EU Clinical Trials Register

Clinical trial results:
An Open-Label, Multicohort, Phase II Study of Atezolizumab in Advanced Solid Tumors

EudraCT number	2015-000269-30
Trial protocol	DE NL IE AT ES FI GB DK PL FR IT
Global end of trial date	28 July 2020

Result version number	v1 (current)
This version publication date	09 April 2021
First version publication date	09 April 2021

Sponsor protocol code	MO29518

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02458638
WHO universal trial number (UTN)	-

Notes:

Sponsor organisation name	F. Hoffmann-La Roche AG
Sponsor organisation address	Grenzacherstrasse 124, Basel, Switzerland, CH-4070
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Notes:

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:

Analysis stage	Final
Date of interim/final analysis	21 December 2019
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	28 July 2020
Was the trial ended prematurely?	No

Notes:

Main objective of the trial:

The primary efficacy objective of this study was to evaluate non-progression rate (NPR) at 18 weeks in participants with advanced solid tumors treated with atezolizumab, defined as the percentage of participants with complete response (CR), partial response (PR), or stable disease (SD) as assessed by the investigator according to Response Evaluation Criteria in Solid Tumors (RECIST) Version (v) 1.1, or according to disease-specific criteria for prostate cancer and malignant pleural mesothelioma.

Protection of trial subjects:

All study subjects were required to read and sign an Informed Consent Form

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	16 July 2015
Long term follow-up planned	Yes
Long term follow-up rationale	Efficacy, Safety
Long term follow-up duration	24 Months
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Country: Number of subjects enrolled	Austria: 2
Country: Number of subjects enrolled	Brazil: 17
Country: Number of subjects enrolled	Canada: 28
Country: Number of subjects enrolled	Switzerland: 14
Country: Number of subjects enrolled	Germany: 7
Country: Number of subjects enrolled	Denmark: 27
Country: Number of subjects enrolled	Spain: 33
Country: Number of subjects enrolled	Finland: 8
Country: Number of subjects enrolled	France: 36
Country: Number of subjects enrolled	United Kingdom: 7
Country: Number of subjects enrolled	Ireland: 15
Country: Number of subjects enrolled	Italy: 92
Country: Number of subjects enrolled	Netherlands: 31
Country: Number of subjects enrolled	Norway: 21
Country: Number of subjects enrolled	Poland: 56
Country: Number of subjects enrolled	Russian Federation: 11
Country: Number of subjects enrolled	Turkey: 20

Country: Number of subjects enrolled	United States: 49
Worldwide total number of subjects	474
EEA total number of subjects	328

Notes:

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)	351
From 65 to 84 years	121
85 years and over	2

Recruitment details:

Participants were enrolled at 47 sites in 18 countries: Austria, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Poland, Russian Federation, Spain, Switzerland, Turkey, United Kingdom and United States.

Screening details:

Participants with advanced solid tumors were eligible to enroll in the study.

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

	Atezolizumab

Arm description:

Atezolizumab 1200 milligrams (mg) was administered by intravenous (IV) infusion on Day 1 of each 3-week cycle until disease progression or unacceptable toxicity.

Arm type	Experimental
Investigational medicinal product name	atezolizumab
Investigational medicinal product code	
Other name	Tecentriq MPDL3280A
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Atezolizumab 1200 mg was administered by IV infusion on Day 1 of each 3-week cycle.

	Atezolizumab
Started	474
Completed	15
Not completed	459
Adverse event, serious fatal	309
Physician decision	1
Consent withdrawn by subject	47
Other Reasons	4
End of Cohort/End of Study	67
Lost to follow-up	31

Reporting group title	Atezolizumab

Reporting group description:

Atezolizumab 1200 milligrams (mg) was administered by intravenous (IV) infusion on Day 1 of each 3-week cycle until disease progression or unacceptable toxicity.

	Atezolizumab	Total	
Number of subjects	474	474	
Age categorical Units: Subjects			
Adults (18-64 years)	351	351	
From 65-84 years	121	121	
85 years and over	2	2	
Age Continuous Units: years			
arithmetic mean	53.7		
standard deviation	± 13.9	-	
Sex: Female, Male Units: participants			
Female	233	233	
Male	241	241	

Reporting group title	Atezolizumab

Reporting group description:

Atezolizumab 1200 milligrams (mg) was administered by intravenous (IV) infusion on Day 1 of each 3-week cycle until disease progression or unacceptable toxicity.

End point title	Non-progression Rate (NPR) at 18 Weeks[1]

End point description:

NPR: percentage of participants with complete response (CR), partial response (PR) or stable disease (SD) as assessed by the Investigator according to RECIST v1.1 or according to Malignant Pleural Mesothelioma Response Evaluation Criteria. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions in the absence of CR. SD: Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for progressive disease (PD). PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. For prostate cancer according to Prostate Response Evaluation Criteria. CR: PSA <5 ng/ml measured twice at least 3 weeks apart or PSA response: PSA < 50% of the PSA reference value after treatment was initiated. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor assessment and at least one tumor assessment post-baseline) participants.

Primary

Known Translocation-Related Sarcomas (n=26)	23.1 (9.0 to 43.6)			
Radiation Induced Sarcoma (n=8)	25.0 (3.2 to 65.1)			
Osteosarcoma (n=11)	45.5 (16.7 to 76.6)			
Chondrosarcoma (n=12)	16.7 (2.1 to 48.4)			
Pleural Mesothelioma (n=13)	38.5 (13.9 to 68.4)			
Peritoneal Mesothelioma (n=14)	42.9 (17.7 to 71.1)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	15.4 (1.9 to 45.4)			
Anaplastic Thyroid Cancer (TC) (n=15)	6.7 (0.2 to 31.9)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	54.5 (23.4 to 83.3)			
Medullary/Follicular/Papillary TC (n=7)	28.6 (3.7 to 71.0)			
Gastric/GE Junction Adenocarcinoma (n=14)	21.4 (4.7 to 50.8)			
Malignant Germ Cell Tumors (n=14)	7.1 (0.2 to 33.9)			
ER+/HER2- Hypermutated MBC (n=12)	8.3 (0.2 to 38.5)			
Thymoma (n=13)	76.9 (46.2 to 95.0)			
Thymic cancer (n=12)	41.7 (15.2 to 72.3)			
Low/Intermediate Grade Carcinoid (n=12)	58.3 (27.7 to 84.8)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	25.0 (5.5 to 57.2)			
Head and Neck Squamous Cell Carcinoma (n=6)	33.3 (4.3 to 77.7)			
Penile Cancer (n=4)	0 (0 to 60.2)			
Anal Cancer (n=11)	18.2 (2.3 to 51.8)			
Known MSI High or MMR Deficient Tumors (n=10)	40.0 (12.2 to 73.8)			

No statistical analyses for this end point

End point title	NPR at 24 Weeks

End point description:

NPR: percentage of participants with complete response (CR), partial response (PR) or stable disease (SD) as assessed by the Investigator according to RECIST v1.1 or according to Malignant Pleural Mesothelioma Response Evaluation Criteria. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions in the absence of CR. SD: Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for progressive disease (PD). PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. For prostate cancer according to Prostate Response Evaluation Criteria. CR: PSA <5 ng/ml measured twice at least 3 weeks apart or PSA response: PSA < 50% of the PSA reference value after treatment was initiated. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor

assessment and at least one tumor assessment post-baseline) participants.

End point type	Secondary

End point timeframe:

At Week 24

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (confidence interval 95%)				
Overall Population (n=433)	22.4 (18.6 to 26.6)			
Cervical Cancer (n=27)	40.7 (22.4 to 61.2)			
Nasopharyngeal Carcinoma (n=27)	22.2 (8.6 to 42.3)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	40.0 (12.2 to 73.8)			
BRCA Mutated Ovarian Cancer (n=15)	20.0 (4.3 to 48.1)			
BRCA Mutated Breast Cancer (n=12)	0 (0 to 26.5)			
Liposarcoma (n=13)	7.7 (0.2 to 36.0)			
Leiomyosarcoma (n=17)	11.8 (1.5 to 36.4)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	13.3 (1.7 to 40.5)			
Undifferentiated Pleomorphic Sarcoma (n=11)	0 (0 to 28.5)			
Known Translocation-Related Sarcomas (n=26)	23.1 (9.0 to 43.6)			
Radiation Induced Sarcoma (n=8)	25.0 (3.2 to 65.1)			
Osteosarcoma (n=11)	45.5 (16.7 to 76.6)			
Chondrosarcoma (n=12)	0 (0 to 26.5)			
Pleural Mesothelioma (n=13)	23.1 (5.0 to 53.8)			
Peritoneal Mesothelioma (n=14)	28.6 (8.4 to 58.1)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	7.7 (0.2 to 36.0)			
Anaplastic Thyroid Cancer (TC) (n=15)	6.7 (0.2 to 31.9)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	54.5 (23.4 to 83.3)			
Medullary/Follicular/Papillary TC (n=7)	28.6 (3.7 to 71.0)			
Gastric/GE Junction Adenocarcinoma (n=14)	7.1 (0.2 to 33.9)			
Malignant Germ Cell Tumors (n=14)	7.1 (0.2 to 33.9)			
ER+/HER2- Hypermutated MBC (n=12)	8.3 (0.2 to 38.5)			
Thymoma (n=13)	76.9 (46.2 to 95.0)			

Thymic cancer (n=12)	33.3 (9.9 to 65.1)			
Low/Intermediate Grade Carcinoid (n=12)	58.3 (27.7 to 84.8)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	16.7 (2.1 to 48.4)			
Head and Neck Squamous Cell Carcinoma (n=6)	16.7 (0.4 to 64.1)			
Penile Cancer (n=4)	0 (0 to 60.2)			
Anal Cancer (n=11)	18.2 (2.3 to 51.8)			
Known MSI High or MMR Deficient Tumors (n=10)	30.0 (6.7 to 65.2)			

No statistical analyses for this end point

End point title	Overall Response Rate (ORR)

End point description:

ORR was defined as the percentage of participants with CR or PR as assessed by the investigator using RECIST v1.1 or Malignant Pleural Mesothelioma Response Evaluation Criteria. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions, taking as reference the baseline sum of diameters, in the absence of CR. For prostate cancer according to Prostate Response Evaluation Criteria. CR: PSA <5 ng/ml measured twice at least 3 weeks apart or PSA response: PSA < 50% of the PSA reference value occurring at any time after treatment was initiated. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (confidence interval 95%)				
Overall Population (n=433)	7.4 (5.1 to 10.3)			
Cervical Cancer (n=27)	14.8 (4.2 to 33.7)			
Nasopharyngeal Carcinoma (n=27)	7.4 (0.9 to 24.3)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	0 (0 to 30.8)			
BRCA Mutated Ovarian Cancer (n=15)	13.3 (1.7 to 40.5)			
BRCA Mutated Breast Cancer (n=12)	0 (0 to 26.5)			

Liposarcoma (n=13)	0 (0 to 24.7)			
Leiomyosarcoma (n=17)	5.9 (0.1 to 28.7)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	0 (0 to 21.8)			
Undifferentiated Pleomorphic Sarcoma (n=11)	0 (0 to 28.5)			
Known Translocation-Related Sarcomas (n=26)	7.7 (0.9 to 25.1)			
Radiation Induced Sarcoma (n=8)	12.5 (0.3 to 52.7)			
Osteosarcoma (n=11)	9.1 (0.2 to 41.3)			
Chondrosarcoma (n=12)	0 (0 to 26.5)			
Pleural Mesothelioma (n=13)	7.7 (0.2 to 36.0)			
Peritoneal Mesothelioma (n=14)	14.3 (1.8 to 42.8)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	0 (0 to 24.7)			
Anaplastic Thyroid Cancer (TC) (n=15)	0 (0 to 21.8)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	9.1 (0.2 to 41.3)			
Medullary/Follicular/Papillary TC (n=7)	0 (0 to 41.0)			
Gastric/GE Junction Adenocarcinoma (n=14)	7.1 (0.2 to 33.9)			
Malignant Germ Cell Tumors (n=14)	0 (0 to 23.2)			
ER+/HER2- Hypermutated MBC (n=12)	8.3 (0.2 to 38.5)			
Thymoma (n=13)	38.5 (13.9 to 68.4)			
Thymic cancer (n=12)	8.3 (0.2 to 38.5)			
Low/Intermediate Grade Carcinoid (n=12)	0 (0 to 26.5)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	16.7 (2.1 to 48.4)			
Head and Neck Squamous Cell Carcinoma (n=6)	16.7 (0.4 to 64.1)			
Penile Cancer (n=4)	0 (0 to 60.2)			
Anal Cancer (n=11)	9.1 (0.2 to 41.3)			
Known MSI High or MMR Deficient Tumors (n=10)	20.0 (2.5 to 55.6)			

No statistical analyses for this end point

End point title	Percentage of Participants by Best Overall Response (BOR)

End point description:

BOR was based on RECIST v1.1, Malignant Pleural Mesothelioma Response Evaluation Criteria or Prostate Response Evaluation Criteria. For an individual participant BOR was obtained as follows: 1) CR: overall tumor response assessment of CR at 2 consecutive visits at least 28 days apart. 2) PR: overall tumor response assessment of PR or CR at 2 consecutive visits at least 28 days apart without being a CR. 3) SD: overall tumor response assessment of SD, PR, or CR at one or more visits at least 42 days

after start of study treatment, but was not a confirmed CR or PR. 4) PD: an overall tumor response assessment of PD at any visit, and did not meet the criteria for a BOR of CR, PR or SD. 5) Missing: an assessment of SD, PR or CR in the first 42 days after start of study treatment and no further tumor assessments thereafter. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor assessment and at least one tumor assessment post-baseline) participants.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (not applicable)				
Overall Population: CR (n=433)	0.7			
Overall Population: PR (n=433)	6.7			
Overall Population: SD (n=433)	36.3			
Overall Population: PD (n=433)	53.3			
Overall Population: Missing (n=433)	3.0			
Cervical Cancer: CR (n=27)	3.7			
Cervical Cancer: PR (n=27)	11.1			
Cervical Cancer: SD (n=27)	40.7			
Cervical Cancer: PD (n=27)	40.7			
Cervical Cancer: Missing (n=27)	3.7			
Nasopharyngeal Carcinoma: CR (n=27)	0			
Nasopharyngeal Carcinoma: PR (n=27)	7.4			
Nasopharyngeal Carcinoma: SD (n=27)	44.4			
Nasopharyngeal Carcinoma: PD (n=27)	48.1			
Nasopharyngeal Carcinoma: Missing (n=27)	0			
MSI-H or MMR Deficient Colorectal Cancer CR (n=10)	0			
MSI-H or MMR Deficient Colorectal Cancer PR (n=10)	0			
MSI-H or MMR Deficient Colorectal Cancer SD (n=10)	40.0			
MSI-H or MMR Deficient Colorectal Cancer PD (n=10)	50.0			
MSI-H or MMR Deficient Colorectal Missing (n=10)	10.0			
BRCA Mutated Ovarian Cancer: CR (n=15)	0			
BRCA Mutated Ovarian Cancer: PR (n=15)	13.3			
BRCA Mutated Ovarian Cancer: SD (n=15)	33.3			
BRCA Mutated Ovarian Cancer: PD (n=15)	46.7			
BRCA Mutated Ovarian Cancer: Missing (n=15)	6.7			
BRCA Mutated Breast Cancer: CR (n=12)	0			

BRCA Mutated Breast Cancer: PR (n=12)	0			
BRCA Mutated Breast Cancer: SD (n=12)	8.3			
BRCA Mutated Breast Cancer: PD (n=12)	91.7			
BRCA Mutated Breast Cancer: Missing (n=12)	0			
Liposarcoma: CR (n=13)	0			
Liposarcoma: PR (n=13)	0			
Liposarcoma: SD (n=13)	30.8			
Liposarcoma: PD (n=13)	61.5			
Liposarcoma: Missing (n=13)	7.7			
Leiomyosarcoma: CR (n=17)	0			
Leiomyosarcoma: PR (n=17)	5.9			
Leiomyosarcoma: SD (n=17)	17.6			
Leiomyosarcoma: PD (n=17)	64.7			
Leiomyosarcoma: Missing (n=17)	11.8			
Gastrointestinal Stromal Tumor (GIST): CR (n=15)	0			
Gastrointestinal Stromal Tumor (GIST): PR (n=15)	0			
Gastrointestinal Stromal Tumor (GIST): SD (n=15)	33.3			
Gastrointestinal Stromal Tumor (GIST): PD (n=15)	66.7			
Gastrointestinal Stromal Tumor: Missing (n=15)	0			
Undifferentiated Pleomorphic Sarcoma: CR (n=11)	0			
Undifferentiated Pleomorphic Sarcoma: PR (n=11)	0			
Undifferentiated Pleomorphic Sarcoma: SD (n=11)	9.1			
Undifferentiated Pleomorphic Sarcoma: PD (n=11)	90.9			
Undifferentiated Pleomorphic Sarc: Missing (n=11)	0			
Known Translocation-Related Sarcomas: CR (n=26)	0			
Known Translocation-Related Sarcomas: PR (n=26)	7.7			
Known Translocation-Related Sarcomas: SD (n=26)	34.6			
Known Translocation-Related Sarcomas: PD (n=26)	53.8			
Known Translocation-Related Sarc. Missing (n=26)	3.8			
Radiation Induced Sarcoma: CR (n=8)	0			
Radiation Induced Sarcoma: PR (n=8)	12.5			
Radiation Induced Sarcoma: SD (n=8)	12.5			
Radiation Induced Sarcoma: PD (n=8)	75.0			
Radiation Induced Sarcoma: Missing (n=8)	0			
Osteosarcoma: CR (n=11)	0			
Osteosarcoma: PR (n=11)	9.1			
Osteosarcoma: SD (n=11)	36.4			
Osteosarcoma: PD (n=11)	54.5			

Osteosarcoma: Missing (n=11)	0			
Chondrosarcoma: CR (n=12)	0			
Chondrosarcoma: PR (n=12)	0			
Chondrosarcoma: SD (n=12)	41.7			
Chondrosarcoma: PD (n=12)	58.3			
Chondrosarcoma: Missing (n=12)	0			
Pleural Mesothelioma: CR (n=13)	0			
Pleural Mesothelioma: PR (n=13)	7.7			
Pleural Mesothelioma: SD (n=13)	61.5			
Pleural Mesothelioma: PD (n=13)	30.8			
Pleural Mesothelioma: Missing (n=13)	0			
Peritoneal Mesothelioma: CR (n=14)	0			
Peritoneal Mesothelioma: PR (n=14)	14.3			
Peritoneal Mesothelioma: SD (n=14)	42.9			
Peritoneal Mesothelioma: PD (n=14)	42.9			
Peritoneal Mesothelioma: Missing (n=14)	0			
Cholangiocarcinoma/Biliary Tract Cancer: CR (n=13)	0			
Cholangiocarcinoma/Biliary Tract Cancer: PR (n=13)	0			
Cholangiocarcinoma/Biliary Tract Cancer: SD (n=13)	53.8			
Cholangiocarcinoma/Biliary Tract Cancer: PD (n=13)	46.2			
Cholangiocarcinoma/Biliary Tract: Missing (n=13)	0			
Anaplastic Thyroid Cancer (TC): CR (n=15)	0			
Anaplastic Thyroid Cancer (TC): PR (n=15)	0			
Anaplastic Thyroid Cancer (TC): SD (n=15)	13.3			
Anaplastic Thyroid Cancer (TC): PD (n=15)	73.3			
Anaplastic Thyroid Cancer (TC): Missing (n=15)	13.3			
Follicular or Papillary TC: CR (n=11)	0			
Follicular or Papillary TC: PR (n=11)	9.1			
Follicular or Papillary Thyroid TC: SD (n=11)	72.7			
Follicular or Papillary Thyroid TC: PD (n=11)	18.2			
Follicular or Papillary Thyroid TC: Missing (n=11)	0			
Medullary/Follicular/Papillary TC: CR (n=7)	0			
Medullary/Follicular/Papillary TC: PR (n=7)	0			
Medullary/Follicular/Papillary TC: SD (n=7)	42.9			
Medullary/Follicular/Papillary TC: PD (n=7)	42.9			
Medullary/Follicular/Papillary TC: Missing (n=7)	14.3			
Gastric/GE Junction Adenocarcinoma: CR (n=14)	0			
Gastric/GE Junction Adenocarcinoma: PR (n=14)	7.1			

Gastric/GE Junction Adenocarcinoma: SD (n=14)	21.4			
Gastric/GE Junction Adenocarcinoma: PD (n=14)	57.1			
Gastric/GE Junction Adenocarcinoma: Missing (n=14)	14.3			
Malignant Germ Cell Tumors: CR (n=14)	0			
Malignant Germ Cell Tumors: PR (n=14)	0			
Malignant Germ Cell Tumors: SD (n=14)	35.7			
Malignant Germ Cell Tumors: PD (n=14)	64.3			
Malignant Germ Cell Tumors: Missing (n=14)	0			
ER+/HER2- Hypermutated MBC: CR (n=12)	0			
ER+/HER2- Hypermutated MBC: PR (n=12)	8.3			
ER+/HER2- Hypermutated MBC: SD (n=12)	8.3			
ER+/HER2- Hypermutated MBC: PD (n=12)	83.3			
ER+/HER2- Hypermutated MBC: Missing (n=12)	0			
Thymoma: CR (n=13)	0			
Thymoma: PR (n=13)	38.5			
Thymoma: SD (n=13)	46.2			
Thymoma: PD (n=13)	7.7			
Thymoma: Missing (n=13)	7.7			
Thymic cancer: CR (n=12)	0			
Thymic cancer: PR (n=12)	8.3			
Thymic cancer: SD (n=12)	50.0			
Thymic cancer: PD (n=12)	41.7			
Thymic cancer: Missing (n=12)	0			
Low/Intermediate Grade Carcinoid: CR (n=12)	0			
Low/Intermediate Grade Carcinoid: PR (n=12)	0			
Low/Intermediate Grade Carcinoid: SD (n=12)	100.0			
Low/Intermediate Grade Carcinoid: PD (n=12)	0			
Low/Intermediate Grade Carcinoid: Missing (n=12)	0			
Poorly Differentiated Grade: CR (n=12)	0			
Poorly Differentiated Grade: PR (n=12)	16.7			
Poorly Differentiated Grade: SD (n=12)	16.7			
Poorly Differentiated Grade: PD (n=12)	66.7			
Poorly Differentiated Grade: Missing (n=12)	0			
Head and Neck Squamous Cell Carcinoma: CR (n=6)	16.7			
Head and Neck Squamous Cell Carcinoma: PR (n=6)	0			
Head and Neck Squamous Cell Carcinoma: SD (n=6)	33.3			
Head and Neck Squamous Cell Carcinoma: PD (n=6)	50.0			
Head and Neck Squamous Cell: Missing (n=6)	0			

Penile Cancer: CR (n=4)	0			
Penile Cancer: PR (n=4)	0			
Penile Cancer: SD (n=4)	50.0			
Penile Cancer: PD (n=4)	50.0			
Penile Cancer: Missing (n=4)	0			
Anal Cancer: CR (n=11)	9.1			
Anal Cancer: PR (n=11)	0			
Anal Cancer: SD (n=11)	36.4			
Anal Cancer: PD (n=11)	54.5			
Anal Cancer: Missing (n=11)	0			
Known MSI High or MMR Deficient Tumors: CR (n=10)	0			
Known MSI High or MMR Deficient Tumors: PR (n=10)	20.0			
Known MSI High or MMR Deficient Tumors: SD (n=10)	40.0			
Known MSI High or MMR Deficient Tumors: PD (n=10)	40.0			
Known MSI High or MMR Deficient: Missing (n=10)	0			

No statistical analyses for this end point

End point title	Clinical Benefit Rate (CBR)

End point description:

CBR was defined as the percentage of participants with CR, PR, or SD according to RECIST v1.1, Malignant Pleural Mesothelioma Response Evaluation Criteria or Prostate Response Evaluation Criteria lasting for >/=6 weeks. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions in the absence of CR. SD: Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for progressive disease (PD). PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. For prostate cancer: CR: PSA <5 ng/ml measured twice at least 3 weeks apart or PSA response: PSA < 50% of the PSA reference value occurring at any time after treatment was initiated. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor assessment and at least one tumor assessment post-baseline) participants.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (confidence interval 95%)				
Overall Population (n=433)	43.6 (38.9 to 48.5)			

Cervical Cancer (n=27)	55.6 (35.3 to 74.5)				
Nasopharyngeal Carcinoma (n=27)	51.9 (31.9 to 71.3)				
MSI-H or MMR Deficient Colorectal Cancer (n=10)	40.0 (12.2 to 73.8)				
BRCA Mutated Ovarian Cancer (n=15)	46.7 (21.3 to 73.4)				
BRCA Mutated Breast Cancer (n=12)	8.3 (0.2 to 38.5)				
Liposarcoma (n=13)	30.8 (9.1 to 61.4)				
Leiomyosarcoma (n=17)	23.5 (6.8 to 49.9)				
Gastrointestinal Stromal Tumor (GIST) (n=15)	33.3 (11.8 to 61.6)				
Undifferentiated Pleomorphic Sarcoma (n=11)	9.1 (0.2 to 41.3)				
Known Translocation-Related Sarcomas (n=26)	42.3 (23.4 to 63.1)				
Radiation Induced Sarcoma (n=8)	25.0 (3.2 to 65.1)				
Osteosarcoma (n=11)	45.5 (16.7 to 76.6)				
Chondrosarcoma (n=12)	41.7 (15.2 to 72.3)				
Pleural Mesothelioma (n=13)	69.2 (38.6 to 90.9)				
Peritoneal Mesothelioma (n=14)	57.1 (28.9 to 82.3)				
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	53.8 (25.1 to 80.8)				
Anaplastic Thyroid Cancer (TC) (n=15)	13.3 (1.7 to 40.5)				
Follicular or Papillary Thyroid Cancer (TC) (n=11)	81.8 (48.2 to 97.7)				

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No statistical analyses for this end point

End point title	Duration of Objective Response (DOR)

End point description:

DOR, based on RECIST v1.1, was defined as the time from the first occurrence of a documented objective response (CR or PR) to the time of progression or death from any cause, whichever occurred first. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions in the absence of CR. PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. DOR was not analyzed if there were less than 4 participants available for the analysis. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	0[2]			
Units: months				
median (confidence interval 95%)	(to)			

Notes:

[2] - Data not analyzed for less than 4 participants.

No statistical analyses for this end point

End point title	Progression-Free Survival (PFS)

End point description:

PFS, based on RECIST v1.1, was defined as the time from the first day of study treatment to the first occurrence of disease progression or death from any cause, whichever occurred first. PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline. 99999=Upper limit of CI was not reached due to low number of participants with events.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: months				
median (confidence interval 95%)				
Cervical Cancer (n=27)	4.14 (1.31 to 8.34)			
Nasopharyngeal Carcinoma (n=27)	3.15 (1.35 to 4.60)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	1.51 (0.72 to 10.97)			
BRCA Mutated Ovarian Cancer (n=15)	2.73 (1.45 to 4.01)			
BRCA Mutated Breast Cancer (n=12)	1.38 (0.99 to 1.54)			
Liposarcoma (n=13)	1.51 (1.25 to 4.70)			
Leiomyosarcoma (n=17)	2.69 (1.28 to 3.12)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	1.41 (1.15 to 2.79)			
Undifferentiated Pleomorphic Sarcoma (n=11)	1.31 (1.25 to 1.35)			
Known Translocation-Related Sarcomas (n=26)	2.73 (1.38 to 5.42)			
Radiation Induced Sarcoma (n=8)	1.43 (1.25 to 14.39)			
Osteosarcoma (n=11)	2.96 (1.28 to 16.69)			
Chondrosarcoma (n=12)	1.87 (1.35 to 5.49)			
Pleural Mesothelioma (n=13)	4.11 (1.25 to 5.49)			
Peritoneal Mesothelioma (n=14)	4.78 (1.31 to 8.28)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	3.71 (1.31 to 4.27)			
Anaplastic Thyroid Cancer (TC) (n=15)	1.41 (1.22 to 2.07)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	8.48 (1.31 to 15.41)			
Medullary/Follicular/Papillary TC (n=7)	3.52 (1.25 to 12.39)			
Gastric/GE Junction Adenocarcinoma (n=14)	1.68 (1.41 to 3.19)			
Malignant Germ Cell Tumors (n=14)	2.73 (1.38 to 4.07)			
ER+/HER2- Hypermutated MBC (n=12)	1.22 (1.08 to 1.48)			
Thymoma (n=13)	11.76 (3.22 to 37.22)			
Thymic cancer (n=12)	4.07 (1.38 to 13.96)			

Low/Intermediate Grade Carcinoid (n=12)	8.54 (4.07 to 13.67)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	1.40 (1.08 to 9.72)			
Head and Neck Squamous Cell Carcinoma (n=6)	2.76 (1.38 to 99999)			
Penile Cancer (n=4)	2.07 (1.22 to 4.14)			
Anal Cancer (n=11)	3.12 (1.31 to 4.11)			
Known MSI High or MMR Deficient Tumors (n=10)	3.98 (1.18 to 16.92)			

No statistical analyses for this end point

End point title	Time to Progression (TTP)

End point description:

Time to progression (TTP), based on RECIST v1.1, was defined as time from the first day of study treatment to the first occurrence of progressive disease or death due to disease progression, whichever occurred first. PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline. 99999=Upper limit of CI was not reached due to low number of participants with events.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: months				
median (confidence interval 95%)				
Cervical Cancer (n=27)	4.14 (1.31 to 8.34)			
Nasopharyngeal Carcinoma (n=27)	3.45 (1.35 to 4.60)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	1.51 (0.72 to 10.97)			
BRCA Mutated Ovarian Cancer (n=15)	2.73 (1.45 to 4.01)			
BRCA Mutated Breast Cancer (n=12)	1.38 (0.99 to 1.54)			
Liposarcoma (n=13)	1.51 (1.25 to 4.70)			
Leiomyosarcoma (n=17)	2.69 (1.28 to 3.12)			

Gastrointestinal Stromal Tumor (GIST) (n=15)	1.41 (1.15 to 2.79)			
Undifferentiated Pleomorphic Sarcoma (n=11)	1.31 (1.25 to 1.35)			
Known Translocation-Related Sarcomas (n=26)	2.73 (1.38 to 3.55)			
Radiation Induced Sarcoma (n=8)	1.43 (1.25 to 14.39)			
Osteosarcoma (n=11)	2.96 (1.28 to 16.69)			
Chondrosarcoma (n=12)	1.87 (1.35 to 5.49)			
Pleural Mesothelioma (n=13)	4.11 (1.25 to 5.49)			
Peritoneal Mesothelioma (n=14)	4.78 (1.31 to 8.28)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	3.71 (1.31 to 4.27)			
Anaplastic Thyroid Cancer (TC) (n=15)	1.41 (1.22 to 2.07)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	8.48 (1.31 to 15.41)			
Medullary/Follicular/Papillary TC (n=7)	5.52 (1.25 to 23.33)			
Gastric/GE Junction Adenocarcinoma (n=14)	1.68 (1.41 to 3.19)			
Malignant Germ Cell Tumors (n=14)	2.73 (1.38 to 4.07)			
ER+/HER2- Hypermutated MBC (n=12)	1.22 (1.08 to 1.48)			
Thymoma (n=13)	12.58 (3.22 to 37.22)			
Thymic cancer (n=12)	2.76 (1.38 to 13.86)			
Low/Intermediate Grade Carcinoid (n=12)	8.54 (4.07 to 10.94)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	1.40 (1.08 to 9.72)			
Head and Neck Squamous Cell Carcinoma (n=6)	2.76 (1.38 to 99999)			
Penile Cancer (n=4)	2.07 (1.22 to 4.14)			
Anal Cancer (n=11)	3.12 (1.31 to 4.11)			
Known MSI High or MMR Deficient Tumors (n=10)	3.98 (1.18 to 16.92)			

No statistical analyses for this end point

End point title	Overall Survival (OS)

End point description:

OS was defined as the time from the first day of study treatment to death from any cause. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline. 9999=Median OS was not reached; 00000=Lower limit of CI could not be determined as

median OS was not reached; 99999=Upper limit of CI could not be determined due to low number of participants with events or median OS was not reached.

End point type	Secondary

End point timeframe:

Baseline until death due to any cause (up to 4.5 years)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: months				
median (confidence interval 95%)				
Cervical Cancer (n=27)	14.78 (10.55 to 26.51)			
Nasopharyngeal Carcinoma (n=27)	17.97 (8.90 to 27.56)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	6.41 (0.99 to 22.90)			
BRCA Mutated Ovarian Cancer (n=15)	24.02 (4.11 to 99999)			
BRCA Mutated Breast Cancer (n=12)	5.09 (1.77 to 7.03)			
Liposarcoma (n=13)	12.71 (4.37 to 24.44)			
Leiomyosarcoma (n=17)	9.66 (3.12 to 13.67)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	7.39 (2.89 to 11.70)			
Undifferentiated Pleomorphic Sarcoma (n=11)	5.59 (3.52 to 9.26)			
Known Translocation-Related Sarcomas (n=26)	17.74 (6.37 to 99999)			
Radiation Induced Sarcoma (n=8)	8.33 (2.43 to 99999)			
Osteosarcoma (n=11)	12.65 (2.50 to 99999)			
Chondrosarcoma (n=12)	21.98 (4.76 to 99999)			
Pleural Mesothelioma (n=13)	17.81 (9.10 to 99999)			
Peritoneal Mesothelioma (n=14)	12.78 (4.21 to 99999)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	7.49 (3.25 to 11.20)			
Anaplastic Thyroid Cancer (TC) (n=15)	4.62 (1.87 to 12.78)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	9999 (00000 to 99999)			
Medullary/Follicular/Papillary TC (n=7)	18.92 (3.52 to 99999)			
Gastric/GE Junction Adenocarcinoma (n=14)	8.57 (2.99 to 18.07)			
Malignant Germ Cell Tumors (n=14)	8.15 (6.14 to 16.49)			
ER+/HER2- Hypermutated MBC (n=12)	8.39 (2.69 to 20.27)			

Thymoma (n=13)	9999 (00000 to 99999)			
Thymic cancer (n=12)	9999 (00000 to 99999)			
Low/Intermediate Grade Carcinoid (n=12)	27.20 (17.02 to 99999)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	16.16 (4.04 to 26.32)			
Head and Neck Squamous Cell Carcinoma (n=6)	12.58 (2.40 to 99999)			
Penile Cancer (n=4)	15.52 (5.49 to 99999)			
Anal Cancer (n=11)	9999 (00000 to 99999)			
Known MSI High or MMR Deficient Tumors (n=10)	18.66 (1.41 to 99999)			

No statistical analyses for this end point

End point title	Number of Participants with Adverse Events

End point description:

An adverse event is any untoward medical occurrence in a subject administered a pharmaceutical product and which does not necessarily have to have a causal relationship with the treatment. An adverse event can therefore be any unfavorable and unintended sign (including an abnormal laboratory finding, for example), symptom, or disease temporally associated with the use of a pharmaceutical product, whether or not considered related to the pharmaceutical product. Preexisting conditions which worsen during a study are also considered as adverse events. Safety analysis set included all participants who received at least one dose of study medication.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	474			
Units: participants	435			

No statistical analyses for this end point

End point title	Treatment Duration of Atezolizumab

End point description:

Safety analysis set included all participants who received at least one dose of study medication.

End point type	Secondary

End point timeframe:

Baseline up to approximately 4.5 years

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	474			
Units: months				
median (full range (min-max))	2.513 (0.03 to 52.47)			

No statistical analyses for this end point

End point title	Mean Number of Doses of Atezolizumab

End point description:

Safety analysis set included all participants who received at least one dose of study medication.

End point type	Secondary

End point timeframe:

Baseline up to approximately 4.5 years

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	474			
Units: doses				
arithmetic mean (standard deviation)	9.0 (± 11.28)			

No statistical analyses for this end point

End point title	Percentage of Participants with Anti-drug Antibodies (ADAs) to Atezolizumab

End point description:

Safety analysis set included all participants who received at least one dose of study medication.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	474			
Units: percentage of participants				
number (not applicable)				
Baseline ADAs	1.9			
Treatment-emergent ADAs	18.3			

No statistical analyses for this end point

End point title	Serum Concentration of Atezolizumab

End point description:

Safety analysis set included all participants who received at least one dose of study medication. 99999=not available as only one participant was analyzed.

End point type	Secondary

End point timeframe:

Predose and postdose on Day 1 of Cycle 1, predose on Day 1 of Cycles 2, 3, 4, 8 (cycle length = 21 days), and every 8 cycles until treatment discontinuation; at follow up (approximately 120 days after last dose) up to approximately 4.5 years

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	474			
Units: ng/mL				
arithmetic mean (standard deviation)				
Cycle 01, Day 1 predose (n=452)	45528.4 (± 84303.42)			
Cycle 01, Day 1 postdose (n=454)	422792.0 (± 225600.85)			
Cycle 02, Day 1 predose (n=433)	85674.3 (± 35394.34)			
Cycle 03, Day 1 predose (n=342)	131868.7 (± 60596.06)			
Cycle 04, Day 1 predose (n=288)	156555.7 (± 67478.76)			
Cycle 08, Day 1 predose (n=156)	201332.1 (± 96547.07)			
Cycle 16, Day 1 predose (n=72)	216038.7 (± 97136.92)			

Cycle 24, Day 1 predose (n=32)	224556.7 (± 104892.34)			
Cycle 32, Day 1 predose (n=21)	253873.7 (± 136820.70)			
Cycle 40, Day 1 predose (n=12)	284000.0 (± 110167.55)			
Cycle 48, Day 1 predose (n=8)	319500.0 (± 203543.61)			
Cycle 56, Day 1 predose (n=1)	203000.0 (± 99999)			
Cycle 64, Day 1 predose (n=2)	217000.0 (± 57982.76)			
Follow Up (n=77)	17565.6 (± 29505.18)			

No statistical analyses for this end point

End point title	Percentage of Participants by Best Overall Response Based on Modified RECIST v1.1 (mBOR)

End point description:

Modified RECIST: 1) New measurable lesions were added into the total tumor burden and followed; 2) Non-target lesions contributed only in the assessment of a CR; 3) Radiographic progression determined only on the basis of measurable disease; had to be confirmed by a consecutive assessment =/>4 weeks later. mBOR: 1) CR: assessment of CR at 2 consecutive visits at least 28 days apart. 2) PR: assessment of PR/CR at 2 consecutive visits at least 28 days apart without being CR. 3) SD: assessment of SD/PR/CR at one or more visits at least 42 days after start of study treatment, but not a confirmed CR or PR. 4) PD: assessment of PD at any visit, and not CR, PR or SD. 5) Missing: an assessment of SD, PR or CR in the first 42 days after start of study treatment and no further tumor assessments thereafter. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor assessment and at least one tumor assessment post-baseline) participants.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (not applicable)				
Overall Population: CR (n=433)	0.7			
Overall Population: PR (n=433)	7.2			
Overall Population: SD (n=433)	43.9			
Overall Population: PD (n=433)	38.3			
Overall Population: Missing (n=433)	9.9			
Cervical Cancer: CR (n=27)	3.7			
Cervical Cancer: PR (n=27)	11.1			

Cervical Cancer: SD (n=27)	44.4			
Cervical Cancer: PD (n=27)	25.9			
Cervical Cancer: Missing (n=27)	14.8			
Nasopharyngeal Carcinoma: CR (n=27)	0			
Nasopharyngeal Carcinoma: PR (n=27)	11.1			
Nasopharyngeal Carcinoma: SD (n=27)	51.9			
Nasopharyngeal Carcinoma: PD (n=27)	33.3			
Nasopharyngeal Carcinoma: Missing (n=27)	3.7			
MSI-H or MMR Deficient Colorectal: CR (n=10)	0			
MSI-H or MMR Deficient Colorectal: PR (n=10)	0			
MSI-H or MMR Deficient Colorectal: SD (n=10)	60.0			
MSI-H or MMR Deficient Colorectal: PD (n=10)	30.0			
MSI-H or MMR Deficient Colorectal: Missing (n=10)	10.0			
BRCA Mutated Ovarian Cancer: CR (n=15)	0			
BRCA Mutated Ovarian Cancer: PR (n=15)	13.3			
BRCA Mutated Ovarian Cancer: SD (n=15)	40.0			
BRCA Mutated Ovarian Cancer: PD (n=15)	33.3			
BRCA Mutated Ovarian Cancer: Missing (n=15)	13.3			
BRCA Mutated Breast Cancer: CR (n=12)	0			
BRCA Mutated Breast Cancer: PR (n=12)	0			
BRCA Mutated Breast Cancer: SD (n=12)	25.0			
BRCA Mutated Breast Cancer: PD (n=12)	58.3			
BRCA Mutated Breast Cancer: Missing (n=12)	16.7			
Liposarcoma: CR (n=13)	0			
Liposarcoma: PR (n=13)	0			
Liposarcoma: SD (n=13)	38.5			
Liposarcoma: PD (n=13)	53.8			
Liposarcoma: Missing (n=13)	7.7			
Leiomyosarcoma: CR (n=17)	0			
Leiomyosarcoma: PR (n=17)	5.9			
Leiomyosarcoma: SD (n=17)	23.5			
Leiomyosarcoma: PD (n=17)	47.1			
Leiomyosarcoma: Missing (n=17)	23.5			
Gastrointestinal Stromal Tumor (GIST): CR (n=15)	0			
Gastrointestinal Stromal Tumor (GIST): PR (n=15)	0			
Gastrointestinal Stromal Tumor (GIST): SD (n=15)	40.0			
Gastrointestinal Stromal Tumor (GIST): PD (n=15)	60.0			
Gastrointestinal Stromal Tumor: Missing (n=15)	0			

Undifferentiated Pleomorphic Sarc: CR (n=11)	0				
Undifferentiated Pleomorphic Sarc: PR (n=11)	0				
Undifferentiated Pleomorphic Sarc: SD (n=11)	9.1				
Undifferentiated Pleomorphic Sarc: PD (n=11)	81.8				
Undifferentiated Pleomorphic Sarc: Missing (n=11)	9.1				
Known Translocation-Related Sarcomas: CR (n=26)	0				
Known Translocation-Related Sarcomas: PR (n=26)	7.7				
Known Translocation-Related Sarcomas: SD (n=26)	46.2				
Known Translocation-Related Sarcomas: PD (n=26)	30.8				
Known Translocation-Related Sarc: Missing (n=26)	15.4				

Anaplastic Thyroid Cancer (TC): CR (n=15)	0			
Anaplastic Thyroid Cancer (TC): PR (n=15)	0			
Anaplastic Thyroid Cancer (TC): SD (n=15)	13.3			
Anaplastic Thyroid Cancer (TC): PD (n=15)	73.3			
Anaplastic Thyroid Cancer (TC): Missing (n=15)	13.3			
Follicular or Papillary TC: CR (n=11)	0			
Follicular or Papillary TC: PR (n=11)	9.1			
Follicular or Papillary TC: SD (n=11)	72.7			
Follicular or Papillary TC: PD (n=11)	9.1			
Follicular or Papillary Thyroid TC: Missing (n=11)	9.1			
Medullary/Follicular/Papillary TC: CR (n=7)	0			
Medullary/Follicular/Papillary TC: PR (n=7)	0			
Medullary/Follicular/Papillary TC: SD (n=7)	42.9			
Medullary/Follicular/Papillary TC: PD (n=7)	42.9			
Medullary/Follicular/Papillary TC: Missing (n=7)	14.3			
Gastric/GE Junction Adenocarcinoma: CR (n=14)	0			
Gastric/GE Junction Adenocarcinoma: PR (n=14)	7.1			
Gastric/GE Junction Adenocarcinoma: SD (n=14)	35.7			
Gastric/GE Junction Adenocarcinoma: PD (n=14)	35.7			
Gastric/GE Junction Adenocarcinoma: Missing (n=14)	21.4			
Malignant Germ Cell Tumors: CR (n=14)	0			
Malignant Germ Cell Tumors: PR (n=14)	0			
Malignant Germ Cell Tumors: SD (n=14)	50.0			
Malignant Germ Cell Tumors: PD (n=14)	50.0			
Malignant Germ Cell Tumors: Missing (n=14)	0			
ER+/HER2- Hypermutated MBC: CR (n=12)	0			
ER+/HER2- Hypermutated MBC: PR (n=12)	8.3			
ER+/HER2- Hypermutated MBC: SD (n=12)	25.0			
ER+/HER2- Hypermutated MBC: PD (n=12)	58.3			
ER+/HER2- Hypermutated MBC: Missing (n=12)	8.3			
Thymoma: CR (n=13)	0			
Thymoma: PR (n=13)	38.5			
Thymoma: SD (n=13)	46.2			
Thymoma: PD (n=13)	7.7			
Thymoma: Missing (n=13)	7.7			
Thymic cancer: CR (n=12)	0			

Thymic cancer: PR (n=12)	8.3			
Thymic cancer: SD (n=12)	50.0			
Thymic cancer: PD (n=12)	33.3			
Thymic cancer: Missing (n=12)	8.3			
Low/Intermediate Grade Carcinoid: CR (n=12)	0			
Low/Intermediate Grade Carcinoid: PR (n=12)	0			
Low/Intermediate Grade Carcinoid: SD (n=12)	100.0			
Low/Intermediate Grade Carcinoid: PD (n=12)	0			
Low/Intermediate Grade Carcinoid: Missing (n=12)	0			
Poorly Differentiated Grade: CR (n=12)	0			
Poorly Differentiated Grade: PR (n=12)	16.7			
Poorly Differentiated Grade: SD (n=12)	16.7			
Poorly Differentiated Grade: PD (n=12)	58.3			
Poorly Differentiated Grade: Missing (n=12)	8.3			
Head and Neck Squamous Cell Carcinoma: CR (n=6)	16.7			
Head and Neck Squamous Cell Carcinoma: PR (n=6)	0			
Head and Neck Squamous Cell Carcinoma: SD (n=6)	33.3			
Head and Neck Squamous Cell Carcinoma: PD (n=6)	50.0			
Head and Neck Squamous Cell: Missing (n=6)	0			
Penile Cancer: CR (n=4)	0			
Penile Cancer: PR (n=4)	0			
Penile Cancer: SD (n=4)	50.0			
Penile Cancer: PD (n=4)	50.0			
Penile Cancer: Missing (n=4)	0			
Anal Cancer: CR (n=11)	9.1			
Anal Cancer: PR (n=11)	0			
Anal Cancer: SD (n=11)	45.5			
Anal Cancer: PD (n=11)	45.5			
Anal Cancer: Missing (n=11)	0			
Known MSI High or MMR Deficient Tumors: CR (n=10)	0			
Known MSI High or MMR Deficient Tumors: PR (n=10)	20.0			
Known MSI High or MMR Deficient Tumors: SD (n=10)	60.0			
Known MSI High or MMR Deficient Tumors: PD (n=10)	20.0			
Known MSI High or MMR Deficient: Missing (n=10)	0			

No statistical analyses for this end point

End point title	ORR Based on Modified RECIST v1.1

End point description:

Modified RECIST was based on the following: 1) New measurable lesions were added into the total tumor burden and followed; 2) Non-target lesions contributed only in the assessment of a CR; 3) Radiographic progression was determined only on the basis of measurable disease; had to be confirmed by a consecutive assessment =/>4 weeks from the date first documented. ORR was defined as the percentage of participants with CR or PR. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions, taking as reference the baseline sum of diameters, in the absence of CR. Efficacy analysis set included all eligible and evaluable participants. A participant was considered evaluable if they received study drug, had a baseline tumor assessment and at least one tumor assessment post-baseline.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (confidence interval 95%)				
Overall Population (n=433)	7.9 (5.5 to 10.8)			
Cervical Cancer (n=27)	14.8 (4.2 to 33.7)			
Nasopharyngeal Carcinoma (n=27)	11.1 (2.4 to 29.2)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	0.0 (0.0 to 30.8)			
BRCA Mutated Ovarian Cancer (n=15)	13.3 (1.7 to 40.5)			
BRCA Mutated Breast Cancer (n=12)	0.0 (0.0 to 26.5)			
Liposarcoma (n=13)	0.0 (0.0 to 24.7)			
Leiomyosarcoma (n=17)	5.9 (0.1 to 28.7)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	0.0 (0.0 to 21.8)			
Undifferentiated Pleomorphic Sarcoma (n=11)	0.0 (0.0 to 28.5)			
Known Translocation-Related Sarcomas (n=26)	7.7 (0.9 to 25.1)			
Radiation Induced Sarcoma (n=8)	12.5 (0.3 to 52.7)			
Osteosarcoma (n=11)	9.1 (0.2 to 41.3)			
Chondrosarcoma (n=12)	0.0 (0.0 to 26.5)			
Pleural Mesothelioma (n=13)	7.7 (0.2 to 36.0)			
Peritoneal Mesothelioma (n=14)	14.3 (1.8 to 42.8)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	0.0 (0.0 to 24.7)			

Anaplastic Thyroid Cancer (TC) (n=15)	0.0 (0.0 to 21.8)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	9.1 (0.2 to 41.3)			
Medullary/Follicular/Papillary TC (n=7)	0.0 (0.0 to 41.0)			
Gastric/GE Junction Adenocarcinoma (n=14)	7.1 (0.2 to 33.9)			
Malignant Germ Cell Tumors (n=14)	0.0 (0.0 to 23.2)			
ER+/HER2- Hypermutated MBC (n=12)	8.3 (0.2 to 38.5)			
Thymoma (n=13)	38.5 (13.9 to 68.4)			
Thymic cancer (n=12)	8.3 (0.2 to 38.5)			
Low/Intermediate Grade Carcinoid (n=12)	0.0 (0.0 to 26.5)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	16.7 (2.1 to 48.4)			
Head and Neck Squamous Cell Carcinoma (n=6)	16.7 (0.4 to 64.1)			
Penile Cancer (n=4)	0.0 (0.0 to 60.2)			
Anal Cancer (n=11)	9.1 (0.2 to 41.3)			
Known MSI High or MMR Deficient Tumors (n=10)	20.0 (2.5 to 55.6)			

No statistical analyses for this end point

End point title	CBR Based on Modified RECIST v1.1

End point description:

Modified RECIST: 1) New measurable lesions were added into the total tumor burden and followed; 2) Non-target lesions contributed only in the assessment of a CR; 3) Radiographic progression was determined only on the basis of measurable disease; had to be confirmed by a consecutive assessment =/>4 weeks from the date first documented. CBR was defined as the percentage of participants with CR, PR, or SD lasting for >/=6 weeks. CR: Disappearance of all target lesions. PR: At least a 30% decrease in the sum of the diameters of all target and all new measurable lesions in the absence of CR. SD: Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for progressive disease (PD). PD: At least a 20% increase in the sum of diameters of all target and all new measurable lesions. Efficacy analysis set: all eligible and evaluable (received study drug, had baseline tumor assessment and at least one tumor assessment post-baseline) participants.

End point type	Secondary

End point timeframe:

Baseline up to 4.5 years (assessed every 6 weeks for first 24 weeks and thereafter every 12 weeks up to loss of clinical benefit, withdrawal of consent, death, or study termination by the Sponsor, whichever occurs first)

	Atezolizumab			
Subject group type	Reporting group			
Number of subjects analysed	433			
Units: percentage of participants				
number (confidence interval 95%)				
Overall Population (n=433)	51.7 (46.9 to 56.5)			
Cervical Cancer (n=27)	59.3 (38.8 to 77.6)			
Nasopharyngeal Carcinoma (n=27)	63.0 (42.4 to 80.6)			
MSI-H or MMR Deficient Colorectal Cancer (n=10)	60.0 (26.2 to 87.8)			
BRCA Mutated Ovarian Cancer (n=15)	53.3 (26.6 to 78.7)			
BRCA Mutated Breast Cancer (n=12)	25.0 (5.5 to 57.2)			
Liposarcoma (n=13)	38.5 (13.9 to 68.4)			
Leiomyosarcoma (n=17)	29.4 (10.3 to 56.0)			
Gastrointestinal Stromal Tumor (GIST) (n=15)	40.0 (16.3 to 67.7)			
Undifferentiated Pleomorphic Sarcoma (n=11)	9.1 (0.2 to 41.3)			
Known Translocation-Related Sarcomas (n=26)	53.8 (33.4 to 73.4)			
Radiation Induced Sarcoma (n=8)	50.0 (15.7 to 84.3)			
Osteosarcoma (n=11)	45.5 (16.7 to 76.6)			
Chondrosarcoma (n=12)	50.0 (21.1 to 78.9)			
Pleural Mesothelioma (n=13)	69.2 (38.6 to 90.9)			
Peritoneal Mesothelioma (n=14)	64.3 (35.1 to 87.2)			
Cholangiocarcinoma/Biliary Tract Cancer (n=13)	69.2 (38.6 to 90.9)			
Anaplastic Thyroid Cancer (TC) (n=15)	13.3 (1.7 to 40.5)			
Follicular or Papillary Thyroid Cancer (TC) (n=11)	81.8 (48.2 to 97.7)			
Medullary/Follicular/Papillary TC (n=7)	42.9 (9.9 to 81.6)			
Gastric/GE Junction Adenocarcinoma (n=14)	42.9 (17.7 to 71.1)			
Malignant Germ Cell Tumors (n=14)	50.0 (23.0 to 77.0)			
ER+/HER2- Hypermutated MBC (n=12)	33.3 (9.9 to 65.1)			
Thymoma (n=13)	84.6 (54.6 to 98.1)			
Thymic cancer (n=12)	58.3 (27.7 to 84.8)			
Low/Intermediate Grade Carcinoid (n=12)	100.0 (73.5 to 100.0)			
Poorly Differentiated Grade (excl. SCLC) (n=12)	33.3 (9.9 to 65.1)			
Head and Neck Squamous Cell Carcinoma (n=6)	50.0 (11.8 to 88.2)			

Penile Cancer (n=4)	50.0 (6.8 to 93.2)			
Anal Cancer (n=11)	54.5 (23.4 to 83.3)			
Known MSI High or MMR Deficient Tumors (n=10)	80.0 (44.4 to 97.5)			

No statistical analyses for this end point

Timeframe for reporting adverse events:
Up to approximately 4.5 years
Adverse event reporting additional description:
Safety analysis set included all participants who received at least one dose of study medication.

Assessment type	Systematic

Dictionary name	MedDRA
Dictionary version	23.0

Reporting group title	Atezolizumab
Reporting group description:	
Atezolizumab 1200 milligrams (mg) was administered by intravenous (IV) infusion on Day 1 of each 3-week cycle until disease progression or unacceptable toxicity.	

	Atezolizumab		
Total subjects affected by serious adverse events			
subjects affected / exposed	142 / 474 (29.96%)		
number of deaths (all causes)	310		
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
ACUTE MYELOID LEUKAEMIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
BASAL CELL CARCINOMA			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
CANCER PAIN			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
LUNG NEOPLASM MALIGNANT			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
MALIGNANT MELANOMA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Vascular disorders			
DEEP VEIN THROMBOSIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
EMBOLISM			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYPERTENSION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYPOTENSION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Surgical and medical procedures			
NEPHROSTOMY TUBE REMOVAL			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
DEATH			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		

FATIGUE			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	2 / 3		
deaths causally related to treatment / all	0 / 0		
GENERAL PHYSICAL HEALTH DETERIORATION			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	1 / 3		
deaths causally related to treatment / all	0 / 0		
MALAISE			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
PYREXIA			
subjects affected / exposed	9 / 474 (1.90%)		
occurrences causally related to treatment / all	5 / 9		
deaths causally related to treatment / all	0 / 0		
Reproductive system and breast disorders			
VAGINAL FISTULA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
VAGINAL HAEMORRHAGE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
ACUTE PULMONARY OEDEMA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
CHYLOTHORAX			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
DYSPNOEA			
subjects affected / exposed	8 / 474 (1.69%)		
occurrences causally related to treatment / all	1 / 8		
deaths causally related to treatment / all	0 / 0		
INTERSTITIAL LUNG DISEASE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
PLEURAL EFFUSION			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	1 / 3		
deaths causally related to treatment / all	0 / 0		
PNEUMONIA ASPIRATION			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 1		
PNEUMONITIS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	1 / 1		
PNEUMOTHORAX			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 1		
PULMONARY EMBOLISM			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
TRACHEAL INFLAMMATION			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
CONFUSIONAL STATE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
SUICIDE ATTEMPT			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 1		
Investigations			
BLOOD CREATININE INCREASED			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HEPATIC ENZYME INCREASED			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
WEIGHT DECREASED			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
FACIAL BONES FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
FEMUR FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

HIP FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
INFUSION RELATED REACTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
OVERDOSE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
RADIUS FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
SPINAL FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
THORACIC VERTEBRAL FRACTURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
TOXICITY TO VARIOUS AGENTS			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
CARDIAC TAMPONADE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
PALPITATIONS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
CEREBELLAR ATAXIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
CEREBROVASCULAR ACCIDENT			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
COGNITIVE DISORDER			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
DIPLEGIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
DIZZINESS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HEADACHE			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYDROCEPHALUS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
IMMUNE-MEDIATED ENCEPHALITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
MYASTHENIA GRAVIS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	1 / 1		
PARAESTHESIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
SEIZURE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
ANAEMIA			
subjects affected / exposed	8 / 474 (1.69%)		
occurrences causally related to treatment / all	0 / 9		
deaths causally related to treatment / all	0 / 0		
APLASTIC ANAEMIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
AUTOIMMUNE HAEMOLYTIC ANAEMIA			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
FEBRILE NEUTROPENIA			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
GRANULOCYTOPENIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
LYMPH NODE HAEMORRHAGE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
SPLENIC VEIN THROMBOSIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
THROMBOCYTOPENIA			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
ABDOMINAL PAIN			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
ABDOMINAL PAIN LOWER			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
COLITIS			

subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	2 / 3		
deaths causally related to treatment / all	0 / 0		
CONSTIPATION			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
DIARRHOEA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
ENTERITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
GASTRIC HAEMORRHAGE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 1		
GASTRIC ULCER			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
GASTROINTESTINAL HAEMORRHAGE			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		
ILEUS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
IMMUNE-MEDIATED ENTEROCOLITIS			

subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
IMPAIRED GASTRIC EMPTYING				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
LARGE INTESTINE PERFORATION				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 1			
OESOPHAGEAL STENOSIS				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
PANCREATITIS				
subjects affected / exposed	2 / 474 (0.42%)			
occurrences causally related to treatment / all	2 / 2			
deaths causally related to treatment / all	0 / 0			
SMALL INTESTINAL OBSTRUCTION				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
STOMATITIS				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Hepatobiliary disorders				
AUTOIMMUNE HEPATITIS				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
HEPATIC STEATOSIS				

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HEPATIC VEIN THROMBOSIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
HEPATITIS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		
Skin and subcutaneous tissue disorders			
RASH			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			
ACUTE KIDNEY INJURY			
subjects affected / exposed	3 / 474 (0.63%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
CHRONIC KIDNEY DISEASE			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HAEMATURIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYDRONEPHROSIS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
NEPHROLITHIASIS			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
RENAL IMPAIRMENT			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Endocrine disorders			
ADRENAL INSUFFICIENCY			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
HYPOTHYROIDISM			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
INAPPROPRIATE ANTIDIURETIC HORMONE SECRETION			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
ARTHRALGIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
BACK PAIN			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
BONE PAIN			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

MUSCULOSKELETAL CHEST PAIN			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
MYOSITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
SACROILIITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
ABDOMINAL INFECTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
BILIARY TRACT INFECTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
BRONCHITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
CELLULITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
CLOSTRIDIUM DIFFICILE COLITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
DIARRHOEA INFECTIOUS			

subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
DIVERTICULITIS				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
ERYSIPELAS				
subjects affected / exposed	2 / 474 (0.42%)			
occurrences causally related to treatment / all	0 / 4			
deaths causally related to treatment / all	0 / 0			
HEPATITIS E				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
HERPES ZOSTER				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
INFECTION				
subjects affected / exposed	2 / 474 (0.42%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
KIDNEY INFECTION				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
LOWER RESPIRATORY TRACT INFECTION				
subjects affected / exposed	1 / 474 (0.21%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
LOWER RESPIRATORY TRACT INFECTION BACTERIAL				

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
MENINGITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
PAROTITIS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
PHARYNGITIS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
PNEUMONIA			
subjects affected / exposed	9 / 474 (1.90%)		
occurrences causally related to treatment / all	0 / 9		
deaths causally related to treatment / all	0 / 2		
PNEUMONIA BACTERIAL			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
PNEUMONIA STAPHYLOCOCCAL			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
PNEUMONIA VIRAL			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
SEPSIS			

subjects affected / exposed	4 / 474 (0.84%)		
occurrences causally related to treatment / all	0 / 4		
deaths causally related to treatment / all	0 / 1		
SOFT TISSUE INFECTION			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
URINARY TRACT INFECTION			
subjects affected / exposed	7 / 474 (1.48%)		
occurrences causally related to treatment / all	0 / 9		
deaths causally related to treatment / all	0 / 0		
VIRAL INFECTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
WOUND INFECTION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
DEHYDRATION			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
DIABETES MELLITUS			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYPERCALCAEMIA			

subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYPERGLYCAEMIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
HYPERKALAEMIA			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		
HYPONATRAEMIA			
subjects affected / exposed	1 / 474 (0.21%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
TYPE 1 DIABETES MELLITUS			
subjects affected / exposed	2 / 474 (0.42%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		

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

	Atezolizumab		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	368 / 474 (77.64%)		
Investigations			
ASPARTATE AMINOTRANSFERASE INCREASED			
subjects affected / exposed	25 / 474 (5.27%)		
occurrences (all)	27		
WEIGHT DECREASED			
subjects affected / exposed	24 / 474 (5.06%)		
occurrences (all)	24		
Nervous system disorders			

HEADACHE			
subjects affected / exposed	29 / 474 (6.12%)		
occurrences (all)	34		
Blood and lymphatic system disorders			
ANAEMIA			
subjects affected / exposed	59 / 474 (12.45%)		
occurrences (all)	68		
General disorders and administration site conditions			
ASTHENIA			
subjects affected / exposed	57 / 474 (12.03%)		
occurrences (all)	61		
FATIGUE			
subjects affected / exposed	107 / 474 (22.57%)		
occurrences (all)	112		
OEDEMA PERIPHERAL			
subjects affected / exposed	34 / 474 (7.17%)		
occurrences (all)	34		
PYREXIA			
subjects affected / exposed	61 / 474 (12.87%)		
occurrences (all)	73		
Gastrointestinal disorders			
ABDOMINAL PAIN			
subjects affected / exposed	38 / 474 (8.02%)		
occurrences (all)	44		
CONSTIPATION			
subjects affected / exposed	46 / 474 (9.70%)		
occurrences (all)	49		
DIARRHOEA			
subjects affected / exposed	73 / 474 (15.40%)		
occurrences (all)	86		
NAUSEA			
subjects affected / exposed	68 / 474 (14.35%)		
occurrences (all)	75		
VOMITING			
subjects affected / exposed	56 / 474 (11.81%)		
occurrences (all)	61		

Respiratory, thoracic and mediastinal disorders COUGH subjects affected / exposed			

Were there any global substantial amendments to the protocol? Yes

20 May 2015	v2: The contraception requirements were clarified and the language in the protocol was aligned with the recommendations provided by the Clinical Trial Facilitation Group (Recommendations related to contraception and pregnancy testing in clinical trials). The inclusion criterion number 4 was clarified to include patients for whom alternative therapy (irrespective of being or not standard or curative) did not exist or was not considered appropriate by the investigator. Calculated creatinine clearance ≥30 mL/min was added to inclusion criterion number 8. The frequency of required thyroid function tests was increased to require regular testing during treatment. The prohibition against live, attenuated vaccines prior to and during treatment with MPDL3280A was extended to include a period of 90 days after discontinuation of MPDL3280A. The reporting for adverse events was extended to 90 days after last dose of study treatment or until initiation of a new anti-cancer therapy, whichever occured first. Since the investigated IMP was not yet approved for marketing, continued treatment beyond progression was only accepted for a period of two years in the individual patient. Should there be need for a further prolongation of the treatment period, additional approval should be applied for. The laboratory, biomarker and other biological samples were clarified. The Schedule of Assessments was revised to reflect the changes to the protocol. PK and ADA assessments were updated. Further clarity was provided around the evaluation of new lesions and lymph nodes according to modified RECIST. The IND number was included.
29 September 2015	v3: MPDL3280A was changed to the international nonproprietary name atezolizumab throughout the document. The inclusion criterion for histologically documented solid tumors was updated to mention "for which alternative therapy does not exist which is known to prolong survival. Advanced solid tumors for which existing alternative therapies are of no proven benefit are also eligible." Exclusion criteria were modified as follows: 1) Hematologic malignancies, NSCLC, triple-negative breast cancer, urothelial bladder cancer (urothelial [transitional cell] histology or mixed histologies with dominant transitional cell pattern), unresectable advanced or metastatic renal cell carcinoma with clear-cell histology and/or sarcomatoid carcinoma. 6) Active or untreated central nervous system (CNS) metastases as determined by computed tomography (CT) or magnetic resonance imaging (MRI) evaluation during screening and prior radiographic assessments. 9) Hormone-replacement therapy was added as an allowed approved anticancer therapy. Exclusion criteria of history of autoimmune disease (19) and active hepatitis B (24) were clarified. The exclusion criterion for known PD-L1 expression was removed. The protocol was amended to reflect the handling of Atezolizumab-Specific Adverse Events according to the new version of the investigators brochure of atezolizumab version 7. The protocol was amended to reflect an increase in sample size due to expansion of cohorts 4, 5, and 10. A clarification was added on patients with cancer of unknown primary site to be included in cohort 10. The schedule of assessment was clarified to what should be measured -14 days before day 1 cycle 1 and what could be done within 35 days before day 1 cycle 1.

19 August 2016	v4: Preliminary review of data from cohort 10 “Other solid tumors” that highlighted the difficulty of analyzing this cohort due to its high heterogeneity prompted a decision to close cohort 10 and replace it with 4 new cohorts and several new sub-cohorts in existing cohorts, to include tumors with a high medical need and a rationale for evaluation of atezolizumab. Inclusion and exclusion criteria were more clearly defined regarding histological types and subtypes accepted in each cohort as well as biomarkers mandated for accurate patient selection. New sub-cohorts were created as appropriate. Selection criteria for baseline general status became stricter. Sub-cohort definitions were clarified to make the patient population within individual sub-cohorts more homogeneous. The definition of evaluable patients was clarified. Guidance for contraception was revised and aligned with other protocols in the atezolizumab clinical development program.
19 June 2017	v5: Inclusion/exclusion criteria were clarified and adjusted based on questions raised by investigators during the conduct of the study. Rules for end of study and end of cohort were clarified. Statistical section was clarified after running the stages I and II analyses in the first cohorts to reach these stages. Safety data were updated in accordance with the most recent atezolizumab protocols and new safety information.
01 March 2018	v6: A new Appendix 8 was added to Version 6 to include the management of the adverse events as requested by the Spanish Agency of Medicines and Medical Devices (AEMPS). Related references were corrected in the protocol body.
29 October 2018	v7: Appendix 8 was updated to include the changes made to the TECENTRIQ® International Brochure versions 12 and 13.
23 October 2019	v8: Appendix 8: updated to include the changes in the Atezolizumab Investigator’s Brochure version 15 (IB v15), including the guidelines for management of immune-mediated myositis and for suspected hemophagocytic lymphohistiocytosis or macrophage activation syndrome, removed description and management guidelines for systemic immune activation, updated terminology changing "immune-related" to "immune-mediated" (and wherever applicable throughout the protocol). Clarified provisions for post-trial access to atezolizumab to allow for continued treatment of patients following last patient last visit (LPLV), and regarding data collection during transition to the extension study.

Notes:

Were there any global interruptions to the trial? No

None reported