Clinical trial results:
Phase 2, Single-arm, Open-label Study of DS-1062a in Advanced or Metastatic Non-small Cell Lung Cancer with Actionable Genomic Alterations and Progressed on or After Kinase Inhibitor Therapy and Platinum-based Chemotherapy (TROPION-Lung05)

Summary

EudraCT number	2020-002774-27
Trial protocol	DE FR HU NL IT
Global end of trial date	

Results information

Result version number	v1 (current)
This version publication date	29 March 2025
First version publication date	29 March 2025

Trial information

Trial identification

Sponsor protocol code	DS1062-A-U202

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04484142
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Daiichi Sankyo Inc.
Sponsor organisation address	211 Mt. Airy Rd. , Basking Ridge, United States, 07920
Public contact	Global Clinical Director, Daiichi Sankyo Inc., 1 908-992-6400, CTRinfo_us@daiichisankyo.com
Scientific contact	Global Clinical Director, Daiichi Sankyo Inc., 1 908-992-6400, CTRinfo_us@daiichisankyo.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Interim
Date of interim/final analysis	09 March 2023
Is this the analysis of the primary completion data?	Yes
Primary completion date	09 March 2023
Global end of trial reached?	No

Notes:

General information about the trial

Main objective of the trial:

To estimate the antitumor activity of DS-1062a among subjects with advanced or metastatic NSCLC with actionable genomic alterations that has progressed on or after one or more kinase inhibitors and platinum-based chemotherapy, as measured by the overall response rate (ORR) as assessed by blinded independent central review (BICR) per Response Evaluation Criteria in Solid Tumors version 1.1 (RECIST v1.1).

Protection of trial subjects:

The study protocol, amendments, the informed consent form(s) (ICF[s]), and information sheets were approved by the appropriate and applicable Independent Ethics Committees (IECs) or Institutional Review Boards (IRBs). The study was conducted in compliance with the protocol, the ethical principles that have their origin in the Declaration of Helsinki, the International Council for Harmonisation (ICH) consolidated Guideline E6 for Good Clinical Practice (GCP) (CPMP/ICH/135/95), and applicable regulatory requirement(s).

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	30 March 2021
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	United States: 39
Country: Number of subjects enrolled	Japan: 32
Country: Number of subjects enrolled	Korea, Republic of: 26
Country: Number of subjects enrolled	Taiwan: 8
Country: Number of subjects enrolled	France: 17
Country: Number of subjects enrolled	Germany: 1
Country: Number of subjects enrolled	Italy: 2
Country: Number of subjects enrolled	Netherlands: 5
Country: Number of subjects enrolled	Spain: 7
Worldwide total number of subjects	137
EEA total number of subjects	32

Notes:

Subjects enrolled per age group

In utero	0

Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	91
From 65 to 84 years	46
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

A total of 137 participants who met all inclusion criteria and no exclusion criteria were enrolled to receive Dato-DXd treatment in 50 clinical sites, North America= 15, Europe= 14, Asia Pacific= 21.

Pre-assignment

Screening details:

A total of 203 participants were screened and 66 participants failed screening.

Period 1

Period 1 title	Overall Study (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Arm title	Dato DXd 6.0 mg/kg Q3W

Arm description:

Participants received an intravenous (IV) infusion of Dato DXd administered at a dose of 6.0 mg/kg every 3 weeks (Q3W) on Day 1 of each 21-day cycle.

Arm type	Experimental
Investigational medicinal product name	Dato-DXd
Investigational medicinal product code	
Other name	DS-1062a
Pharmaceutical forms	Powder and solvent for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

IV infusion of Dato DXd administered at a dose of 6.0 mg/kg Q3W

Number of subjects in period 1	Dato DXd 6.0 mg/kg Q3W
Started	137
Completed	20
Not completed	117
Consent withdrawn by subject	6
Physician decision	1
Adverse event, non-fatal	13
Progressive Disease	87
Clinical Progression	10

Baseline characteristics

Reporting groups	
Reporting group title	Dato DXd 6.0 mg/kg Q3W
Reporting group description:	
Participants received an intravenous (IV) infusion of Dato DXd administered at a dose of 6.0 mg/kg every 3 weeks (Q3W) on Day 1 of each 21-day cycle.	

Reporting group values	Dato DXd 6.0 mg/kg Q3W	Total	
Number of subjects	137	137	
Age Categorical Units: Subjects			
Age continuous Units: years			
arithmetic mean	59.5		
standard deviation	± 11.15	-	
Gender categorical Units: Subjects			
Female	83	83	
Male	54	54	
Race (NIH/OMB) Units: Subjects			
American Indian or Alaska Native	0	0	
Asian	78	78	
Native Hawaiian or Other Pacific Islander	0	0	
Black or African American	0	0	
White	43	43	
More than one race	15	15	
Unknown or Not Reported	1	1	

End points

End points reporting groups

Reporting group title	Dato DXd 6.0 mg/kg Q3W

Reporting group description:

Participants received an intravenous (IV) infusion of Dato DXd administered at a dose of 6.0 mg/kg every 3 weeks (Q3W) on Day 1 of each 21-day cycle.

Primary: Percentage of Participants With Objective Response Rate (ORR) Based on Blinded Independent Central Review (BICR)

End point title	Percentage of Participants With Objective Response Rate (ORR) Based on Blinded Independent Central Review (BICR)[1]

End point description:

ORR is defined as the proportion of participants with a best overall response of confirmed complete response (CR) or confirmed partial response (PR) per Response Evaluation Criteria in Solid Tumors (RECIST) version 1.1.

End point type	Primary

End point timeframe:

From baseline until disease progression, death, or other protocol defined reason, up to approximately 24 months.

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: No statistical analyses for this end point

End point values	Dato DXd 6.0 mg/kg Q3W			
Subject group type	Reporting group			
Number of subjects analysed	137			
Units: percentage of participants				
number (confidence interval 95%)	35.8 (27.8 to 44.4)			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events (AE) were collected from the date of first treatment, up to 24 months.

Adverse event reporting additional description:

A treatment-emergent adverse event (TEAE) is defined as an adverse event with a start or worsening date on or after the start of study treatment until 35 days since the last dose of study treatment.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	25.1

Reporting groups

Reporting group title	Dato DXd 6.0 mg/kg Q3W

Reporting group description:

Participants received an intravenous (IV) infusion of Dato DXd administered at a dose of 6.0 mg/kg every 3 weeks (Q3W) on Day 1 of each 21-day cycle.

Serious adverse events	Dato DXd 6.0 mg/kg Q3W		
Total subjects affected by serious adverse events			
subjects affected / exposed	34 / 137 (24.82%)		
number of deaths (all causes)	68		
number of deaths resulting from adverse events	2		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Tumour associated fever			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Non-small cell lung cancer			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Vascular disorders			
Deep vein thrombosis			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			

Fatigue			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Immune system disorders			
Hypersensitivity			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
subjects affected / exposed	4 / 137 (2.92%)		
occurrences causally related to treatment / all	0 / 4		
deaths causally related to treatment / all	0 / 1		
Pneumonitis			
subjects affected / exposed	3 / 137 (2.19%)		
occurrences causally related to treatment / all	1 / 4		
deaths causally related to treatment / all	0 / 0		
Bronchial obstruction			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pharyngeal inflammation			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Mental status changes			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Confusional state			

subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Investigations			
Oxygen saturation decreased			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ejection fraction decreased			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Spinal cord compression			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hypoxic-ischaemic encephalopathy			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Headache			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Dizziness			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Cerebral infarction			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Aphasia			

subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Eye disorders			
Cataract			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Glaucoma			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Vomiting			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Stomatitis			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Gastric perforation			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Dysphagia			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Abdominal pain upper			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			

