



Clinical trial results: Phase II Study of Trastuzumab-Deruxtecan (T-DX; DS-8201a) in HER2-positive Breast Cancer Patients with newly diagnosed or progressing Brain Metastases

Summary

EudraCT number	2020-000981-41
Trial protocol	AT
Global end of trial date	16 November 2023

Results information

Result version number	v1 (current)
This version publication date	01 August 2024
First version publication date	01 August 2024

Trial information

Trial identification

Sponsor protocol code	TUXEDO-1
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04752059
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	MedUniWien
Sponsor organisation address	Spitalgasse 23, Vienna, Austria, 1090
Public contact	Marika Rosner, Med. Univ. Wien, Klinik f. Innere Mdizin I, Onkologie, +43 14040044450, marika.rosner@meduniwien.ac.at
Scientific contact	Rupert Bartsch, Med. Univ. Wien, Klinik f. Innere Mdizin I, Onkologie, +43 14040044450, rupert.bartsch@meduniwien.ac.at

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	Final
Date of interim/final analysis	16 November 2023
Is this the analysis of the primary completion data?	Yes
Primary completion date	16 November 2023
Global end of trial reached?	Yes
Global end of trial date	16 November 2023
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate the ability of trastuzumab-deruxtecan to induce CNS responses in patients with HER2-positive breast cancer and newly diagnosed multiple brain metastases.

Protection of trial subjects:

CT thorax/abdomen and MRI brain every 9 weeks

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 June 2020
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	Austria: 15
Worldwide total number of subjects	15
EEA total number of subjects	15

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)	8
From 65 to 84 years	7
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

15 patients were enrolled at the University Hospital Vienna

Pre-assignment

Screening details:

15 patients were screened according to the inclusion and exclusion criteria

Period 1

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

Arms

Arm title	Treatment arm
Arm description: -	
Arm type	Experimental
Investigational medicinal product name	Trastuzumab-Deruxtecan
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

5,4mg/kg intravenous every 3 weeks

Number of subjects in period 1	Treatment arm
Started	15
Completed	15

Baseline characteristics

Reporting groups

Reporting group title	Overall trial
Reporting group description: -	

Reporting group values	Overall trial	Total	
Number of subjects	15	15	
Age categorical			
Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	12	12	
From 65-84 years	3	3	
85 years and over	0	0	
Age continuous			
Units: years			
median	69		
full range (min-max)	30 to 76	-	
Gender categorical			
Units: Subjects			
Female	14	14	
Male	1	1	

Subject analysis sets

Subject analysis set title	Objective response rate
Subject analysis set type	Per protocol
Subject analysis set description:	
Simon's two-stage phase II design	

Reporting group values	Objective response rate		
Number of subjects	15		
Age categorical			
Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	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)	12		

From 65-84 years	3		
85 years and over	0		

Age continuous Units: years median full range (min-max)			
Gender categorical Units: Subjects			
Female	14		
Male	1		

End points

End points reporting groups

Reporting group title	Treatment arm
Reporting group description: -	
Subject analysis set title	Objective response rate
Subject analysis set type	Per protocol
Subject analysis set description: Simon's two-stage phase II design	

Primary: Overall trial

End point title	Overall trial
End point description:	
End point type	Primary
End point timeframe: From baseline until end of treatment	

End point values	Treatment arm	Objective response rate		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	15	15		
Units: 22				
number (not applicable)	15	15		

Statistical analyses

Statistical analysis title	Objective responses rate
Comparison groups	Treatment arm v Objective response rate
Number of subjects included in analysis	30
Analysis specification	Pre-specified
Analysis type	other ^[1]
P-value	< 0.05
Method	Simon's two stage design

Notes:

[1] - descriptive statistics

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From the time of signing the informed consent through to the end of the designated follow-up period.

Assessment type	Systematic
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Dictionary used

Dictionary name	NCI CTCAE
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Dictionary version	5.0
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Reporting groups

Reporting group title	Treatment related Adverse Events
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Reporting group description: -

Serious adverse events	Treatment related Adverse Events		
Total subjects affected by serious adverse events			
subjects affected / exposed	8 / 15 (53.33%)		
number of deaths (all causes)	6		
number of deaths resulting from adverse events	0		
Cardiac disorders			
Ejection fraction decreased			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Seizure			
subjects affected / exposed	1 / 15 (6.67%)		
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 / 15 (6.67%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Psychosis			

subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Pain			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
lung infection			
subjects affected / exposed	2 / 15 (13.33%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		
Sepsis			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Urinary tract infection			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Fever			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 3 %

Non-serious adverse events	Treatment related Adverse Events		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	15 / 15 (100.00%)		
Nervous system disorders			
Peripheral sensory neuropathy			

subjects affected / exposed occurrences (all)	3 / 15 (20.00%) 3		
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	8 / 15 (53.33%)		
occurrences (all)	8		
Neutropenia			
subjects affected / exposed	7 / 15 (46.67%)		
occurrences (all)	7		
Thrombocytopenia			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences (all)	1		
General disorders and administration site conditions			
edema			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences (all)	1		
Fatigue			
subjects affected / exposed	12 / 15 (80.00%)		
occurrences (all)	12		
Gastrointestinal disorders			
Constipation			
subjects affected / exposed	5 / 15 (33.33%)		
occurrences (all)	5		
Diarrhoea			
subjects affected / exposed	3 / 15 (20.00%)		
occurrences (all)	3		
Nausea			
subjects affected / exposed	7 / 15 (46.67%)		
occurrences (all)	7		
Vomiting			
subjects affected / exposed	5 / 15 (33.33%)		
occurrences (all)	5		
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
subjects affected / exposed	2 / 15 (13.33%)		
occurrences (all)	2		

Skin and subcutaneous tissue disorders Alopecia subjects affected / exposed occurrences (all) Palmar-plantar erythrodysesthesia syndrome subjects affected / exposed occurrences (all)	 7 / 15 (46.67%) 7 1 / 15 (6.67%) 1		
Infections and infestations shingles subjects affected / exposed occurrences (all) thrush subjects affected / exposed occurrences (all)	 2 / 15 (13.33%) 2 4 / 15 (26.67%) 4		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported