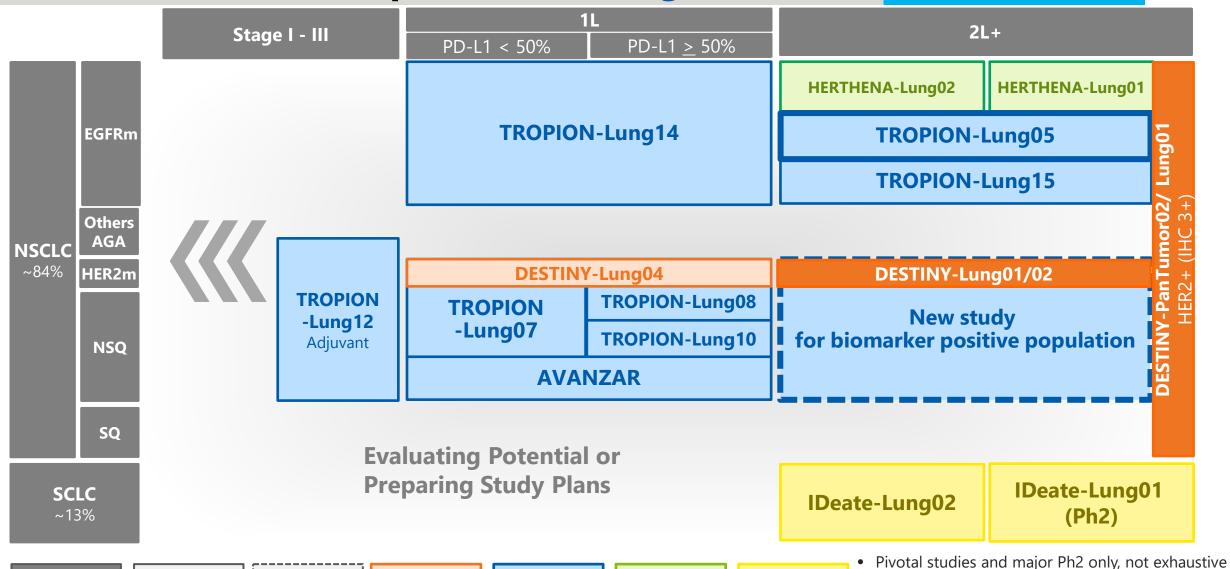
5DXd ADCs

On-going

Launched

Establish and Expand DXd ADCs to Address the Broad Spectrum of Lung Cancer





Dato-DXd

HER3-DXd

I-DXd

Box size does not reflect the patient population
Box indicates current potential target segment

ENHERTU®

Planning

Others

Major Progress since R&D day 2023



Cancer other than BC and LC, cross-cancer initiatives

Expand indications of ENHERTU® beyond BC and LC EXPAND

- ENHERTU® obtained indication for HER2+ (IHC3+) solid tumors 2L+ in the US in Apr 2024
- DESTINY-BTC01 in HER2 expressing BTC 1L started in Aug 2024

Explore potential of DXd ADCs in additional cancers EXPAND

- HERTHENA-PanTumor01 (FSD: Mar 2024)
- IDeate-PanTumor02 (FSD: May 2024)
- REJOICE-PanTumor01 (Anticipated FSD: FY2024 H2)

Initiated pivotal study in OVC

EXPAND

REJOICE-Ovarian01
 (Ph2/3, platinum-resistant OVC, FSD: Apr 2024)

Foster next-generation therapeutics



- First data presentation of DS-9606 (anti-CLDN6 ADC) at ESMO 2024
- Approval of valemetostat for r/r PTCL in Japan in Jun 2024

Develop a new formulation for patient convenience

EXTEND

 Planning to develop ENHERTU[®] subcutaneous injection in collaboration with Alteogen Inc., Korea

Daiichi Sankyo Research Institutes for External Collaboration







Our Research Institute activities will accomplish the following objectives by deploying top scientists from Research function

- Form networks and approach technologies that drive scientific paradigm shifts
- Undertake sponsored research, foster startup incubation, and drive technology acquisition
- Cultivate talent to enhance global insights and perspectives



Agenda

- **1** Opening
- 2 R&D Update
- **3** Clinical Progress
- **4** Translational Research
- **5** ADC Manufacturing & Supply
- 6 Q&A



Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

ENHERTU[®] early line studies in BC

Analysis of drug-related ILD in Dato-DXd

Early clinical stage development

Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

ENHERTU® early line studies in BC

Analysis of drug-related ILD in Dato-DXd

Early clinical stage development

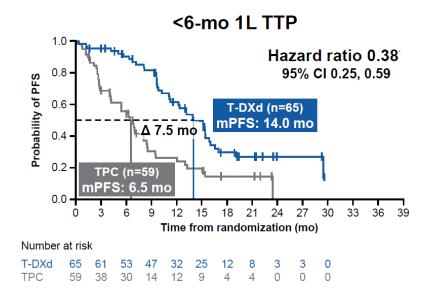


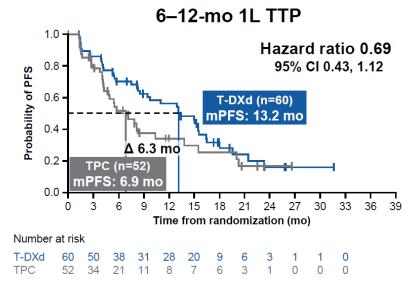
DESTINY-Breast06: PFS in Exploratory Subgroup Analysis SABCS 2024

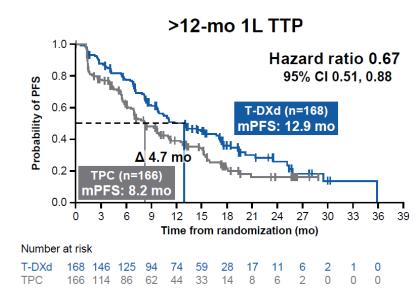


ENHERTU® improved PFS vs TPC regardless of time to progression on 1L endocrine therapy + CDK4/6i

<TTP subgroups>







- ■ENHERTU® demonstrated a clinically meaningful efficacy benefit vs TPC regardless of time to progression (TTP) on 1L ET + CDK4/6i (mPFS 12.9–14.0 mo with ENHERTU®)
 - ✓ This included patients with rapid (<6-mo) progression on 1L ET + CDK4/6i

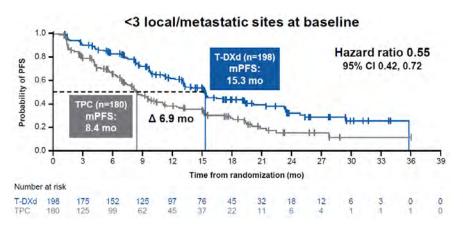


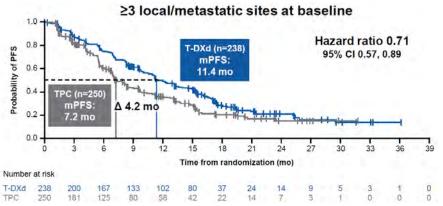
DESTINY-Breast06: PFS in Exploratory Subgroup Analysis SABCS 2024



PFS benefit with ENHERTU® was observed regardless of disease burden, with notable efficacy in patients with lower disease burden

<Disease burden subgroups>





TPC	Hazard ra	atio (95% CI)
7.0 (6.4, 8.1)	H●H	0.59 (0.48, 0.72)
11.3 (8.3, 15.2)	⊢• ⊢	0.70 (0.51, 0.96)
7.1 (6.5, 8.3)	⊢● ⊢	0.57 (0.45, 0.72)
9.7 (7.5, 13.2)	⊢⊕ ⊢	0.71 (0.55, 0.90)
	10000	
7.9 (6.9, 8.5)	HOH	0.65 (0.55, 0.78)
11.3 (6.9, 15.7)	⊢•	0.51 (0.30, 0.85)
	0.25 0.5 1	2
	Favors T-DXd Favo	ors TPC
	11.3 (8.3, 15.2) 7.1 (6.5, 8.3) 9.7 (7.5, 13.2) 7.9 (6.9, 8.5)	11.3 (8.3, 15.2) 7.1 (6.5, 8.3) 9.7 (7.5, 13.2) 7.9 (6.9, 8.5) 11.3 (6.9, 15.7)

Median PFS, mo (95% CI)

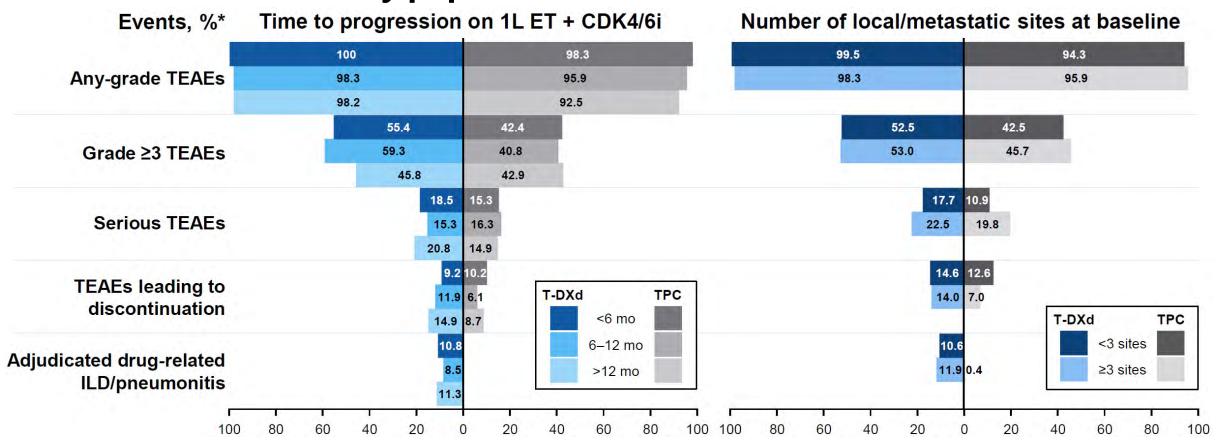
■ ENHERTU® also demonstrated efficacy regardless of disease burden, with notable efficacy in patients with lower disease burden (mPFS 15.0–23.3 mo with ENHERTU®)



DESTINY-Breast06: Safety in Exploratory Subgroups SABCS 2024



Safety profiles for ENHERTU® and TPC in TTP and disease burden subgroups in line with overall safety population[†]



^{*}Includes AEs with an onset date or worsening on or after the date of first dose and up to and including 47 days following the date of last dose of study medication or before the initiation of the first subsequent cancer therapy (whichever occurs first); includes ILD/pneumonitis with an onset date or worsening on or after the date of first dose; †overall safety population (T-DXd vs TPC): any TEAEs, 98.8% vs 95.2%; Grade ≥3 TEAEs, 52.8% vs 44.4%; serious TEAEs, 20.3% vs 16.1%; TEAEs leading to discontinuation, 14.3% vs 9.4%; adjudicated drug-related ILD, 11.3% vs 0.2% AE: adverse event, ET: endocrine therapy, ILD: interstitial lung disease, mo: months, T-DXd: trastuzumab deruxtecan, TEAE: treatment-emergent adverse event, TPC: treatment of physician's choice, TTP: time to progression

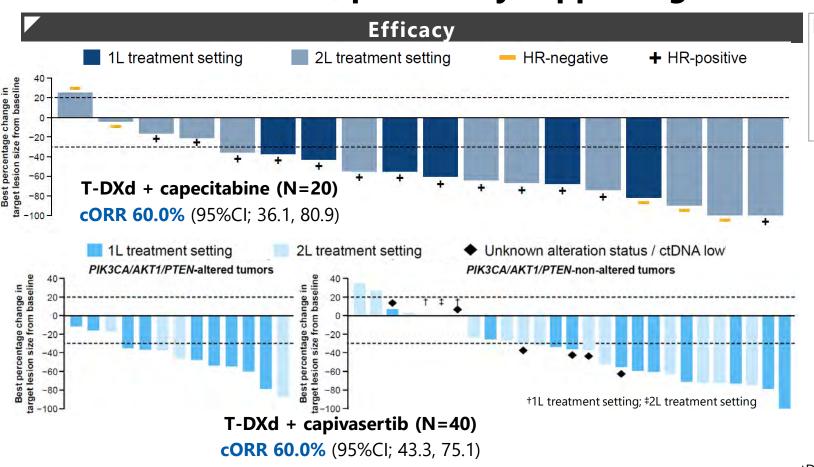


DESTINY-Breast08

SABCS 2024



ENHERTU® + capecitabine or capivasertib are tolerable and active in patients with HER2 low mBC, potentially supporting further investigation



DESTINY-Breast08 Study:

A Ph1b study to investigate safety, tolerability, PK and preliminary anti-tumor activity of ENHERTU® in combination with other therapeutics in patients with HER2 low mBC

- ENHERTU® in combination with capecitabine or capivasertib demonstrated preliminary antitumor activity in patients with HER2-low mBC
- The safety profiles for ENHERTU® plus capecitabine and ENHERTU® plus capivasertib were generally consistent with the known safety profile of each agent

cORR in patients with *PIK3CA/AKT1/PTEN*-altered tumors was 76.9% (n=10/13; 95% CI 46.2, 95.0)

- cORR in patients with PIK3CA/AKT1/PTEN-non-altered tumors was 52.4% (n=11/21; 95% CI 29.8, 74.3)
- cORR in patients with an unknown and ctDNA low status was 50.0% (n=1/2) and 50.0% (n=2/4), respectively

ctDNA: circulating tumor deoxyribonucleic acid, mBC: metastatic breast cancer, CI: confidence interval, HR: hormone receptor, PK: pharmacokinetics, cORR: confirmed objective response rate, SABCS: San Antonio Breast Cancer Symposium, T-DXd: trastuzumab deruxtecan

Pooled Analysis of TROPION-Lung01 and TROPION-Lung05ESMO Asia 2024



117 patients with EGFRm NSCLC who received Dato-DXd in TL01 and TL05 study were included in the pooled analysis

TROPION-Lung05 (Phase II study) Presence of ≥ 1 actionable genomic alteration (EGFR, ALK, ROS1, NTRK, BRAF, MET exon 14 skipping, or RET) Dato-DXd **Endpoints:** EGFRm Pool: 6 mg/kg Q3Wa ≥1 line of targeted therapy ORR per BICR N = 117(N=137) 1–2 prior cytotoxic agent–containing therapies including BOR per BICR Pt-CT in the metastatic setting DCR per BICR **TROPION-Lung05** Radiographic disease progression after most recent therapy DOR per BICR (n=78)PFS per BICR **TROPION-Lung01** Dato-DXd OS TROPION-Lung01 (Phase III study) (n=39)6 mg/kg Q3Wb Safety • In those with actionable genomic alterations (EGFR, ALK, (N=299)ROS1, NTRK, BRAF, MET exon 14 skipping, or RET) • 1–2 prior approved targeted therapies + Pt-CT, and **Docetaxel** ≤1 anti-PD-(L)1 mAb 75 mg/m² Q3W^b No prior docetaxel

(N=305)

^aData cut off: December 14, 2022; ^bData cut off: March 1, 2024 (OS and safety) or March 29, 2023 (all other efficacy endpoints).

BICR: blinded independent central review, BOR: best overall response, CT: chemotherapy, DCR: disease control rate, DOR: duration of response, ESMO: European Society for Medical Oncology,

NSCLC: non-small cell lung cancer, ORR: overall response rate, OS: overall survival, PFS: progression-free survival, Pt-CT: platinum-based chemotherapy, Q3W: once every 3 weeks



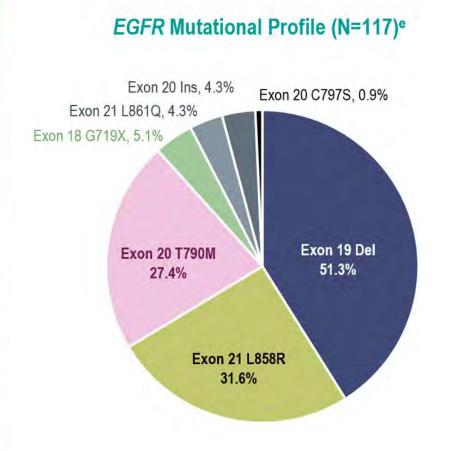
Pooled Analysis of TROPION-Lung01 and TROPION-Lung05



Demographics and Baseline Characteristics

Characteristic	EGFRm Pool (N=117)	TROPION- Lung05 (N=78)	TROPION- Lung01 (N=39)
Median age (range), years	63 (36–81)	63 (36–77)	62 (39–81)
Sex, female, n (%)	73 (62.4)	52 (66.7)	21 (53.8)
Race, n (%) Asian White Black or African American Other/missing	81 (69.2) 27 (23.1) 1 (0.9) 8 (6.8)	55 (70.5) 20 (25.6) 0 3 (3.8)	26 (66.7) 7 (17.9) 1 (2.6) 5 (12.8)
ECOG PS, n (%) 0 1	39 (33.3) 78 (66.7)	24 (30.8) 54 (69.2)	15 (38.5) 24 (61.5)
Smokera, n (%)	55 (47.0)	34 (43.6)	21 (53.8)
Nonsquamous histologyb, n (%)	115 (98.3)	77 (98.7)	38 (97.4)
Brain metastasis at study entry, n (%)	36 (30.8)	21 (26.9)	15 (38.5)
Median lines systemic therapy (range) ^c	3 (1–5)	3 (1–5)	2 (1–5)
Prior osimertinib ^d , n (%) First line Second line	96 (82.1) 47 (40.2) 34 (29.1)	61 (78.2) 27 (34.6) 20 (25.6)	35 (89.7) 20 (51.3) 14 (35.9)

ESMO Asia 2024



^aCurrent/former; ^bAdenocarcinoma and other nonsquamous types; ^cPrior lines in the locally advanced/metastatic setting; ^dAdditional patients may have received osimertinib as third line or later therapy; ^eAnalyses based on local testing reported by investigators in the electronic case report form. Patients may have ≥1 *EGFR* mutation with or without a non-*EGFR* mutation. Other mutation types identified alongside *EGFR* were *ALK* rearrangement, n=2; *ROS1* rearrangement, n=2; *NTRK* fusion, n=1; *MET* amplification, n=5; *MET* Exon 14 skipping, n=1. Del: deletion, ECOG PS: Eastern Cooperative Oncology Group Performance Status, ESMO: European Society for Medical Oncology, Ins: insertion



Pooled Analysis of TROPION-Lung01 and TROPION-Lung05 ESMO Asia 2024

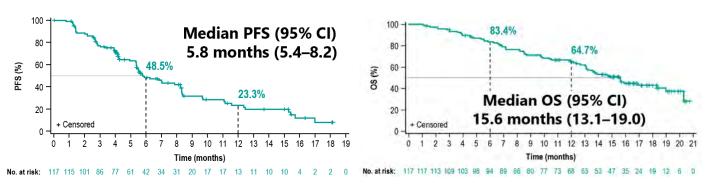


Dato-DXd is a potential treatment option for patients with EGFRm NSCLC in the second-line and later settings

Efficacy

Response	EGFRm Pool (N=117)	Prior Osimertinib (N=96)
Confirmed ORR.a n (%) [95% CI]	50 (42.7) [33.6–52.2]	43 (44.8) [34.6—55.3]
BOR, n (%) CR PR SD Non-CR/Non-PD PD NE	5 (4.3) 45 (38.5) 48 (41.0) 3 (2.6) 12 (10.3) 4 (3.4)	4 (4.2) 39 (40.6) 37 (38.5) 2 (2.1) 10 (10.4) 4 (4.2)
Median DOR, months (95% CI)	7.0 (4.2–9.8)	6.9 (4.2–9.8)
DCR , b. n (%) [95% CI]	101 (86.3) [78.7–92.0]	82 (85.4) [76.7—91.8]
Median PFS, months (95% CI)	5.8 (5.4–8.2)	5.7 (5.4—7.9)
Median OS, months (95% CI)	15.6 (13.1–19.0)	14.7 (13.0–18.3)

PFS and OS in the *EGFR*m Pool (N=117)



■Robust clinical activity:

- ORR: 42.7% (95% CI: 33.6-52.2); median DOR: 7.0 mo (range: 4.2–9.8); median PFS: 5.8 mo; median OS: 15.6 mo
- Outcomes for patients with prior osimertinib treatment were similar to the overall pooled population

^aCR+PR; ^bCR+PR+SD or non-CR/non-PD.

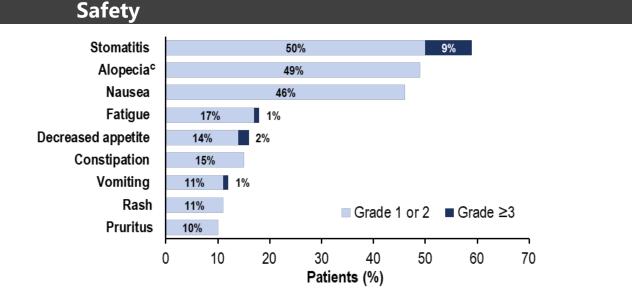


Pooled Analysis of TROPION-Lung01 and TROPION-Lung05 ESMO Asia 2024



Dato-DXd is a potential treatment option for patients with EGFRm NSCLC in the 2L and later settings

EGFRm Pool (N=117) 111 (95) TRAEs, n (%) Grade ≥3 27 (23) Associated with dose reduction 26 (22) 27 (23) Associated with dose delay Associated with treatment discontinuation 6 (5) 0(0)Associated with death Serious TRAEs 9 (8) AESIsa, n (%) Stomatitis/oral mucositis 81 (69) Grade 3b 11 (9) Ocular surface events 38 (32) Grade 3b 3 (3) Adjudicated drug-related ILD 5 (4) 1 (1) Grade 3b



■A manageable safety profile with no new safety signals

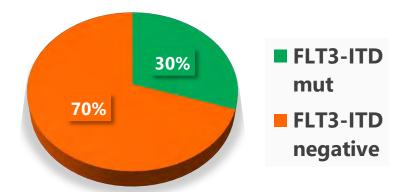
- Low rates of serious TRAEs or TRAEs leading to treatment discontinuations
- Grade ≥2 stomatitis/oral mucositis seen in ~1/3 patients was effectively managed with dose reductions/delays, and no treatment discontinuations due to stomatitis occurred
- No grade 4 or 5 ILD events

AESI: adverse event of special interest, CTCAE: Common Terminology Criteria for Adverse Events, ILD: interstitial lung disease, NSCLC: non-small cell lung cancer, TRAE: treatment-related adverse event

^aAESIs listed are treatment emergent and include all preferred terms that define the medical concept. Some patients may have had >1 event. ^bNo grade 4 or 5 events occurred. ^cIncludes an event incorrectly reported as grade 3 per CTCAE grades.

Beyond FLT3-ITD Mutation





Newly Diagnosed AML *FLT3*-ITD negative

R/R AML FLT3-ITD mut

Newly Diagnosed AML FLT3-ITD mut

QuANTUM-R, Ph3 VANFLYTA® Mono 2014-18 QuANTUM-First, Ph3 SOC + VANFLYTA® 2016-21 QuANTUM-Wild, Ph3 SOC + VANFLYTA® 2024-ongoing

IIS QUIWI, Ph2
SOC + VANFLYTA®
2019-24

Background



- Potential contribution of ITD-negative FLT3 to the survival and proliferation of leukemic cells
 - ✓ Elevated expression of the FLT3 receptor is observed in nearly all cases of AML
 - ✓ High levels of FLT3 gene expression are detected in 70–100% of AML blasts, independent of the presence of *FLT3* mutations
- VANFLYTA® has potent binding affinity for the FLT3 receptor regardless of mutation
- The clinical utility of VANFLYTA® in patients with *FLT3*-ITD negative AML is supported by evidence from preclinical models and clinical trials
 - ✓ **Preclinical**: *ex vivo* plasma inhibitory assays showed robust suppression of FLT3 phosphorylation with VANFLYTA® in cells expressing wild-type FLT3
 - ✓ **Clinical**: The effectiveness of the VANFLYTA® for *FLT3*-ITD negative AML has been demonstrated (Ph1 and Ph2 (**QUIWI**))

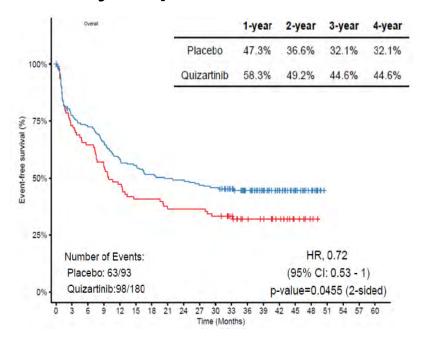
AML: acute myeloid leukemia

Final Results of Ph2 PETHEMA-QUIWI study ASH 2024



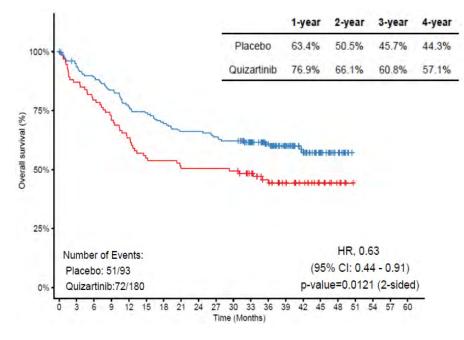
Data supports indication expansion potential of VANFLYTA® to newly diagnosed *FLT3*-ITD negative AML

■ Primary Endpoint: EFS



■ Secondary Endpoint: CR/CRi CR/CRi rate after 2 cycles was 77.2% in the VANFLYTA® arm and 76.3% in the placebo arm

■ Secondary Endpoint: OS



■ Secondary Endpoint: Safety No new safety signals were observed among VANFLYTA® and placebo arms

QuANTUM-Wild Study Design



Started QuANTUM-Wild Ph3 study for *FLT3*-ITD negative AML based on data from QUIWI study

QuANTUM-Wild study design Consolidation Maintenance 28- day cycle Induction (up to 2 cycles) (up to 36 cycles) (up to 4 cycles) High dose cytarabine + **Eligible patients** Arm A: quizartinib quizartinib Newly diagnosed quizartinib and/or stem cell 60 mg **AML** 60 mg transplant cytarabine Without FLT3-ITD Long **Days 1-7** High dose cytarabine + mutations R Arm B: term placebo placebo daunorubicin followplacebo and/or stem cell 2:2:1 or ibarubicin up transplant **Days 1-3** N = 700Arm C: High dose cytarabine + quizartinib placebo quizartinib and/or stem cell 60 mg transplant

- VANFLYTA® + chemotherapy demonstrated preliminary efficacy in patients with newly diagnosed *FLT3*-ITD negative AML compared to placebo+ chemotherapy in the interim analysis of QUIWI study (EHA 2023)
- Started the study in Dec 2024 to expand indication for *FLT3*-ITD negative AML based on QUIWI study results

Primary endpoint

- OS
- Secondary endpoint
- EFS, DCR, RFS, CR rate etc.

Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

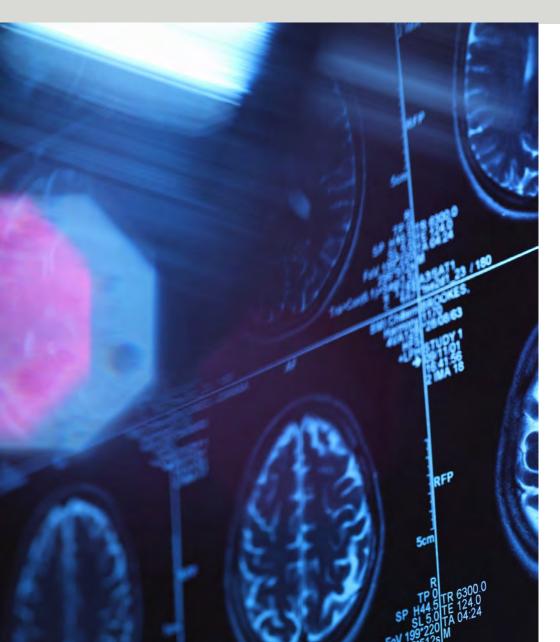
ENHERTU® early line studies in BC

Analysis of drug-related ILD in Dato-DXd

Early clinical stage development

Brain Metastases in Breast and Lung Cancers





- Brain metastases (BMs) occur in nearly one-third patients with HER2+ BC or TNBC¹
- 10-20% NSCLC patients have BMs at the time of diagnosis, and the rate increases as the disease progresses²
- Patients with SCLC are twice as likely to develop BMs as those with NSCLC³
- BM impacts significantly on disease prognosis and patient's QOL⁴

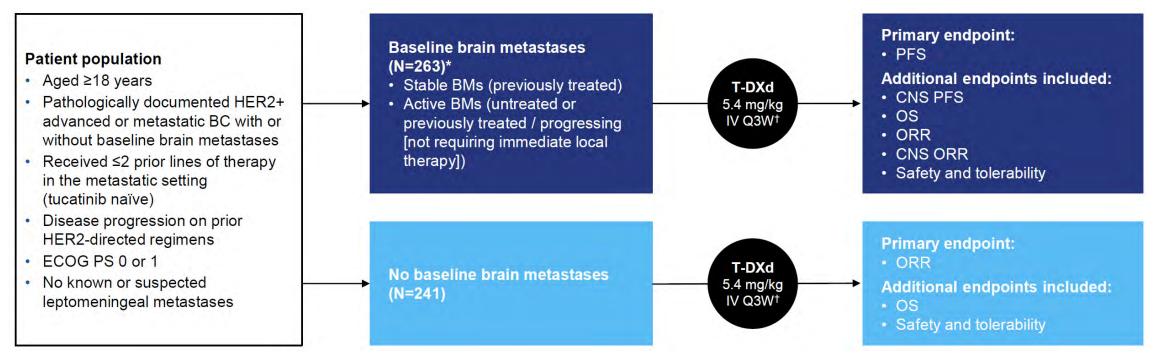


DESTINY-Breast12 Study Design



ESMO 2024

Phase 3b/4 study of ENHERTU® in patients with or without baseline brain metastases (BMs) with previously treated advanced/metastatic HER2-positive BC



■ The largest prospective study of ENHERTU® in patients with stable or active BMs

Data reported for the full analysis set (all patients enrolled in the study who received at least one treatment dose) and safety analysis set (identical to full analysis set). No hypothesis testing or comparison of cohorts. Response and progression assessed by ICR per RECIST 1.1 in both cohorts. Patients were enrolled from Australia, Canada, Europe, Japan, and US

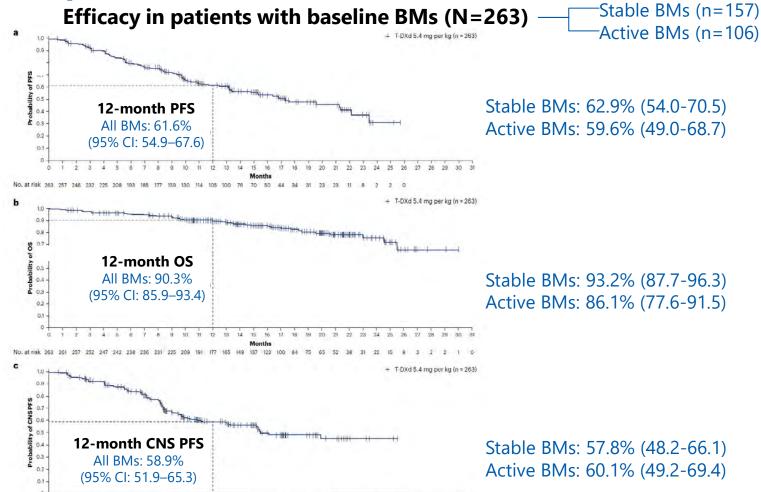
*Concomitant use of ≤3 mg of dexamethasone daily or equivalent allowed for symptom control of BMs (baseline BMs cohort only); †until RECIST 1.1-defined disease progression outside the CNS



DESTINY-Breast12: Key Endpoints with Baseline BMs ESMO 2024



Data support use of ENHERTU® in previously treated patients with HER2+ mBC, irrespective of stable/active baseline brain metastases (BMs)



ENHERTU® showed:

- Consistent 12-month PFS in patients with stable and active BMs
- Consistent 12-month CNS PFS in patients with stable and active BMs
- Consistent 12-month OS in patients with BMs (90.3%) and without BMs (90.6%, graph not shown)

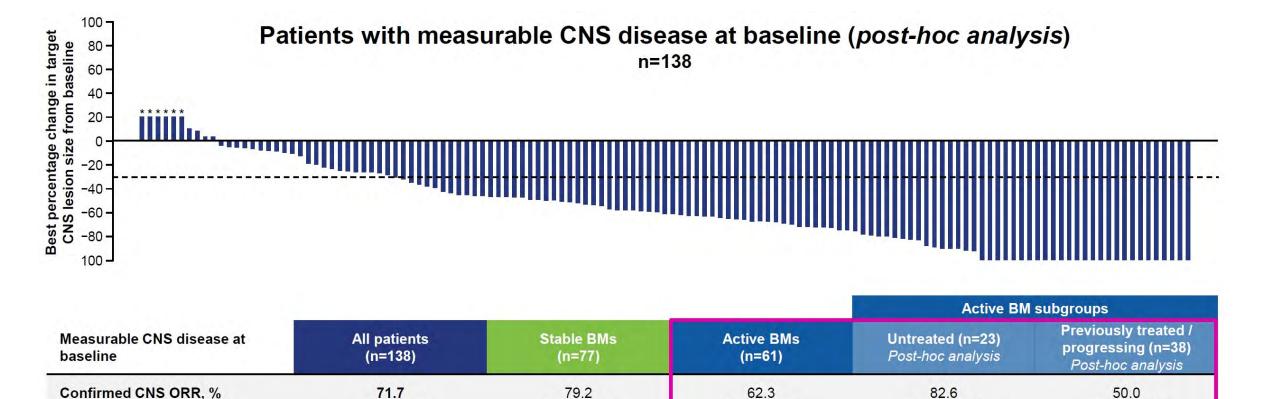


(95% CI)

CNS ORR in Baseline BMs Patients



DESTINY-Breast12



■ ENHERTU® showed substantial CNS responses in the overall BMs population, including patients with stable and active BMs

(50.1, 74.5)

(67.1, 98.1)

(70.2, 88.3)

Dashed line indicates a 30% decrease in target tumor size (PR)

(34.1, 65.9)

(64.2, 79.3)

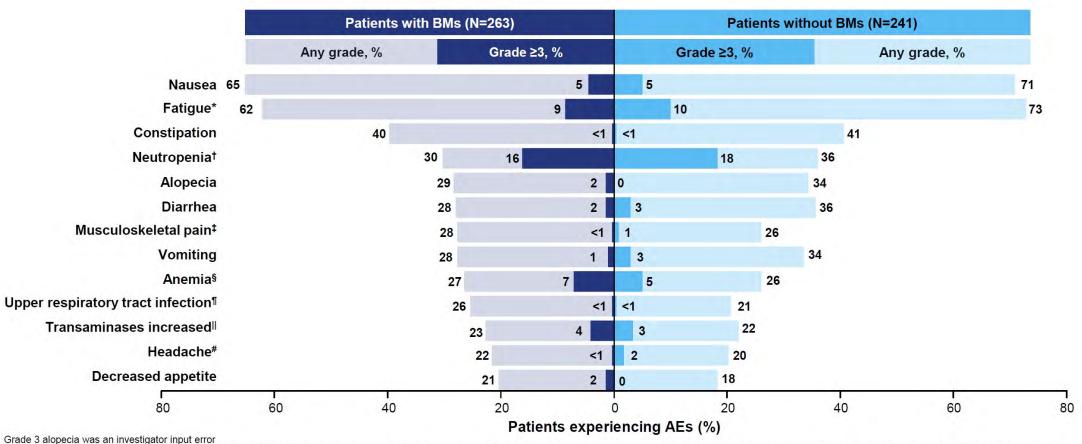
^{*}Imputed values: a value of +20% was imputed if best percentage change could not be calculated because of missing data if: a patient had a new lesion or progression of non-target lesions or target lesions, or had withdrawn because of PD and had no evaluable target lesion data before or at PD



AEs in ≥20% of Patients in Either Cohort



DESTINY-Breast12



*Includes the preferred terms 'asthenia', 'fatigue', 'lethargy', and 'malaise'; fincludes the preferred terms 'neutropenia' and 'neutrophil count decreased'; fincludes the preferred terms 'back pain', 'bone pain', 'limb discomfort', 'muscle spasms', 'musculoskeletal chest pain', 'musculoskeletal pain', 'influenza-like illness', 'laryngitis', 'nasopharyngitis', 'rhinitis', 'sinusitis', and 'upper respiratory tract infection'; lincludes the preferred terms 'alanine aminotransferase increased', 'aspartate aminotransferase increased', 'aspartate aminotransferase increased', 'laryngitis', 'rhinitis', 'rhinitis', 'sinusitis', and 'upper respiratory tract infection'; lincludes the preferred terms 'alanine aminotransferase increased', 'aspartate aminotransferase increased', 'aspartate aminotransferase increased', 'laryngitis', 'rhinitis', 'sinusitis', 'gamma-glutamyltransferase increased', 'hypertransaminasemia', 'liver function test abnormal', and 'transaminases increased'; "includes the preferred terms 'headache', 'migraine', and 'sinus headache'

■ The safety profile of ENHERTU® was consistent with previous reports; no new safety signals were identified

DXd-ADC Efficacy in NSCLC Patients with BMs



Recent publications



■ ENHERTU® monotherapy demonstrated intracranial activity in patients with or without prior BMs treatment in exploratory pooled analyses from **DESTINY-Lung01/02** (ESMO 2023)

Dato-DXd

- Dato-DXd showed intracranial activity in heavily pretreated NSCLC patients with AGA in a post hoc analysis of **TROPION-Lung05** (ASCO 2024)
- In patients receiving Dato-DXd, trends towards improved systemic efficacy were observed vs docetaxel in patients with and without baseline BMs in results from **TROPION-Lung01** (ESMO 2024)

HER3-DXd

■ HER3-DXd showed durable intracranial responses in patients with EGFR-mutated NSCLC with BMs at baseline that had not been treated with radiotherapy in results from **HERTHENA-Lung01** (ESMO 2023, J Clin Oncol 2024)

Additional clinical trials are ongoing investigating DXd-ADCs' efficacy in BMs (e.g., TUXEDO-2, TUXEDO-3, DATO-BASE)



I-DXd Efficacy in SCLC Patients with BMs



IDeate-Lung01 subset analysis

Intracranial response

	Patients with brain metastases at baseline			Subset of patients with brain target lesions		
	8 mg/kg (n=19)	12 mg/kg (n=18)	Total (N=37)	8 mg/kg (n=6)	12 mg/kg (n=10)	Total (N=16)
CNS confirmed ORR, % (95% CI)	36.8 (16.3–61.6)	38.9 (17.3-64.3)	37.8 (22.5–55.2)	66.7 (22.3–95.7)	50.0 (18.7-81.3)	56.3 (29.9–80.2)
CNS confirmed BOR, n (%)						
CR	5 (26,3)	4 (22.2)	9 (24.3)	2 (33.3)	2 (20.0)	4 (25.0)
PR	2 (10.5)*	3 (16.7) ^a	5 (13.5)	2 (33.3)	3 (30.0)	5 (31.3)
SD or non-CR/non-PDb	8 (42.1)	10 (55.6)	18 (48.6)	2 (33.3)	5 (50.0)	7 (43.8)
PD	1 (5,3)	0	1 (2.7)	Ò	0	0
Not evaluable	3 (15.8)	1 (5.6)	4 (10.8)	0	0	0
CNS confirmed DCR,° % (95% CI)	78.9 (54.4–93.9)	94.4 (72.7–99.9)	86.5 (71.2–95.5)	100 (54.1–100.0)	100 (69.2–100.0)	100 (79.4–100.0)
CNS DOR, median (95% CI), months	4.3 (3.3-NE)	7.4 (3.0-NE)	6.2 (3.3-NE)	3.9 (3.3-NE)	6.5 (3.0-NE)	4.4 (3.0-6.7)
CNS TTR, median (range), months	1.4 (1.2–1.5)	1.2 (0.9–2.8)	1.3 (0.9–2.8)	1.3 (1.2–1.4)	1.2 (0.9–2.8)	1.3 (0.9–2.8)

^aAll patients with PR had target lesions at baseline. ^bOnly patients without baseline brain target lesions could have response classified as "non-CR/non-PD". ^cCR + PR + SD + non-CR/non-PD.

- In the 37 patients with brain metastases at baseline, CNS confirmed ORR was 37.8% (95% CI, 22.5–55.2) and median CNS DOR was 6.2 months (95% CI, 3.3–NE)
- In the subset of 16 patients with brain target lesions at baseline, CNS confirmed ORR was 56.3% (95% CI, 29.9–80.2) and median CNS DOR was 4.4 months (95% CI, 3.0–6.7)
- The safety profile of I-DXd was similar between patients with and without BMs at baseline

DXd ADCs Become Promising Treatment Options for BMs





■ Accumulating evidence is establishing the fact that DXd ADCs are effective against BMs in Breast and Lung cancers

Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

ENHERTU® early line studies in BC

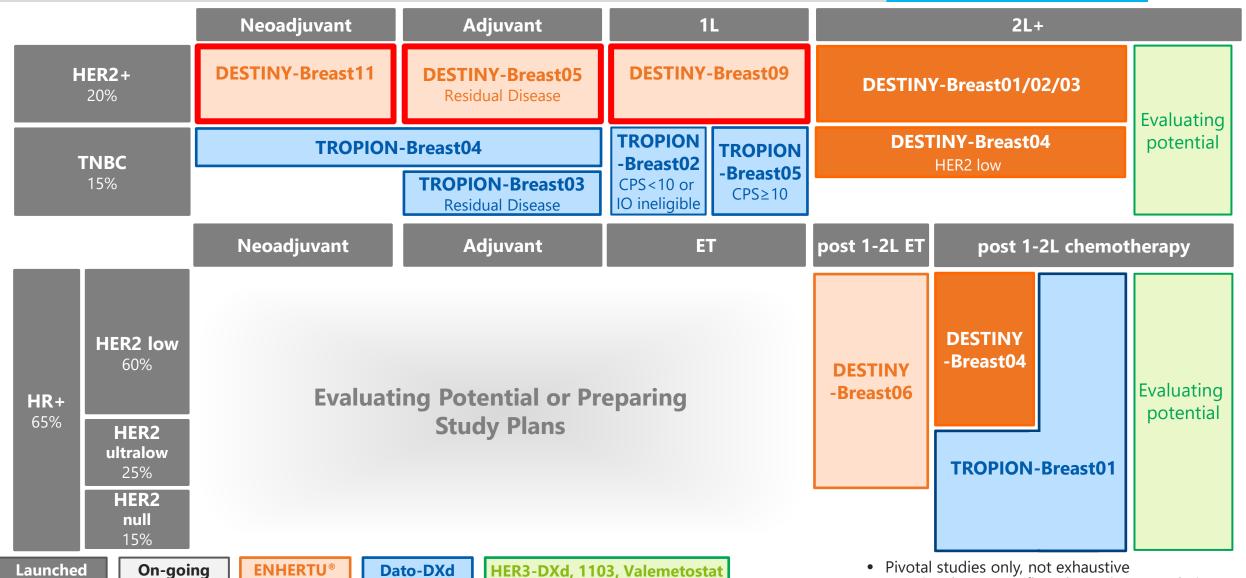
Analysis of drug-related ILD in Dato-DXd

Early clinical stage development

5DXd ADCs

Establish and Expand DXd ADCs to Address the Broader Spectrum of Breast Cancer





- Pivotal studies only, not exhaustive
 - Box size does not reflect the patient population
- Box indicates current potential target segment 43



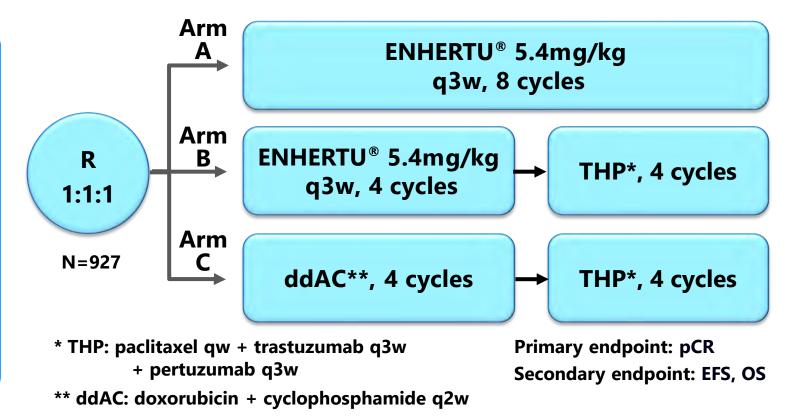
DESTINY-Breast11 Study



Ph3 study of ENHERTU® monotherapy or ENHERTU® followed by THP vs. ddAC-THP in neoadjuvant setting for high-risk HER2-positive early-stage BC

Key Eligibility Criteria

- ◆ HER2-positive locally advanced BC
- ◆ HR positive or negative
- ◆ Histologically documented HER2 positive early BC participants, including clinical stage at presentation (based on mammogram or breast MRI assessment): T0-4 (inclusive of inflammatory breast cancer), N1-3, M0 or ≥ T3, N0, M0 as determined by the AJCC staging system, 8th edition



TLR anticipated in FY2025 H1



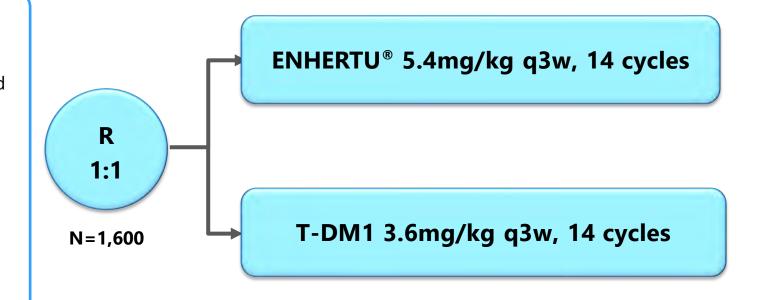
DESTINY-Breast05 Study



Ph3 study of ENHERTU® vs. T-DM1 in high-risk HER2 positive participants with residual invasive BC following neoadjuvant therapy

Key Eligibility Criteria

- ♦ HER2 positive BC (IHC3+ or ISH+ as confirmed by a central laboratory) histologically
- ◆ Completion of neoadjuvant systemic chemotherapy and HER2-directed treatment
- Adequate excision: surgical removal of all clinically evident disease in the breast and lymph nodes
- Pathologic evidence of residual invasive carcinoma in the breast and/or axillary lymph nodes following completion of neoadjuvant therapy meeting high-risk criteria



Primary endpoint: IDFS, Secondary endpoint: DFS, OS, DRFI, BMFI, safety and tolerability, PK, ADA

TLR anticipated in FY2025

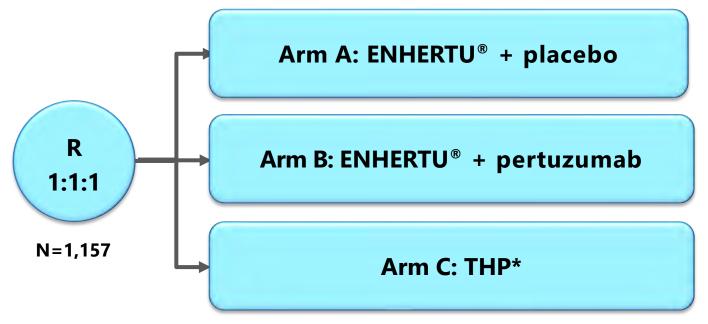
DESTINY-Breast09 Study



Ph3 study of ENHERTU® monotherapy or in combination with pertuzumab vs. SOC in 1L setting for HER2 positive BC

Key Eligibility Criteria

- ◆ Advanced and/or metastatic BC
- ◆ HER2 positive (IHC3+ or ISH+) by central confirmation
- No previous chemotherapy or HER2targeted therapy for advanced or metastatic BC except for 1 previous line of endocrine therapy in the metastatic setting



*THP: paclitaxel qw + trastuzumab q3w + pertuzumab q3w

Primary endpoint: PFS by BICR Secondary endpoint: PFS by investigator, OS, ORR, DOR, PK, safety and tolerability etc.

TLR anticipated in FY2025

Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

ENHERTU® early line studies in BC

Analysis of drug-related ILD in Dato-DXd

Early clinical stage development



Pooled Analysis of Drug-related ILD



ASCO 2024

Incidence and severity of adjudicated drug-related ILD across 5 studies of Dato-DXd in patients with advanced solid tumors

Adjudicated drug- related ILD, n (%)	NSCLC+BC (N=927)	NSCLC ^a (N=484)	BC ^b (N=443)	Other tumors ^c (N=272)
Grade 1	9 (1.0)	4 (0.8)	5 (1.1)	1 (0.4)
Grade 2	21 (2.3)	17 (3.5)	4 (0.9)	3 (1.1)
Grade 3	5 (0.5)	2 (0.4)	3 (0.7)	3 (1.1)
Grade 4	2 (0.2)	2 (0.4)	0	1 (0.4)
Grade 5	9 (1.0)	8 (1.7)	1 (0.2)	1 (0.4) ^d
Total	46 (5.0)	33 (6.8)e	13 (2.9)	9 (3.3)
Associated with dose reduction	3 (0.3)	2 (0.4)	1 (0.2)	0 (0)
Associated with drug interruption	14 (1.5)	11 (2.3)	3 (0.7)	4 (1.5)
Associated with drug withdrawal	26 (2.8)	20 (4.1)	6 (1.4)	3 (1.1)

Across all tumor types, overall incidence of adjudicated drugrelated ILD cases seen with Dato-DXd was low

- The majority of cases were low grade (grade 1 or 2)
- Grade ≥3 events have been reported, highlighting the need for careful monitoring and adherence to management guidelines
- In the NSCLC+BC pool, the median time to onset of first adjudicated drug-related ILD event was 48 days and the median duration was 39 days
- Dato-DXd-related ILD was more commonly observed in patients with NSCLC, and risk factors are currently under investigation
- This pooled analysis further supports a favorable benefit/risk profile of Dato-DXd for patients with advanced solid tumors

BC: Breast cancer, NSCLC: non-small cell lung cancer, ILD: interstitial lung disease

a: TROPION-Lung01 (n=297); TROPION-Lung05 (n=137); TROPION-PanTumor01 (n=50). b: TROPION-Breast01 (n=360); TROPION-PanTumor01 (n=83). c: TROPION-PanTumor01 (n=137); TROPION-PanTumor03 (n=135). d: One patient with prostate cancer from the TROPION-PanTumor01 trial experienced a grade 5 event. e: In TROPION-Lung01, 1 additional patient had a drug-related grade 2 ILD event according to the Adjudication Committee. The event was removed from the clinical database by the investigator as the investigator attributed the ILD event to disease progression and is not included in the above analyses.

Clinical Progress





Medical Congress Highlights

DXd ADCs in brain metastases

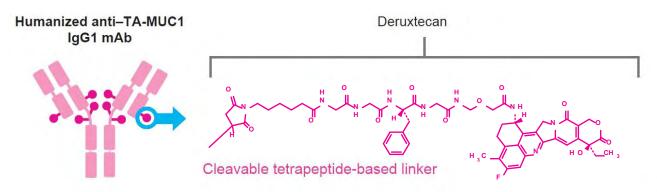
ENHERTU® early line studies in BC

Analysis of drug-related ILD in Dato-DXd

Early clinical stage development

DS-3939 is the 6th DXd ADC and Directed Against TA-MUC1





Topoisomerase I inhibitor payload (DXd)

What is TA-MUC1?

- MUC1 is a transmembrane glycoprotein that is highly glycosylated in normal tissues and is localized to the apical membrane of epithelial surfaces.
- In cancers, MUC1 loses cell polarity and is redistributed over the cell surface and within the cytoplasm. Glycosylation of MUC1 is dysregulated in cancers and predominantly modified with shorter glycans, leading to the emergence of aberrantly glycosylated MUC1, known as tumor-associated MUC1 (TA-MUC1).
- TA-MUC1 is overexpressed in **broad range of tumors** including NSCLC, BC, UC, OVC, BTC and PDAC

DS-3939 features

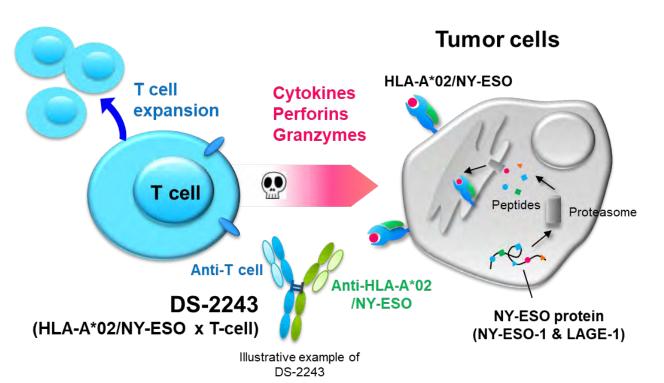
- High drug-to-antibody ratio ≈8
- DS-3939 specifically binds to TA-MUC1 by recognizing both the tumor specific glycan and backbone peptide moieties
- DS-3939 exhibited tumor regression against various preclinical in vivo models and also induced tumor regression after treatment of other FDA approved ADCs in xenograft model

DS-2243 Overview



A Potential First-in-Class Bispecific T-cell Engager (Bi-TCE) Targeting HLA-A*02/NY-ESO Tumors

Mode of Action



- Cutting-Edge Bi-TCE: Engineered to selectively engage both tumor antigens and T-cells, driving a targeted and potent immune response.
- **Tumor-Specific Targeting**: Precise targeting through the HLA-A*02/NY-ESO complex mediated by NY-ESO, a highly tumor-specific antigen. NY-ESO is only expressed in the testis in normal tissue, where it is present without HLA-A molecules.
- **Broad Applicability**: High/moderate frequency of NY-ESO expression observed in Synovial Sarcoma, Myxoid/Round Cell Liposarcoma, NSCLC, UC etc.
- **Promising Efficacy**: Exhibits robust anti-tumor activity and significant combination therapy potential in preclinical studies.



Agenda

- **1** Opening
- 2 R&D Update
- **3 Clinical Progress**
- **4** Translational Research
- **5** ADC Manufacturing & Supply
- 6 Q&A



Dale Shuster, PhD Career Highlights



Daiichi Sankyo CVD Hand of Clobal Pracision Madisina

2022

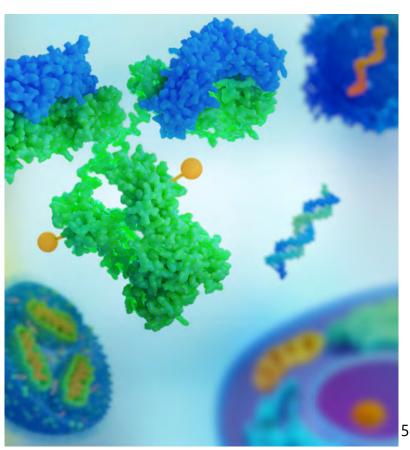
2022	SVP, Head of Global Precision Medicine
2019	VP, Global Team Leader of Dato-DXd
2013	Ex Dir, Global Team Leader of Pexidartinib and other oncology assets
2010	Sr Dir, Integrated Strategy Team Leader and Global Team Leader of multiple oncology assets

Eisai Medical Research

2007	Director, Global Project Team Leader of Eribulin
2005	Assoc Dir, Global Project Manager of Eribulin

Other Pharma Experience

Total of 32 years of experience in the pharmaceutical industry, including drug discovery, preclinical research and assay development, and drug development across a range of therapeutic areas.



Dato-DXd Exploration in NSCLC



TROPION-Lung01 study design

Key Eligibility Criteria

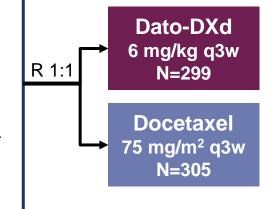
- NSCLC (stage IIIB, IIIC, or IV)
- ECOG PS of 0 or 1
- No prior docetaxel

Without AGA*

 1 or 2 prior lines, including platinum CT and anti–PD-(L)1 mAb therapy

With AGA

- Positive for EGFR, ALK, NTRK, BRAF, ROS1, MET exon 14 skipping, or RET
- 1 or 2 prior approved targeted therapies + platinum-based CT, and ≤1 anti–PD-(L)1 mAb

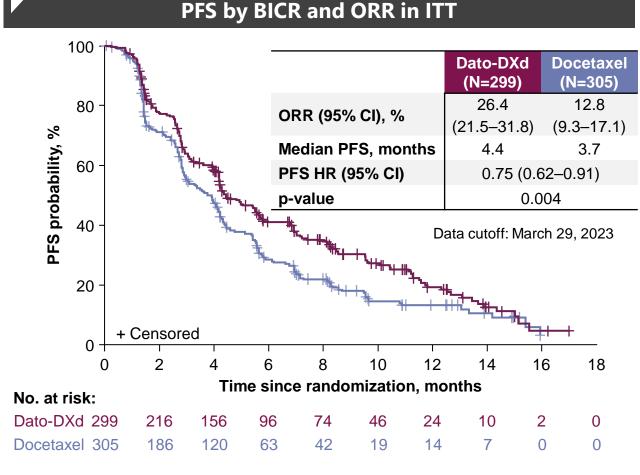


Stratified by:

Histology[†], AGA[‡], anti–PD-(L)1 mAb included in most recent prior therapy, geography[§]

Dual Primary Endpoints: PFS by BICR; OS

Secondary Endpoints: ORR by BICR; DOR by BICR; Safety

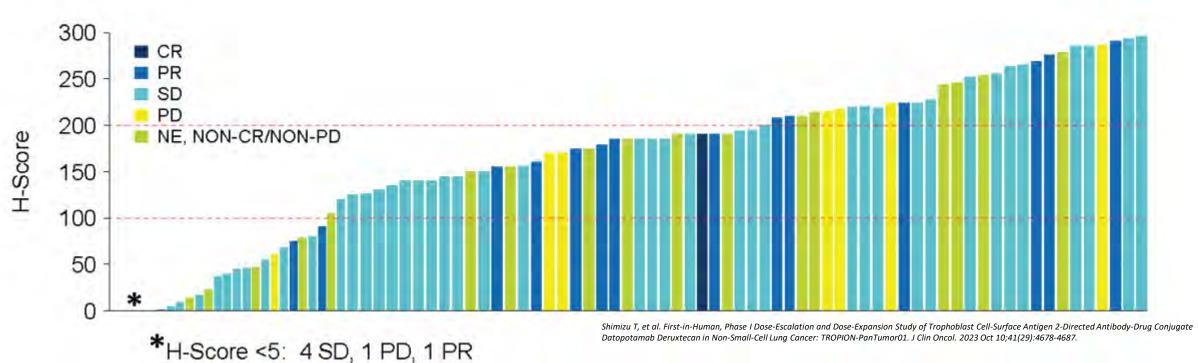


 Although the study met its one of primary endpoints; PFS, a predictive biomarker is needed to segregate the subpopulation who benefits the most from Dato-DXd

TROPION-PanTumor01: Dato-DXd Anti-tumor Activity by TROP2 IHC



Response by TROP2 Membrane Expression

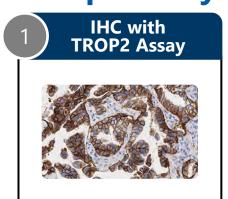


■ TROP2 expression by immunohistochemistry using manual pathologist scoring failed to segregate the subpopulation with high efficacy

TROP2 Normalized Membrane Ratio (NMR) measured by Quantitative Continuous Scoring (QCS)

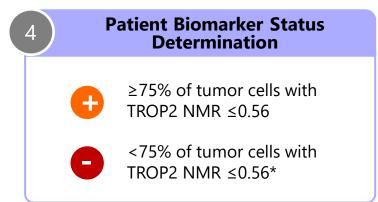


QCS is a novel computational pathology approach that precisely quantifies and locates targets like TROP2



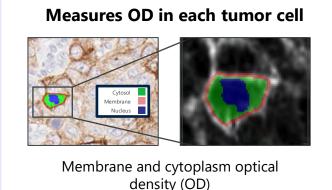






Calculates TROP2 NMR for





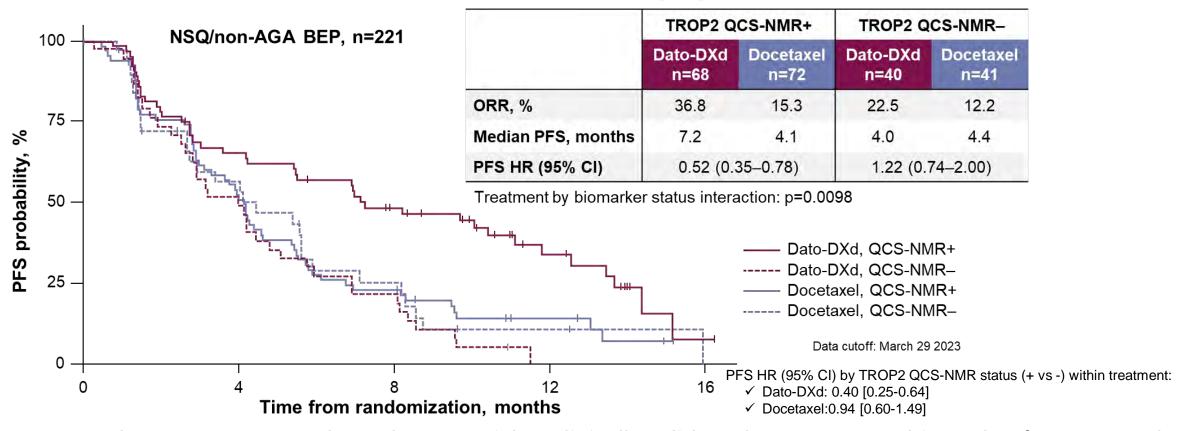
every tumor cell Membrane OD Membrane OD + Cytoplasm OD

Lower NMR \rightarrow higher cytoplasm proportion

NSQ/non-AGA BEP: Efficacy by TROP2 QCS-NMR Status



TROP2 QCS-NMR positivity is predictive for longer PFS with Dato-DXd in the NSQ/non-AGA biomarker-evaluable population



- AVANZAR and TROPION-Lung10 have the potential to clinically validate the TROP2 QCS biomarker for Dato-DXd
- An additional trial in patients with biomarker-positive tumors in the 2L NSQ NSCLC setting is planned

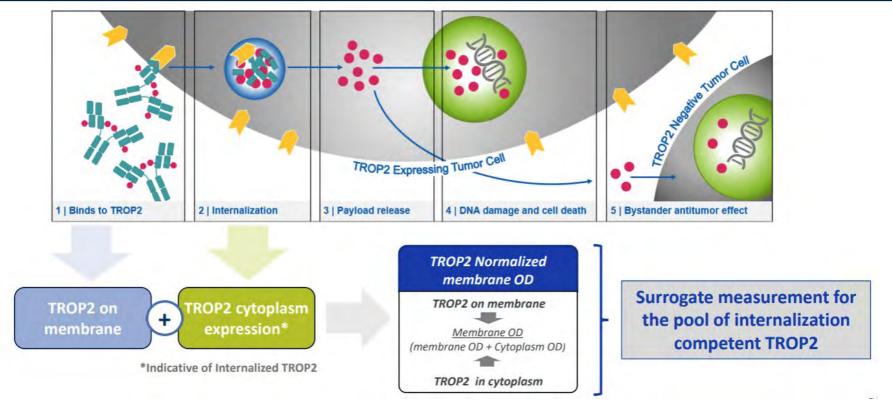
QCS in Dato-DXd



A success case of hypothesis-driven predictive biomarker discovery

Hypotheses

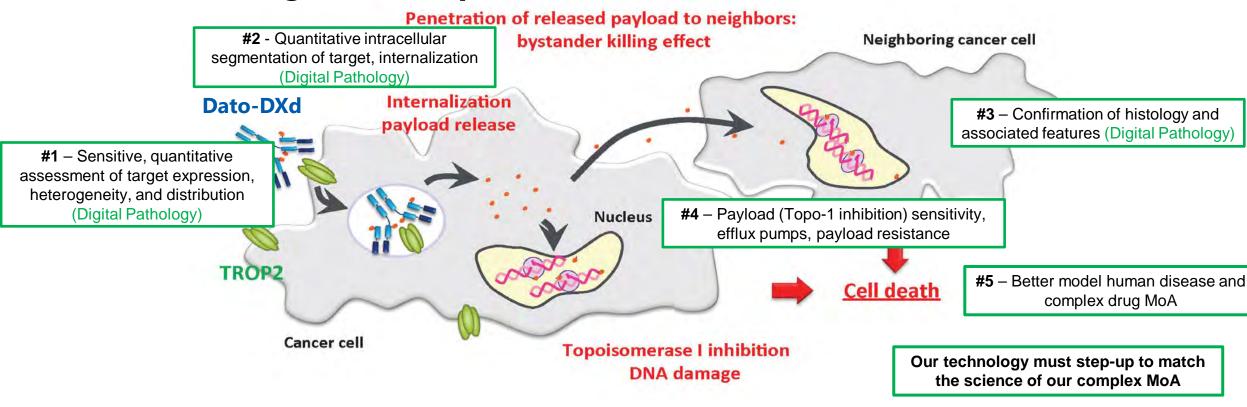
- 1 Precise, quantitative measurement of TROP2 in the membrane and cytoplasm, and their relationship, predict efficacy of Dato-DXd in NSCLC
- 2 Increased cytoplasmic expression of TROP2 identify a greater pool of cytoplasmic TROP2 capable of internalizing Dato-DXd bound to TROP2 and predict efficacy of Dato-DXd in NSCLC



Predictive Biomarkers from Focus on ADC Mechanism of Action



The mechanism of action (MoA) is more complex for DXd ADCs than conventional targeted therapies



- For conventional targeted therapies, a predictive biomarker often derives from target expression
- Target expression along with attention to key steps in the MoA may bring more success predicting efficacy
- Access to large datasets with clinical results will be critical

Daiichi Sankyo Precision Medicine



Bridge molecular science from preclinical to clinic and back

Research

Preclinical & Early Development

Late Development

Compiled Data & Biospecimens

- Preclinical research
- Patient biomarker profiles > genomics, proteomics, imaging
- Clinical study biomarkers
- Clinical study data
- External data

Disease pathophysiology Target biology and drug MoA in disease Drug-target interaction

Pharmacodynamic biomarkers Predictive biomarkers Profile biomarkers in disease PK assays

Quantitative systems pharmacology

Precise development Proof of mechanism Dose ranging Evaluate predictive BMs

THE THE PARTY OF T

Confirm dose Confirm predictive BM CDx Development Adv analytics/integrating data

BLA/NDA

- ClinPharm modules
- Dose justification
- Efficacy in biomarker subgroups CD_x PMA

Scientifically guide additional indications & drug combos

Reverse Translation:

- Rational combinations
- Drug discovery
- Disease pathophysiology
- Development strategy



Kev issues > specific hypotheses

Tools to interrogate hypotheses



Cross-project learnings



Marketing applications

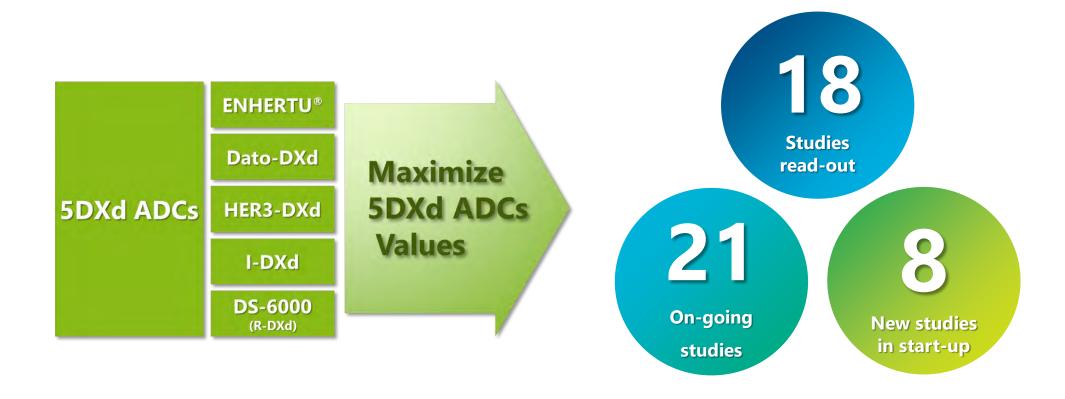
Precision Medicine

Integration of molecular science for precise early development, enable and learn from late development, provide key parts of approval dossiers





Registrational studies across 5 DXd ADCs in numerous tumor types



Learnings from 5DXd ADCs will be utilized for early asset programs

Steps to Build Digital Pathology in Daiichi Sankyo



Technology to match complex MoA of new investigational therapies

Current

- Deploy in future ADCs with BM approach
- ◆ Establish seamless integration of digital pathology from preclinical through CDx commercialization

Established

Collaborate with US Merck* on digital pathology for HER3-DXd, I-DXd, and R-DXd

Future

- Enhance Daiichi Sankyo capability for DS-3939 and other upcoming products
- Assess digital/computational pathology for immuno-oncology and other complex biologies
- Clinical translational pathology expertise interfaced with CDx
- ◆ IT infrastructure to enable global image sharing
- Collaborate with AstraZeneca to foster computational pathology for T-DXd and Dato-DXd

Overview of Pathology Expertise and Its Build



Study of causes, nature, and effects of disease **Pathology** Examine tissues, organs, and body fluids Digitization of pathology specimen (whole slide **Digital Pathology** imaging) Electronic analysis and sharing of data and reports Combines artificial intelligence and digital pathology to extract meaningful information Computational Develop algorithms to automate pathology tasks **Pathology** and processes

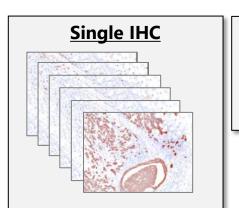
> Achieved

Established vendors

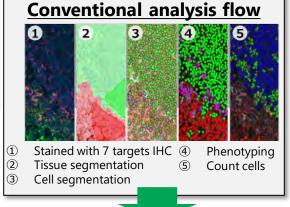
Alliance partners and internal build

High-quality AI Model for Fluorescent Multiplex IHC



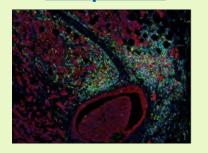


Manual scoring



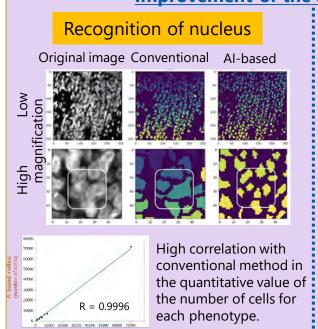
■ Established pilot model with over 20 cell phenotyping to apply for breast, colorectal and pancreas cancers, by combining the expertise of Daiichi Sankyo and LPIXEL Inc., which is one of the leading companies of image analysis AI technologies

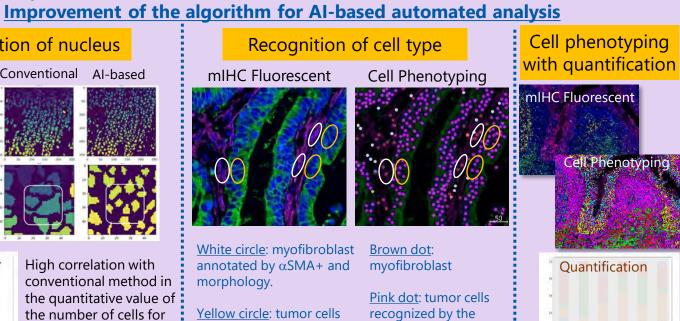




An immunostaining method, which allows the simultaneous detection of multiple markers on a single tissue section





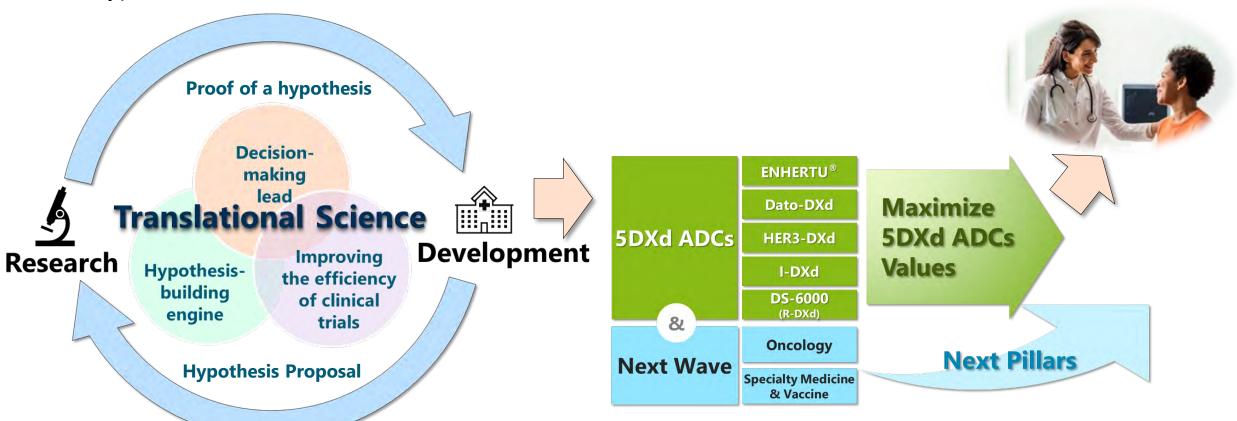


annotated by CK+.

Vision of Precision Medicine at Daiichi Sankyo



- A ROLE that is responsible for efficient clinical trials that make optimal use of biomarkers
- A FUNCTION that leads decision-making based on scientific data
- An ENGINE that continuously generates innovation by forming a loop of hypothesis proposal and hypothesis verification in clinical trials and non-clinical trials



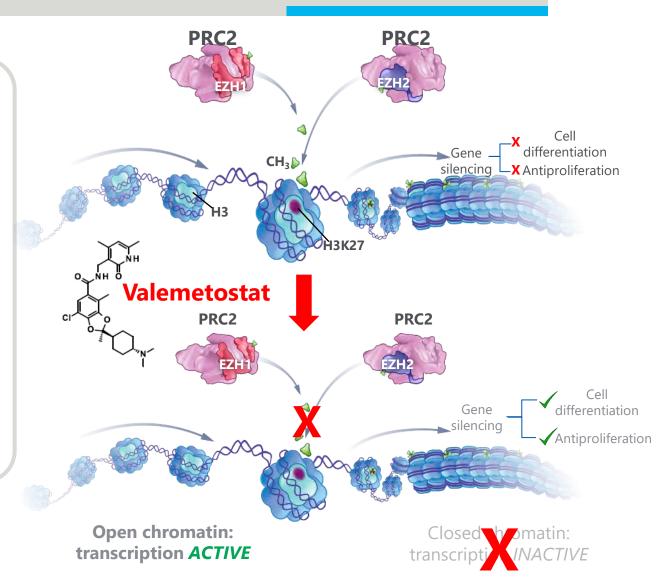
Another Example of Deep Focus on MoA: Valemetostat



Inhibition of both EZH2 and EZH1 are likely needed to fully induce pharmacological effect

Valemetostat

- A potent and selective dual inhibitor of EZH1 and EZH2, preventing the trimethylation of H3K27
- Alters gene expression patterns and attenuates the proliferation of EZH1/2-dependent cancer cells
- EZH1 has been shown to compensate for loss of EZH2 in some lymphoma models highlighting the importance of dual inhibition

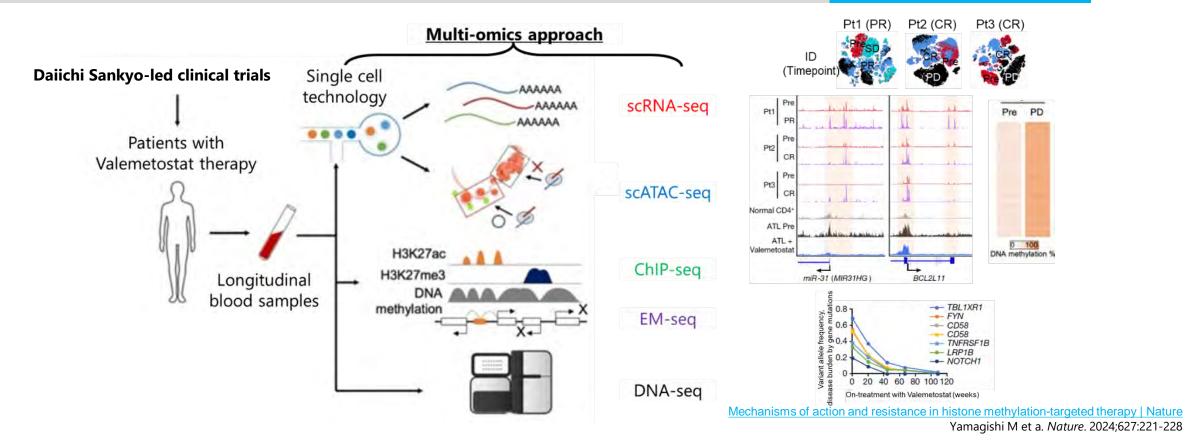


Nakagawa M, et al. AACR 2017 [abstract 4670], Nakagawa M, et al. ASH 2017 [abstract 590], Honma D, et al. Cancer Sci. 2017;108(10):2069-2078, Yamaqishi M, et al. Cell Rep. 2019;29:2321-2337

MoA; mechanism of action

Mechanistic Discovery Lays the Breakthrough of Epigenetics Therapy in Refractory Hematologic Cancer





- Integration of the multilayered omics analyses and clinical resources revealed that eliminating H3K27me3 leads to the reprogramming of the cancer epigenome, including upregulation of IO and ADC targets
- The resistant mutations appeared on the docking interface of EZH2 itself or on very pivotal epigenome factors with cooperative roles in gene silencing
- These deep insights will expand program value by rationalizing various combination studies including with ICI and/or DXd ADCs



Agenda

- **1** Opening
- 2 R&D Update
- **3 Clinical Progress**
- **4** Translational Research
- **5** ADC Manufacturing & Supply
- 6 Q&A



Career Highlights: Hiroto Kashiwase



- 2023 Executive officer, Head of Global Technology
- 2022 Executive officer, Head of Supply Chain Unit
- 2020 Corporate officer,

 Head of Pharmaceutical Technology Unit
- 2019 Head of Pharmaceutical Technology Unit
- 2017 Vice President, CMC planning Department
- 2013 Board Member of Luitpold Pharmaceuticals Inc.*1
- 2011 Daiichi Sankyo Inc.
- **2008 CMC Planning Department**
- 2005 Daiichi Sankyo Co., Ltd. Corporate Integration Promotion Department
- **2004 Corporate Management Department**
- **2001 Planning Department**
- 1993 Biological Research Laboratories II
- 1989 Bioscience Research Laboratories, Sankyo Co., Ltd.



^{*1} Currently American Regent Inc.

Agenda



- 1. Introduction of Technology Unit
- 2. ADC manufacturing process
- 3. Supply strategy for 5DXd ADCs



Agenda

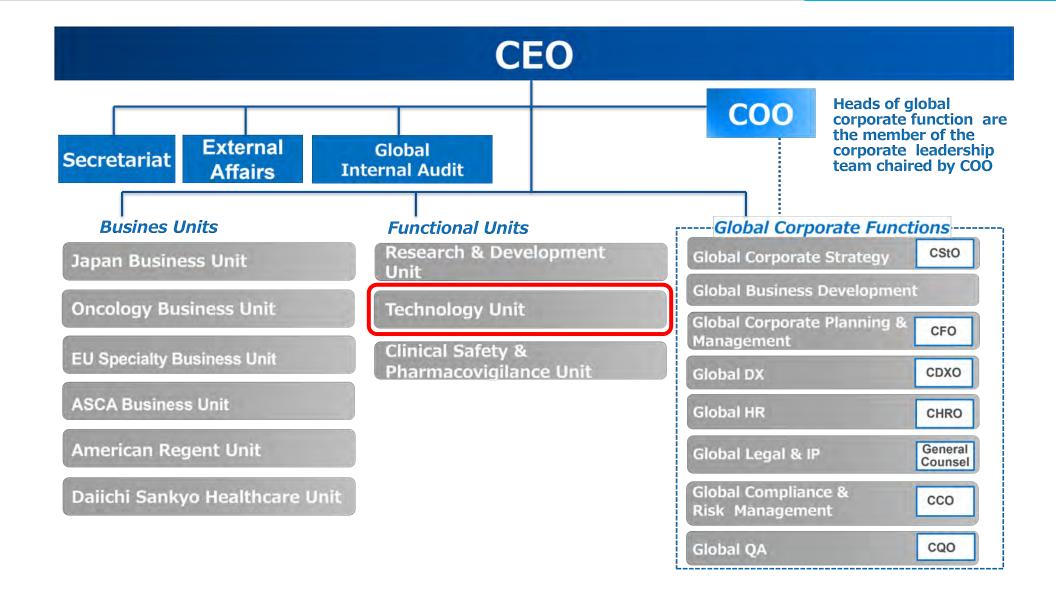


- 1. Introduction of Technology Unit
- 2. ADC manufacturing process
- 3. Supply strategy for 5DXd ADCs



Global Management Structure

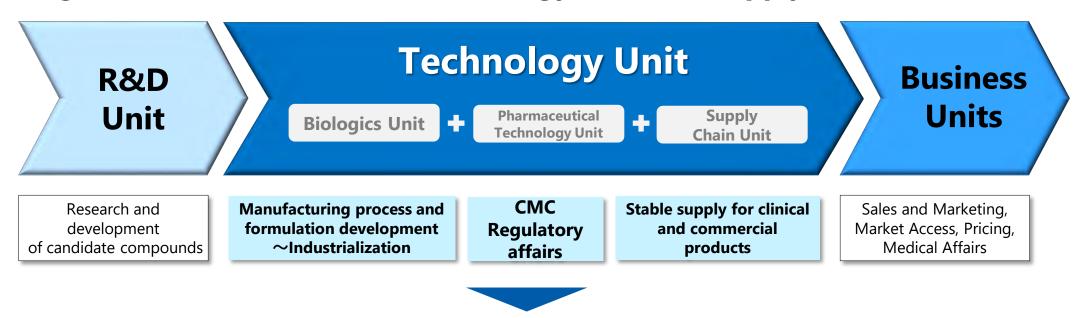




Role of Technology Unit



Launched in 2023 by integrating three units, Biologics unit, Pharmaceutical Technology unit, and Supply Chain unit



Responsible for the entire manufacturing and supply processes from early development to commercial production, Contributing to Daiichi Sankyo's "Science & Technology"

Characteristics of Technology Unit





- Strategy · Planning · General affairs · L&D*1
- CMC management
- CMC research development
- Supply chain management
- Regulatory affairs CMC
- Plant management

*1 Learning & Development



>4000 People

- More than 4,000 people are working in the Tech. Unit
- Equivalent to approx. 1/5 of the total number of Daiichi Sankyo employees

Agenda



- 1. Introduction of Technology Unit
- 2. ADC manufacturing process
- 3. Supply strategy for 5DXd ADCs

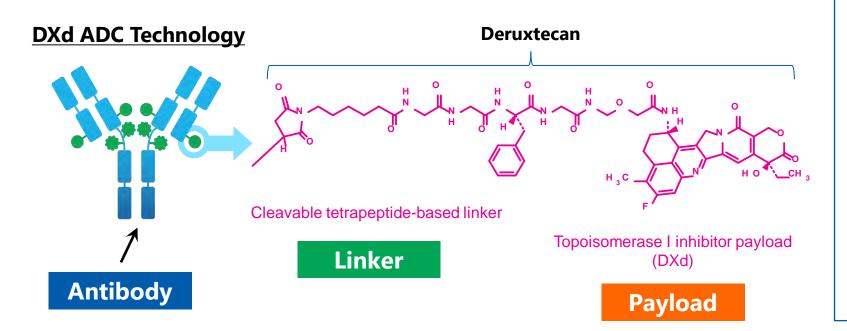


Attributes of DXd ADC Technology



DXd ADCs has 3 components

- Antibody: A tumor-selective antibody
- Linker: A tetrapeptide-based cleavable linker that covalently bonds the antibody and payload
- Payload: A topoisomerase I inhibitor (an exatecan derivative, DXd)



7 Key Attributes of DXd ADC

- Payload MoA: Topoisomerase I inhibitor
- High potency of payload
- High drug to antibody ratio (DAR)
- Stable linker-payload
- Payload with short systemic half-life
- Tumor-selective cleavable linker
- Bystander antitumor effect*1

76 MoA; mechanism of action

^{*1} The effect of the payload released within cancer cells acting on surrounding cancer cells

5DXd ADCs



- Utilizing our unique ADC technology (DXd ADC Technology), high product value is anticipated
- Although the payload is the same, the target antigens and the average number of drug bindings (DAR) differ

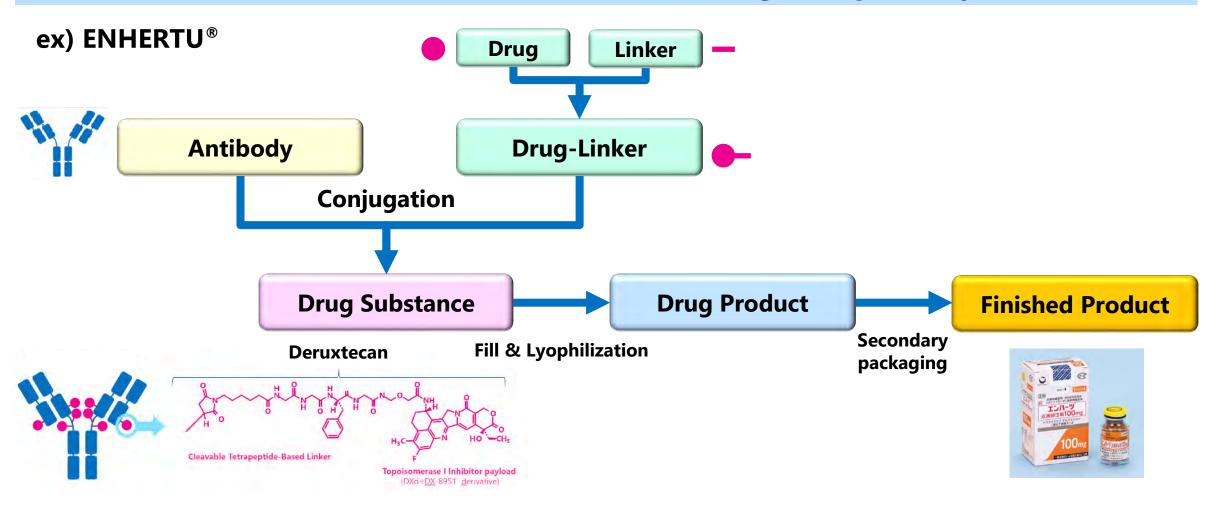
	ENHERTU®	Dato-DXd	HER3-DXd	I-DXd	DS-6000 (R-DXd)
ADC image					
Generic name	Trastuzumab deruxtecan	Datopotamab deruxtecan	Patritumab deruxtecan	Ifinatamab deruxtecan	Raludotatug deruxtecan*
Target antigens	HER2	TROP2	HER3	В7-Н3	CDH6

^{*}Japanese Accepted Names for Pharmaceuticals, JAN undecided

ADC Manufacturing Process



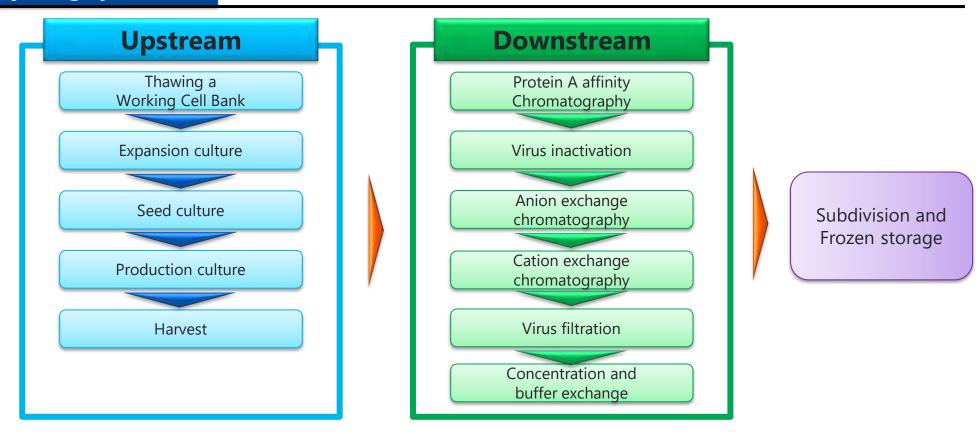
ADCs are composed of multiple components, which are manufactured and managed separately



Manufacturing Process of Antibody



Antibody mfg. process

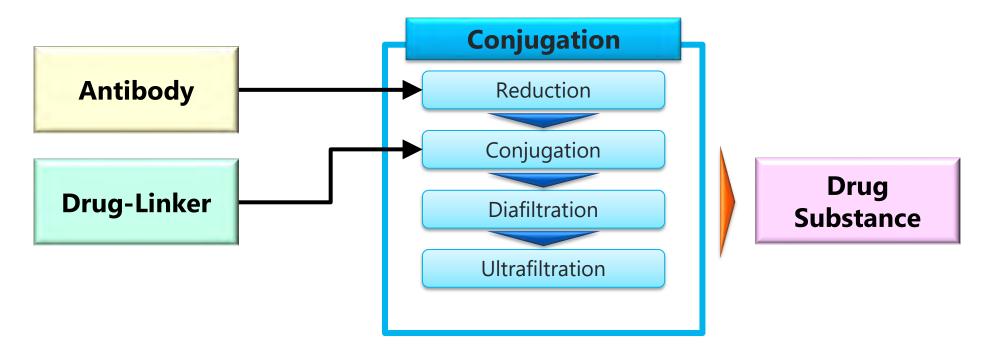


- Upstream process: Gradually scale up the culture to proliferate cells to a certain density and produce antibodies
- Downstream process: Remove impurities and viruses efficiently to obtain high purity target antibodies

Manufacturing Process of Drug Substance



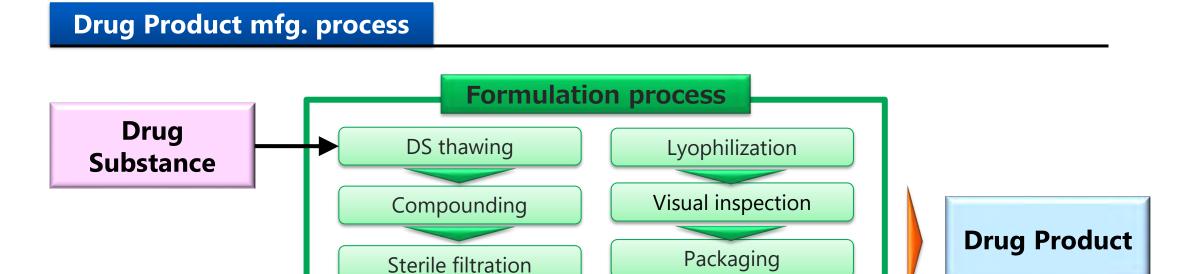
Drug Substance mfg. process



- The synthesis is achieved by reducing the disulfide bonds of the antibody and conjugating it with drug-linkers
- The drug to antibody ratio can be highly controlled through elaborate design and management of the manufacturing process. It enables high-quality drug substance production with good reproducibility

Manufacturing Process of Drug Product





■ Lyophilization technology allows long shelf-life while retaining the properties of the drug substance

Filling

Agenda



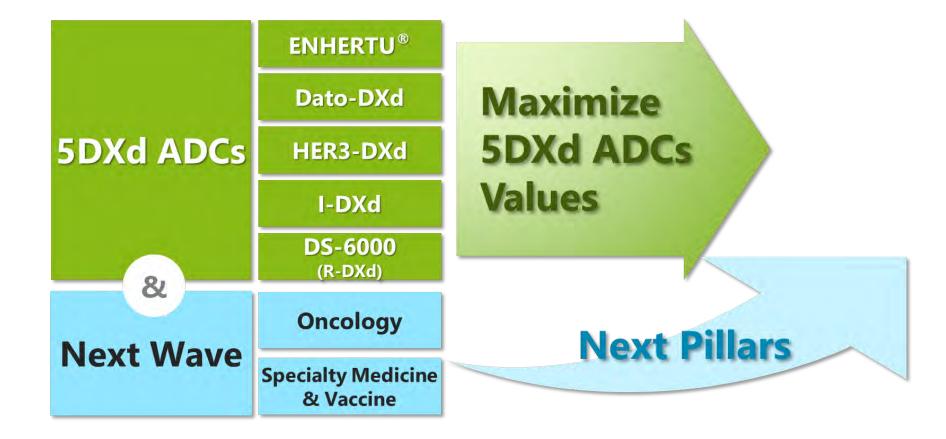
- 1. Introduction of Technology Unit
- 2. ADC manufacturing process
- 3. Supply strategy for 5DXd ADCs



5DXd ADCs and Next Wave



The most important challenge for Technology Unit Stable deliver of our promising 5DXd ADCs to patients



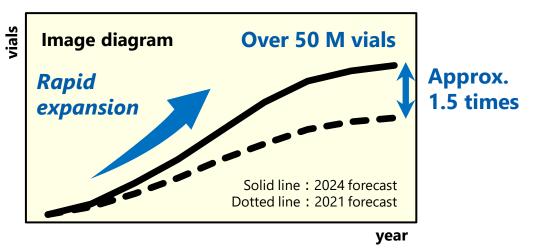
Rapid Expansion of Demand for 5DXd ADCs



With strong progress of clinical development, the overall demand forecast for 5DXd ADCs has significantly increased.

- Strong progress of Enhertu[®],
 Product sales forecast for FY2024 : 508.4 Bn yen
- The emergence of a new growth driver following 3ADC (3ADCs ⇒ 5DXd ADCs)
- Strategic partnership with AstraZeneca (Enhertu®, Dato-DXd) and US Merck* (HER3-DXd, I-DXd, DS-6000)

■ A demand of over 50 M vials*1 is expected for 5DXd ADCs in total. (Approx. 1.5 times*2 increased compared to the original demand forecast in the 5-Year Business Plan (FY2021-FY2025))





- *1 Number of vials required per year at peak time (Total of 5DXd ADCs)
- *2 Comparison with number of vials required per year at peak time calculated in the 5-Year Business Plan

It is essential to establish a supply system that can meet peak demand for 5DXd ADCs in total (Over 50 M vials)

^{*} Merck & Co., Inc., Rahway, NJ, USA

Supply Strategy for 5DXd ADCs

Capability



Capacity (Expansion of production capacity)

X

Capability (Improvement of productivity)



Maximization of supply volume

- Further improvement of productivity by leveraging technology.
- Development and strengthening of biotechnology specialist
- Transformation into a highproductivity organization

Maximize 5DXd ADCs
Supply Volume

Capacity

- I Enhancement of production capacity through capital investment
- Establishment and expansion of a global supply system

Enhancement of Supply Capacity through Capital Investment in in-house and CMOs



86



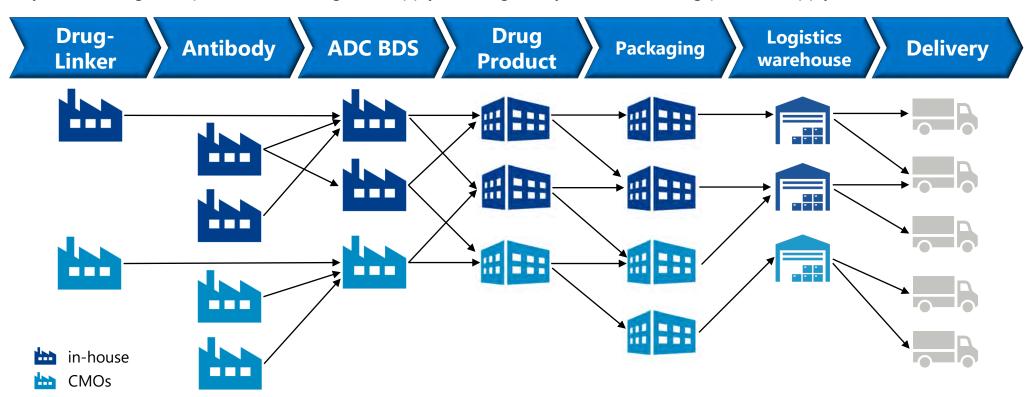
CMO; contract manufacturing organization

Establishment and Expansion of a Global Supply System



Multiple manufacturing and supply routes have been established by effectively utilizing both in-house and CMOs

- By effectively utilizing both in-house and CMOs, we have secured supply capacity to adjust to the rapid increase in demand
- By establishing multiple manufacturing and supply routes globally, we are reducing product supply risks



*The above supply routes are an image and differs from the actual supply system

Improvement of Productivity through Technological Enhancements



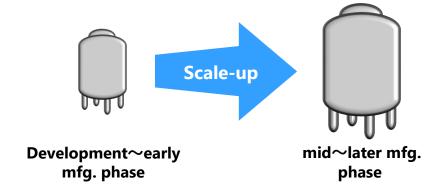
By continuously strengthening our technology, we will achieve further improvements in productivity and stable production.

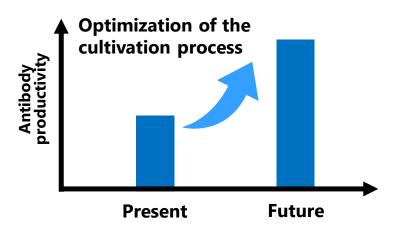
■ Scale-up of manufacturing processes

✓ Improvement of productivity through the scale-up of manufacturing processes for antibodies, Drug Substance, and Drug Products

Optimization of the antibody manufacturing process

✓ Enhancing the productivity of antibodies by utilizing highly productive cell lines and optimizing the cultivation process (such as medium improvement and culture conditions)





Development and Strengthening of Biotechnology Specialist



Developing and strengthening biotechnology specialist is essential for the development and stable supply of ADC products

Priority area

Target profile

Development of antibody manufacturing processes

QC, QA, RA, manufacturing

A person who has a deep understanding of the manufacturing processes involved in biopharmaceuticals and can carry out process development research that contributes to drug discovery research for biopharmaceuticals and cost reduction for 5DXd ADCs.

A person who understands the manufacturing processes of biopharmaceuticals and can utilize their expertise to promote biopharmaceutical-related activities within the technology unit and throughout the entire value chain.

Quality

Assurance Dept.

- Proactive recruitment activities and effective utilization of internal talent through reskilling
- Implementation of training programs to accelerate people development of biotechnology specialist
- Seamless personnel exchange through the integration of organizations and functions

Training program for antibody manufacturing operators Related departments collaborate to promote the training of operators throughout the year. Q1 Q2 Q3 Q4 Theoretical education pilot-scale training pilot-scale training Theoretical education Mfg.OJT(Clinical) Theoretical education Mfg.OJT(Commercial)

Fundamental

training

GMP regular training



Agenda

- **1** Opening
- 2 R&D Update
- **3 Clinical Progress**
- **4** Translational Research
- **5** ADC Manufacturing & Supply
- 6 Q&A



Contact address regarding this material

Daiichi Sankyo Co., Ltd.

Corporate Communications Department

TEL: +81-3-6225-1125

Email: DaiichiSankyolR_jp@daiichisankyo.com