Hepatic function abnormal			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Soft tissue swelling			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Herpes zoster			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
COVID-19 pneumonia			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
COVID-19			
subjects affected / exposed	2 / 137 (1.46%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Septic shock			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Influenza			
subjects affected / exposed	1 / 137 (0.73%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	Dato DXd 6.0 mg/kg Q3W		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	135 / 137 (98.54%)		
Investigations			
Weight decreased			
subjects affected / exposed	14 / 137 (10.22%)		
occurrences (all)	14		
Amylase increased			
subjects affected / exposed	12 / 137 (8.76%)		
occurrences (all)	17		
Aspartate aminotransferase increased			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	9		
Blood creatinine increased			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	12		
Neutrophil count decreased			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	10		
Alanine aminotransferase increased			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	10		
White blood cell count decreased			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	13		
Injury, poisoning and procedural complications			
Infusion related reaction			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	9		
Nervous system disorders			
Dysgeusia			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	8		
Dizziness			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	9		

Headache			
subjects affected / exposed	14 / 137 (10.22%)		
occurrences (all)	14		
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	21 / 137 (15.33%)		
occurrences (all)	24		
Blood alkaline phosphatase increased			
subjects affected / exposed	7 / 137 (5.11%)		
occurrences (all)	8		
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	34 / 137 (24.82%)		
occurrences (all)	40		
Asthenia			
subjects affected / exposed	21 / 137 (15.33%)		
occurrences (all)	35		
Pyrexia			
subjects affected / exposed	14 / 137 (10.22%)		
occurrences (all)	17		
Malaise			
subjects affected / exposed	11 / 137 (8.03%)		
occurrences (all)	13		
Oedema peripheral			
subjects affected / exposed	7 / 137 (5.11%)		
occurrences (all)	7		
Eye disorders			
Vision blurred			
subjects affected / exposed	12 / 137 (8.76%)		
occurrences (all)	12		
Dry eye			
subjects affected / exposed	15 / 137 (10.95%)		
occurrences (all)	16		
Keratitis			
subjects affected / exposed	7 / 137 (5.11%)		
occurrences (all)	7		

Gastrointestinal disorders Constipation subjects affected / exposed occurrences (all) Vomiting subjects affected / exposed occurrences (all) Diarrhoea subjects affected / exposed occurrences (all) Stomatitis subjects affected / exposed occurrences (all) Nausea subjects affected / exposed occurrences (all)	 43 / 137 (31.39%) 47 31 / 137 (22.63%) 41 17 / 137 (12.41%) 19 79 / 137 (57.66%) 89 82 / 137 (59.85%) 117		
Respiratory, thoracic and mediastinal disorders Oropharyngeal pain subjects affected / exposed occurrences (all) Dyspnoea subjects affected / exposed occurrences (all) Cough subjects affected / exposed occurrences (all)	 8 / 137 (5.84%) 8 15 / 137 (10.95%) 16 20 / 137 (14.60%) 21		
Skin and subcutaneous tissue disorders Rash subjects affected / exposed occurrences (all) Alopecia subjects affected / exposed occurrences (all) Rash maculo-papular subjects affected / exposed occurrences (all)	 21 / 137 (15.33%) 27 70 / 137 (51.09%) 71 10 / 137 (7.30%) 11		

Pruritus			
subjects affected / exposed	14 / 137 (10.22%)		
occurrences (all)	14		
Musculoskeletal and connective tissue disorders			
Myalgia			
subjects affected / exposed	7 / 137 (5.11%)		
occurrences (all)	7		
Back pain			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	8		
Infections and infestations			
COVID-19			
subjects affected / exposed	20 / 137 (14.60%)		
occurrences (all)	20		
Metabolism and nutrition disorders			
Hyponatraemia			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	11		
Hypoalbuminaemia			
subjects affected / exposed	8 / 137 (5.84%)		
occurrences (all)	9		
Hypokalaemia			
subjects affected / exposed	9 / 137 (6.57%)		
occurrences (all)	10		
Decreased appetite			
subjects affected / exposed	37 / 137 (27.01%)		
occurrences (all)	44		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
25 September 2023	The main purpose of this amendment to Study DS1062-A-U202 is to update safety information based on a review of the emerging data across the Dato-DXd clinical development program. Additional changes are made to add clarity to the protocol language and to ensure consistency with other studies in the development program.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported