

**Clinical trial results:****A Phase III Randomized Open-Label Study of Single Agent****Pembrolizumab vs. Physicians'****Choice of Single Agent Docetaxel, Paclitaxel, or Irinotecan in Subjects with****Advanced/Metastatic Adenocarcinoma and Squamous Cell Carcinoma of the Esophagus that****have Progressed after First-Line Standard Therapy (KEYNOTE-181)****Summary**

| | |
|--------------------------|--|
| EudraCT number | 2015-002782-32 |
| Trial protocol | SE NO EE PT FI ES DE DK CZ NL FR IE IT |
| Global end of trial date | 14 March 2022 |

Results information

| | |
|--------------------------------|---------------|
| Result version number | v1 (current) |
| This version publication date | 10 March 2023 |
| First version publication date | 10 March 2023 |

Trial information**Trial identification**

| | |
|-----------------------|-------------|
| Sponsor protocol code | MK-3475-181 |
|-----------------------|-------------|

Additional study identifiers

| | |
|------------------------------------|-------------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT02564263 |
| WHO universal trial number (UTN) | - |
| Other trial identifiers | JAPIC-CTI: 163145 |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Merck Sharp & Dohme LLC |
| Sponsor organisation address | 126 East Lincoln Avenue, P.O. Box 2000, Rahway, NJ, United States, 07065 |
| Public contact | Clinical Trials Disclosure, Merck Sharp & Dohme LLC, ClinicalTrialsDisclosure@merck.com |
| Scientific contact | Clinical Trials Disclosure, Merck Sharp & Dohme LLC, ClinicalTrialsDisclosure@merck.com |

Notes:

Paediatric regulatory details

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

Notes:

Results analysis stage

| | |
|--|-----------------|
| Analysis stage | Final |
| Date of interim/final analysis | 14 March 2022 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 15 October 2018 |
| Global end of trial reached? | Yes |
| Global end of trial date | 14 March 2022 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

In this study, participants with advanced or metastatic adenocarcinoma or squamous cell carcinoma of the esophagus or Siewert type I adenocarcinoma of the esophagogastric junction (EGJ) that had progressed after first-line standard therapy were randomized to receive either pembrolizumab (MK-3475) OR the Investigator's choice of standard chemotherapy with paclitaxel, docetaxel, or irinotecan.

The primary study hypothesis was that treatment with pembrolizumab would prolong overall survival (OS) as compared to treatment with standard chemotherapy.

Protection of trial subjects:

This study was conducted in conformance with Good Clinical Practice standards and applicable country and/or local statutes and regulations regarding ethical committee review, informed consent, and the protection of human subjects participating in biomedical research.

Background therapy: -

Evidence for comparator: -

| | |
|---|------------------|
| Actual start date of recruitment | 01 December 2015 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | Yes |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|---------------|
| Country: Number of subjects enrolled | Argentina: 3 |
| Country: Number of subjects enrolled | Australia: 20 |
| Country: Number of subjects enrolled | Brazil: 23 |
| Country: Number of subjects enrolled | Canada: 10 |
| Country: Number of subjects enrolled | China: 11 |
| Country: Number of subjects enrolled | Colombia: 1 |
| Country: Number of subjects enrolled | Czechia: 9 |
| Country: Number of subjects enrolled | Denmark: 12 |
| Country: Number of subjects enrolled | Estonia: 7 |
| Country: Number of subjects enrolled | Finland: 5 |
| Country: Number of subjects enrolled | France: 80 |
| Country: Number of subjects enrolled | Germany: 8 |
| Country: Number of subjects enrolled | Hong Kong: 5 |
| Country: Number of subjects enrolled | Ireland: 3 |

| | |
|--------------------------------------|------------------------|
| Country: Number of subjects enrolled | Israel: 6 |
| Country: Number of subjects enrolled | Italy: 5 |
| Country: Number of subjects enrolled | Japan: 152 |
| Country: Number of subjects enrolled | Korea, Republic of: 38 |
| Country: Number of subjects enrolled | Malaysia: 4 |
| Country: Number of subjects enrolled | Mexico: 2 |
| Country: Number of subjects enrolled | Netherlands: 10 |
| Country: Number of subjects enrolled | Norway: 7 |
| Country: Number of subjects enrolled | Peru: 2 |
| Country: Number of subjects enrolled | Portugal: 13 |
| Country: Number of subjects enrolled | Russian Federation: 7 |
| Country: Number of subjects enrolled | Spain: 24 |
| Country: Number of subjects enrolled | Sweden: 6 |
| Country: Number of subjects enrolled | Taiwan: 23 |
| Country: Number of subjects enrolled | Thailand: 10 |
| Country: Number of subjects enrolled | Turkey: 19 |
| Country: Number of subjects enrolled | United Kingdom: 27 |
| Country: Number of subjects enrolled | United States: 76 |
| Worldwide total number of subjects | 628 |
| EEA total number of subjects | 189 |

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) | 356 |
| From 65 to 84 years | 272 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

At the time of the primary analysis data cut-off of 15-Oct-2018, 67 participants were ongoing in the study.

Period 1

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

Arms

| | |
|------------------------------|---------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Pembrolizumab |

Arm description:

Participants received pembrolizumab 200 mg, intravenously (IV) on Day 1 of every 21-day (3-week) cycle for up to 35 administrations (up to approximately 25 months).

| | |
|--|-----------------------|
| Arm type | Experimental |
| Investigational medicinal product name | pembrolizumab |
| Investigational medicinal product code | |
| Other name | KEYTRUDA®, MK-3475 |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

200 mg administered as IV infusion on Day 1 of every 21-day cycle

| | |
|------------------|--------------|
| Arm title | Chemotherapy |
|------------------|--------------|

Arm description:

Participants received Investigator's choice of paclitaxel 80-100 mg/m² IV on Days 1, 8, and 15 of every 28-day (4-week) cycle, OR docetaxel 75 mg/m² IV on Day 1 of every 21-day (3-week) cycle, OR irinotecan 180 mg/m² IV on Day 1 of every 14-day (2-week) cycle (up to approximately 19 months).

| | |
|--|-----------------------|
| Arm type | Active comparator |
| Investigational medicinal product name | paclitaxel |
| Investigational medicinal product code | |
| Other name | TAXOL® |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

80-100 mg/m² administered as IV infusion on Days 1, 8, and 15 of each 28-day cycle

| | |
|--|-----------------------|
| Investigational medicinal product name | irinotecan |
| Investigational medicinal product code | |
| Other name | CAMPTOSAR® |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

180 mg/m² administered as IV infusion on Day 1 of every 14-day cycle

| | |
|--|-----------------------|
| Investigational medicinal product name | docetaxel |
| Investigational medicinal product code | |
| Other name | TAXOTERE® |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

75 mg/m² administered as IV infusion on Day 1 of every 21-day cycle

| Number of subjects in period 1 | Pembrolizumab | Chemotherapy |
|---|---------------|--------------|
| Started | 314 | 314 |
| Treated | 314 | 296 |
| Received Second Course of Pembrolizumab | 5 | 0 |
| Completed | 0 | 0 |
| Not completed | 314 | 314 |
| Adverse event, serious fatal | 270 | 262 |
| Sponsor's decision | 9 | 4 |
| Consent withdrawn by subject | 4 | 19 |
| Adverse event, non-fatal | 31 | 29 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|---------------|
| Reporting group title | Pembrolizumab |
|-----------------------|---------------|

Reporting group description:

Participants received pembrolizumab 200 mg, intravenously (IV) on Day 1 of every 21-day (3-week) cycle for up to 35 administrations (up to approximately 25 months).

| | |
|-----------------------|--------------|
| Reporting group title | Chemotherapy |
|-----------------------|--------------|

Reporting group description:

Participants received Investigator's choice of paclitaxel 80-100 mg/m² IV on Days 1, 8, and 15 of every 28-day (4-week) cycle, OR docetaxel 75 mg/m² IV on Day 1 of every 21-day (3-week) cycle, OR irinotecan 180 mg/m² IV on Day 1 of every 14-day (2-week) cycle (up to approximately 19 months).

| Reporting group values | Pembrolizumab | Chemotherapy | Total |
|--|---------------|--------------|-------|
| Number of subjects | 314 | 314 | 628 |
| Age categorical Units: Subjects | | | |
| In utero | 0 | 0 | 0 |
| Preterm newborn infants (gestational age < 37 wks) | 0 | 0 | 0 |
| Newborns (0-27 days) | 0 | 0 | 0 |
| Infants and toddlers (28 days-23 months) | 0 | 0 | 0 |
| Children (2-11 years) | 0 | 0 | 0 |
| Adolescents (12-17 years) | 0 | 0 | 0 |
| Adults (18-64 years) | 175 | 181 | 356 |
| From 65-84 years | 139 | 133 | 272 |
| 85 years and over | 0 | 0 | 0 |
| Age Continuous Units: Years | | | |
| arithmetic mean | 62.6 | 62.0 | - |
| standard deviation | ± 9.4 | ± 9.6 | - |
| Sex: Female, Male Units: Participants | | | |
| Female | 41 | 43 | 84 |
| Male | 273 | 271 | 544 |
| Race (NIH/OMB) Units: Subjects | | | |
| American Indian or Alaska Native | 0 | 1 | 1 |
| Asian | 126 | 122 | 248 |
| Native Hawaiian or Other Pacific Islander | 0 | 1 | 1 |
| Black or African American | 3 | 3 | 6 |
| White | 179 | 172 | 351 |
| More than one race | 2 | 4 | 6 |
| Unknown or Not Reported | 4 | 11 | 15 |
| Ethnicity (NIH/OMB) Units: Subjects | | | |
| Hispanic or Latino | 19 | 25 | 44 |
| Not Hispanic or Latino | 288 | 273 | 561 |

| | | | |
|---|-----|-----|-----|
| Unknown or Not Reported | 7 | 16 | 23 |
| Programmed Death-Ligand 1 (PD-L1) Status: Combined Positive Score (CPS) | | | |
| Participants were assessed for their PD-L1 tumor expression levels by immunohistochemistry assay on tumor tissue from a newly obtained biopsy. PD-L1 CPS was calculated as the number of PD-L1 positive cells (tumor cells, macrophages, lymphocytes) divided by the total tumor cells and is expressed as a percentage. Participants were classified based on their PD-L1 tumor status as being either PD-L1 CPS ≥ 10 or PD-L1 CPS < 10 . | | | |
| Units: Subjects | | | |
| PD-L1 CPS ≥ 10 | 109 | 117 | 226 |
| PD-L1 CPS < 10 | 199 | 194 | 393 |
| Not Evaluable | 6 | 3 | 9 |
| Geographic Region | | | |
| Participants were classified based on their geographic region of enrollment as either being from Asia or from outside of Asia (Rest of World [RoW]). | | | |
| Units: Subjects | | | |
| Asia | 121 | 122 | 243 |
| RoW | 193 | 192 | 385 |
| Tumor Histology | | | |
| Participants were classified based on their tumor histology (cell type) as either having squamous cell carcinoma or having adenocarcinoma of esophagus and esophagogastric junction (EGJ) Siewert type I. | | | |
| Units: Subjects | | | |
| Squamous cell carcinoma | 199 | 204 | 403 |
| Adenocarcinoma of esophagus & EGJ Siewert type I | 115 | 110 | 225 |

End points

End points reporting groups

| | |
|--|---------------|
| Reporting group title | Pembrolizumab |
| Reporting group description: Participants received pembrolizumab 200 mg, intravenously (IV) on Day 1 of every 21-day (3-week) cycle for up to 35 administrations (up to approximately 25 months). | |
| Reporting group title | Chemotherapy |
| Reporting group description: Participants received Investigator's choice of paclitaxel 80-100 mg/m ² IV on Days 1, 8, and 15 of every 28-day (4-week) cycle, OR docetaxel 75 mg/m ² IV on Day 1 of every 21-day (3-week) cycle, OR irinotecan 180 mg/m ² IV on Day 1 of every 14-day (2-week) cycle (up to approximately 19 months). | |

Primary: Overall Survival (OS) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus

| | |
|--|---|
| End point title | Overall Survival (OS) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus |
| End point description: OS was defined as the time from randomization to death due to any cause. The efficacy analysis population consisted of all randomized participants with SCC of the esophagus. Participants were included in the treatment group to which they were randomized. Median OS in participants with SCC of the esophagus is presented. | |
| End point type | Primary |
| End point timeframe: Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months) | |

| End point values | Pembrolizumab | Chemotherapy | | |
|----------------------------------|-------------------|------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 198 | 203 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 8.2 (6.7 to 10.3) | 7.1 (6.1 to 8.2) | | |

Statistical analyses

| | |
|---|--|
| Statistical analysis title | OS in Participants with SCC of the Esophagus |
| Statistical analysis description: Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW) | |
| Comparison groups | Pembrolizumab v Chemotherapy |

| | |
|---|--------------------------|
| Number of subjects included in analysis | 401 |
| Analysis specification | Pre-specified |
| Analysis type | |
| P-value | = 0.00894 ^[1] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.77 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.63 |
| upper limit | 0.96 |

Notes:

[1] - One-sided p-value based on stratified log-rank test

Primary: Overall Survival (OS) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10)

| | |
|-----------------|---|
| End point title | Overall Survival (OS) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10) |
|-----------------|---|

End point description:

OS was defined as the time from randomization to death due to any cause. The efficacy analysis population consisted of all randomized participants with a PD-L1 CPS ≥ 10 . Participants were included in the treatment group to which they were randomized. Median OS in participants with a PD-L1 CPS ≥ 10 is presented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|----------------------------------|-------------------|------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 107 | 115 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 9.3 (6.6 to 12.5) | 6.7 (5.1 to 8.2) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | OS in Participants with PD-L1 CPS ≥ 10 |
|----------------------------|---|

Statistical analysis description:

Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type 1 adenocarcinoma of the esophagogastric junction [EGJ])

| | |
|-------------------|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
|-------------------|------------------------------|

| | |
|---|--------------------------|
| Number of subjects included in analysis | 222 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.00855 ^[2] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.7 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.52 |
| upper limit | 0.94 |

Notes:

[2] - One-sided p-value based on stratified log-rank test

Primary: Overall Survival (OS) in All Participants

| | |
|------------------------|--|
| End point title | Overall Survival (OS) in All Participants |
| End point description: | OS was defined as the time from randomization to death due to any cause. The efficacy analysis population consisted of all randomized participants. Participants were included in the treatment group to which they were randomized. Median OS in all participants is presented. |
| End point type | Primary |
| End point timeframe: | Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months) |

| End point values | Pembrolizumab | Chemotherapy | | |
|----------------------------------|------------------|------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 314 | 314 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 7.1 (6.2 to 8.1) | 7.1 (6.3 to 8.0) | | |

Statistical analyses

| | |
|---|--|
| Statistical analysis title | OS in All Participants |
| Statistical analysis description: | Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type 1 adenocarcinoma of the esophagogastric junction [EGJ]) |
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 628 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.0531 ^[3] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.89 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.75 |
| upper limit | 1.05 |

Notes:

[3] - One-sided p-value based on stratified maximum weighted log rank test: the maximum of the log-rank test statistic & a weighted log-rank Fleming-Harrington (0,1) test statistic

Secondary: Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in All Participants

| | |
|-----------------|--|
| End point title | Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in All Participants |
|-----------------|--|

End point description:

PFS was defined as the time from randomization to the first documented progressive disease (PD) or death due to any cause, whichever occurred first. Per RECIST 1.1, PD was defined as $\geq 20\%$ increase in the sum of diameters of target lesions. In addition to the relative increase of 20%, the sum must also have demonstrated an absolute increase of ≥ 5 mm. The appearance of ≥ 1 new lesions was also considered PD. The efficacy analysis population consisted of all randomized participants. Participants were included in the treatment group to which they were randomized. Median PFS as assessed by blinded independent central review per RECIST 1.1 in all participants is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|----------------------------------|------------------|------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 314 | 314 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 2.1 (2.1 to 2.2) | 3.4 (2.8 to 3.9) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | PFS as Assessed by RECIST 1.1 in All Participants |
|----------------------------|---|

Statistical analysis description:

Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type 1 adenocarcinoma of the EGJ)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 628 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.287 ^[4] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 1.11 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.94 |
| upper limit | 1.31 |

Notes:

[4] - One-sided p-value based on stratified maximum weighted log rank test: the maximum of the log-rank test statistic & a weighted log-rank Fleming-Harrington (0,1) test statistic

Secondary: Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in All Participants

| | |
|-----------------|--|
| End point title | Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in All Participants |
|-----------------|--|

End point description:

ORR was defined as the percentage of participants who had a Complete Response (CR: Disappearance of all target lesions) or a Partial Response (PR: $\geq 30\%$ decrease in the sum of diameters of target lesions) as assessed using RECIST 1.1. The efficacy analysis population consisted of all randomized participants. Participants were included in the treatment group to which they were randomized. The percentage of all participants who experienced a CR or PR is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|-----------------------------------|--------------------|-------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 314 | 314 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | 13.1 (9.5 to 17.3) | 6.7 (4.2 to 10.0) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | ORR as Assessed by RECIST 1.1 in All Participants |
|----------------------------|---|

Statistical analysis description:

Miettinen & Nurminen method stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type I adenocarcinoma of the EGJ)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 628 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.0037 ^[5] |
| Method | Miettinen & Nurminen method |
| Parameter estimate | Difference in Percentages |
| Point estimate | 6.4 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 1.7 |
| upper limit | 11.2 |

Notes:

[5] - One-sided p-value for testing. H0: difference in % = 0 versus; H1: difference in % > 0.

Secondary: Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus

| | |
|-----------------|--|
| End point title | Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus |
|-----------------|--|

End point description:

PFS was defined as the time from randomization to the first documented progressive disease (PD) or death due to any cause, whichever occurred first. Per RECIST 1.1, PD was defined as $\geq 20\%$ increase in the sum of diameters of target lesions. In addition to the relative increase of 20%, the sum must also have demonstrated an absolute increase of ≥ 5 mm. The appearance of ≥ 1 new lesions was also considered PD. The efficacy analysis population consisted of all randomized participants with SCC of the esophagus. Participants were included in the treatment group to which they were randomized. Median PFS as assessed by blinded independent central review per RECIST 1.1 is presented for participants with SCC of the esophagus.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|----------------------------------|------------------|------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 198 | 203 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 2.2 (2.1 to 3.2) | 3.1 (2.2 to 3.9) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | PFS in Participants with SCC of the Esophagus |
|----------------------------|---|

Statistical analysis description:

Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 401 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.216 ^[6] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.92 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.75 |
| upper limit | 1.13 |

Notes:

[6] - One-sided p-value based on stratified log-rank test

Secondary: Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10)

| | |
|-----------------|--|
| End point title | Progression-free Survival (PFS) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10) |
|-----------------|--|

End point description:

PFS was defined as the time from randomization to the first documented progressive disease (PD) or death due to any cause, whichever occurred first. Per RECIST 1.1, PD was defined as $\geq 20\%$ increase in the sum of diameters of target lesions. In addition to the relative increase of 20%, the sum must also have demonstrated an absolute increase of ≥ 5 mm. The appearance of ≥ 1 new lesions was also considered PD. The efficacy analysis population consisted of all randomized participants with a PD-L1 CPS ≥ 10 . Participants were included in the treatment group to which they were randomized. Median PFS as assessed by blinded independent central review per RECIST 1.1 is presented for participants with a PD-L1 CPS ≥ 10 .

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| | | | | |
|----------------------------------|------------------|------------------|--|--|
| End point values | Pembrolizumab | Chemotherapy | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 107 | 115 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 2.6 (2.1 to 4.1) | 3.0 (2.1 to 3.7) | | |

Statistical analyses

| | |
|-----------------------------------|--|
| Statistical analysis title | PFS in Participants with PD-L1 CPS ≥ 10 |
|-----------------------------------|--|

Statistical analysis description:

Cox regression model with treatment as a covariate stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type 1 adenocarcinoma of the EGJ)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 222 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.015 ^[7] |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.73 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.54 |
| upper limit | 0.97 |

Notes:

[7] - One-sided p-value based on stratified log-rank test

Secondary: Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus

| | |
|-----------------|--|
| End point title | Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Squamous Cell Carcinoma (SCC) of the Esophagus |
|-----------------|--|

End point description:

ORR was defined as the percentage of participants who had a Complete Response (CR: Disappearance of all target lesions) or a Partial Response (PR: $\geq 30\%$ decrease in the sum of diameters of target lesions) as assessed using RECIST 1.1. The efficacy analysis population consisted of all randomized participants with SCC of the esophagus. Participants were included in the treatment group to which they were randomized. The percentage of participants with SCC of the esophagus who experienced a CR or PR is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|-----------------------------------|---------------------|-------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 198 | 203 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | 16.7 (11.8 to 22.6) | 7.4 (4.2 to 11.9) | | |

Statistical analyses

| | |
|----------------------------|---|
| Statistical analysis title | ORR in Participants with SCC of the Esophagus |
|----------------------------|---|

Statistical analysis description:

Miettinen & Nurminen method stratified by geographic region (Asia vs RoW)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 401 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.0022 ^[8] |
| Method | Miettinen & Nurminen method |
| Parameter estimate | Difference in Percentages |
| Point estimate | 9.2 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 3 |
| upper limit | 15.8 |

Notes:

[8] - One-sided p-value for testing. H0: difference in % = 0; H1: difference in % > 0.

Secondary: Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10)

| | |
|-----------------|---|
| End point title | Objective Response Rate (ORR) as Assessed by Response Evaluation Criteria in Solid Tumors Version 1.1 (RECIST 1.1) in Participants with Programmed Death-Ligand 1 Combined Positive Score ≥ 10 (PD-L1 CPS ≥ 10) |
|-----------------|---|

End point description:

ORR was defined as the percentage of participants who had a Complete Response (CR: Disappearance of all target lesions) or a Partial Response (PR: ≥ 30% decrease in the sum of diameters of target lesions) as assessed using RECIST 1.1. The efficacy analysis population consisted of all randomized participants with a PD-L1 CPS ≥ 10. Participants were included in the treatment group to which they were randomized. The percentage of participants with a PD-L1 CPS ≥ 10 who experienced a CR or PR is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through Final Analysis data cutoff date of 15-Oct-2018 (up to approximately 34 months)

| End point values | Pembrolizumab | Chemotherapy | | |
|-----------------------------------|---------------------|-------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 107 | 115 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | 21.5 (14.1 to 30.5) | 6.1 (2.5 to 12.1) | | |

Statistical analyses

| | |
|-----------------------------------|---|
| Statistical analysis title | ORR in Participants with PD-L1 CPS ≥ 10 |
|-----------------------------------|---|

Statistical analysis description:

Miettinen & Nurminen method stratified by geographic region (Asia vs RoW) & tumor histology (SCC vs adenocarcinoma/Siewert type I adenocarcinoma of the EGJ)

| | |
|---|------------------------------|
| Comparison groups | Pembrolizumab v Chemotherapy |
| Number of subjects included in analysis | 222 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.0006 ^[9] |
| Method | Miettinen & Nurminen method |
| Parameter estimate | Difference in Percentages |
| Point estimate | 15.1 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 6.2 |
| upper limit | 24.7 |

Notes:

[9] - One-sided p-value for testing. H0: difference in % = 0; H1: difference in % > 0.

Secondary: Number of Participants Experiencing an Adverse Event (AE)

| | |
|-----------------|---|
| End point title | Number of Participants Experiencing an Adverse Event (AE) |
|-----------------|---|

End point description:

An AE was defined as any untoward medical occurrence in a participant administered a pharmaceutical product and which does not necessarily have to have a causal relationship with this treatment. An AE could therefore be any unfavourable and unintended sign, symptom, or disease temporally associated with the use of a medicinal product or protocol-specified procedure, whether or not considered related to the medicinal product or protocol-specified procedure. Any worsening of a pre-existing condition that was temporally associated with the use of the Sponsor's product was also an AE. The analysis population consisted of all randomized participants who received at least 1 dose of study treatment. Participants were included in the treatment group to which they were randomized. The number of participants who experienced ≥ 1 AE is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through End-of-Trial Analysis data cutoff date of 14-Mar-2022 (up to approximately 6 years)

| End point values | Pembrolizumab | Chemotherapy | | |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 314 | 296 | | |
| Units: Participants | 301 | 288 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants Discontinuing Study Treatment Due an Adverse Event (AE)

| | |
|-----------------|--|
| End point title | Number of Participants Discontinuing Study Treatment Due an Adverse Event (AE) |
|-----------------|--|

End point description:

An AE was defined as any untoward medical occurrence in a participant administered a pharmaceutical product and which does not necessarily have to have a causal relationship with this treatment. An AE could therefore be any unfavourable and unintended sign, symptom, or disease temporally associated with the use of a medicinal product or protocol-specified procedure, whether or not considered related to the medicinal product or protocol-specified procedure. Any worsening of a pre-existing condition that was temporally associated with the use of the Sponsor's product was also an AE. The analysis population consisted of all randomized participants who received at least 1 dose of study treatment. Participants were included in the treatment group to which they were randomized. The number of participants who discontinued study treatment due to an AE is presented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Through End-of-Trial Analysis data cutoff date of 14-Mar-2022 (up to approximately 6 years)

| | | | | |
|-----------------------------|-----------------|-----------------|--|--|
| End point values | Pembrolizumab | Chemotherapy | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 314 | 296 | | |
| Units: Participants | 40 | 42 | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Through End-of-Trial Analysis data cutoff date of 14-Mar-2022 (up to approximately 6 years)

Adverse event reporting additional description:

Deaths (all-causes) analysis population included all randomized participants (N=314, 314, 5). AE analysis population included all participants who received ≥ 1 dose of study treatment (N=314, 296, 5). MedDRA preferred terms "Neoplasm progression", "Malignant neoplasm progression" and "Disease progression" unrelated to study drug are excluded as AEs.

| | |
|-----------------|------------|
| Assessment type | Systematic |
|-----------------|------------|

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|------|
| Dictionary version | 24.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|----------------------------|
| Reporting group title | Pembrolizumab First Course |
|-----------------------|----------------------------|

Reporting group description:

Participants received pembrolizumab 200 mg, intravenously (IV) on Day 1 of every 21-day (3-week) cycle for up to 35 administrations (up to approximately 25 months).

| | |
|-----------------------|-----------------------------|
| Reporting group title | Pembrolizumab Second Course |
|-----------------------|-----------------------------|

Reporting group description:

Qualified participants who received pembrolizumab as a first course and stopped the first course of pembrolizumab due to complete response (CR) or completed the first course of pembrolizumab and had stable disease but progressed after discontinuation, initiated a second course of pembrolizumab at the investigator's discretion for up to 17 cycles (approximately 1 year additional).

| | |
|-----------------------|--------------|
| Reporting group title | Chemotherapy |
|-----------------------|--------------|

Reporting group description:

Participants received Investigator's choice of paclitaxel 80-100 mg/m² IV on Days 1, 8, and 15 of every 28-day (4-week) cycle, OR docetaxel 75 mg/m² IV on Day 1 of every 21-day (3-week) cycle, OR irinotecan 180 mg/m² IV on Day 1 of every 14-day (2-week) cycle (up to approximately 19 months).

| Serious adverse events | Pembrolizumab First Course | Pembrolizumab Second Course | Chemotherapy |
|---|----------------------------|-----------------------------|--------------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 127 / 314 (40.45%) | 1 / 5 (20.00%) | 121 / 314 (38.54%) |
| number of deaths (all causes) | 305 | 3 | 305 |
| number of deaths resulting from adverse events | 5 | 0 | 5 |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | |
| Breast cancer | | | |
| subjects affected / exposed ^[1] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cancer pain | | | |

| | | | |
|--|-----------------|---------------|-----------------|
| subjects affected / exposed ^[2] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Head and neck cancer | | | |
| subjects affected / exposed ^[3] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Metastases to bone | | | |
| subjects affected / exposed ^[4] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Squamous cell carcinoma | | | |
| subjects affected / exposed ^[5] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Vascular disorders | | | |
| Deep vein thrombosis | | | |
| subjects affected / exposed ^[6] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haemorrhage | | | |
| subjects affected / exposed ^[7] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Shock haemorrhagic | | | |
| subjects affected / exposed ^[8] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| General disorders and administration site conditions | | | |
| Asthenia | | | |
| subjects affected / exposed ^[9] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| | | | |
|---|-----------------|----------------|------------------|
| General physical health deterioration subjects affected / exposed ^[10] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Fatigue subjects affected / exposed ^[11] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 1 / 2 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Death subjects affected / exposed ^[12] | 5 / 314 (1.59%) | 0 / 5 (0.00%) | 10 / 296 (3.38%) |
| occurrences causally related to treatment / all | 1 / 5 | 0 / 0 | 0 / 10 |
| deaths causally related to treatment / all | 1 / 5 | 0 / 0 | 0 / 10 |
| Chest pain subjects affected / exposed ^[13] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Strangulated hernia subjects affected / exposed ^[14] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pyrexia subjects affected / exposed ^[15] | 4 / 314 (1.27%) | 0 / 5 (0.00%) | 4 / 296 (1.35%) |
| occurrences causally related to treatment / all | 2 / 4 | 0 / 0 | 3 / 4 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Reproductive system and breast disorders Prostatitis subjects affected / exposed ^[16] | 0 / 314 (0.00%) | 1 / 5 (20.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Respiratory, thoracic and mediastinal disorders Acute respiratory failure | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[17] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| Acute respiratory distress syndrome | | | |
| subjects affected / exposed ^[18] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Aspiration | | | |
| subjects affected / exposed ^[19] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Chronic obstructive pulmonary disease | | | |
| subjects affected / exposed ^[20] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Dyspnoea | | | |
| subjects affected / exposed ^[21] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haemoptysis | | | |
| subjects affected / exposed ^[22] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Hiccups | | | |
| subjects affected / exposed ^[23] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Interstitial lung disease | | | |
| subjects affected / exposed ^[24] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Lung disorder | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[25] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pleural effusion | | | |
| subjects affected / exposed ^[26] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pneumonitis | | | |
| subjects affected / exposed ^[27] | 7 / 314 (2.23%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 7 / 7 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 2 / 2 | 0 / 0 | 0 / 0 |
| Pneumothorax | | | |
| subjects affected / exposed ^[28] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tracheal fistula | | | |
| subjects affected / exposed ^[29] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Stridor | | | |
| subjects affected / exposed ^[30] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Respiratory failure | | | |
| subjects affected / exposed ^[31] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Pulmonary necrosis | | | |
| subjects affected / exposed ^[32] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pulmonary embolism | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[33] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Upper airway obstruction | | | |
| subjects affected / exposed ^[34] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Psychiatric disorders | | | |
| Completed suicide | | | |
| subjects affected / exposed ^[35] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| Confusional state | | | |
| subjects affected / exposed ^[36] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Delirium | | | |
| subjects affected / exposed ^[37] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Product issues | | | |
| Device occlusion | | | |
| subjects affected / exposed ^[38] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Device dislocation | | | |
| subjects affected / exposed ^[39] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Investigations | | | |
| Hepatic enzyme increased | | | |
| subjects affected / exposed ^[40] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| | | | |
|---|-----------------|---------------|-----------------|
| Liver function test increased subjects affected / exposed ^[41] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Neutrophil count decreased subjects affected / exposed ^[42] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 3 / 296 (1.01%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 3 / 3 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| White blood cell count decreased subjects affected / exposed ^[43] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 2 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| Weight decreased subjects affected / exposed ^[44] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| White blood cell count increased subjects affected / exposed ^[45] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Injury, poisoning and procedural complications | | | |
| Anastomotic fistula subjects affected / exposed ^[46] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Anastomotic leak subjects affected / exposed ^[47] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Fall subjects affected / exposed ^[48] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| | | | |
|---|-----------------|---------------|-----------------|
| Femoral neck fracture | | | |
| subjects affected / exposed ^[49] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrostomy failure | | | |
| subjects affected / exposed ^[50] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Foreign body in gastrointestinal tract | | | |
| subjects affected / exposed ^[51] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infusion related reaction | | | |
| subjects affected / exposed ^[52] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Radiation pneumonitis | | | |
| subjects affected / exposed ^[53] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Spinal compression fracture | | | |
| subjects affected / exposed ^[54] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tracheal injury | | | |
| subjects affected / exposed ^[55] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Subdural haematoma | | | |
| subjects affected / exposed ^[56] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tracheal obstruction | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[57] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Upper limb fracture | | | |
| subjects affected / exposed ^[58] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Congenital, familial and genetic disorders | | | |
| Tracheo-oesophageal fistula | | | |
| subjects affected / exposed ^[59] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cardiac disorders | | | |
| Acute left ventricular failure | | | |
| subjects affected / exposed ^[60] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Acute myocardial infarction | | | |
| subjects affected / exposed ^[61] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Atrial fibrillation | | | |
| subjects affected / exposed ^[62] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cardio-respiratory arrest | | | |
| subjects affected / exposed ^[63] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Myocarditis | | | |
| subjects affected / exposed ^[64] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |

| | | | |
|---|-----------------|---------------|-----------------|
| Sinus tachycardia | | | |
| subjects affected / exposed ^[65] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tachycardia | | | |
| subjects affected / exposed ^[66] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Nervous system disorders | | | |
| Dystonia | | | |
| subjects affected / exposed ^[67] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cerebrovascular accident | | | |
| subjects affected / exposed ^[68] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Demyelination | | | |
| subjects affected / exposed ^[69] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Dyskinesia | | | |
| subjects affected / exposed ^[70] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cerebellar stroke | | | |
| subjects affected / exposed ^[71] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Bell's palsy | | | |
| subjects affected / exposed ^[72] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cerebral infarction | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[73] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Guillain-Barre syndrome | | | |
| subjects affected / exposed ^[74] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Facial paralysis | | | |
| subjects affected / exposed ^[75] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haemorrhage intracranial | | | |
| subjects affected / exposed ^[76] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Neuralgia | | | |
| subjects affected / exposed ^[77] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hemiparesis | | | |
| subjects affected / exposed ^[78] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Headache | | | |
| subjects affected / exposed ^[79] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haemorrhagic stroke | | | |
| subjects affected / exposed ^[80] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Neuropathy peripheral | | | |

| | | | |
|---|-----------------|---------------|------------------|
| subjects affected / exposed ^[81] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Radiculopathy | | | |
| subjects affected / exposed ^[82] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Vocal cord paralysis | | | |
| subjects affected / exposed ^[83] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Spinal cord compression | | | |
| subjects affected / exposed ^[84] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Blood and lymphatic system disorders | | | |
| Anaemia | | | |
| subjects affected / exposed ^[85] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 5 / 296 (1.69%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 3 / 5 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Immune thrombocytopenia | | | |
| subjects affected / exposed ^[86] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Febrile neutropenia | | | |
| subjects affected / exposed ^[87] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 22 / 296 (7.43%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 23 / 24 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Leukopenia | | | |
| subjects affected / exposed ^[88] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Neutropenia | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[89] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 4 / 296 (1.35%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 4 / 5 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Eye disorders | | | |
| Cataract | | | |
| subjects affected / exposed ^[90] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrointestinal disorders | | | |
| Abdominal distension | | | |
| subjects affected / exposed ^[91] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Abdominal pain | | | |
| subjects affected / exposed ^[92] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Colitis | | | |
| subjects affected / exposed ^[93] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 3 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Constipation | | | |
| subjects affected / exposed ^[94] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Diarrhoea | | | |
| subjects affected / exposed ^[95] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 4 / 296 (1.35%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 3 / 4 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Diverticulum oesophageal | | | |
| subjects affected / exposed ^[96] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Dysphagia | | | |

| | | | |
|---|------------------|---------------|-----------------|
| subjects affected / exposed ^[97] | 11 / 314 (3.50%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 1 / 12 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Enterocolitis | | | |
| subjects affected / exposed ^[98] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrointestinal haemorrhage | | | |
| subjects affected / exposed ^[99] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 4 / 296 (1.35%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 4 |
| deaths causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 1 |
| Gastrointestinal hypomotility | | | |
| subjects affected / exposed ^[100] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haematemesis | | | |
| subjects affected / exposed ^[101] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Impaired gastric emptying | | | |
| subjects affected / exposed ^[102] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Intestinal perforation | | | |
| subjects affected / exposed ^[103] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Nausea | | | |
| subjects affected / exposed ^[104] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 3 / 296 (1.01%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 3 / 3 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophageal fistula | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[105] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophageal haemorrhage | | | |
| subjects affected / exposed ^[106] | 4 / 314 (1.27%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 4 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 4 | 0 / 0 | 0 / 0 |
| Oesophageal obstruction | | | |
| subjects affected / exposed ^[107] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophageal perforation | | | |
| subjects affected / exposed ^[108] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophageal stenosis | | | |
| subjects affected / exposed ^[109] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophageal ulcer | | | |
| subjects affected / exposed ^[110] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Oesophagitis | | | |
| subjects affected / exposed ^[111] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Peritoneal adhesions | | | |
| subjects affected / exposed ^[112] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Upper gastrointestinal haemorrhage | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[113] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 3 / 296 (1.01%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 3 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 2 |
| Vomiting | | | |
| subjects affected / exposed ^[114] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 5 / 296 (1.69%) |
| occurrences causally related to treatment / all | 1 / 2 | 0 / 0 | 4 / 5 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hepatobiliary disorders | | | |
| Cholecystitis | | | |
| subjects affected / exposed ^[115] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Autoimmune hepatitis | | | |
| subjects affected / exposed ^[116] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 2 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cholecystitis acute | | | |
| subjects affected / exposed ^[117] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hepatic failure | | | |
| subjects affected / exposed ^[118] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Hepatic function abnormal | | | |
| subjects affected / exposed ^[119] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Immune-mediated hepatitis | | | |
| subjects affected / exposed ^[120] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 2 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Liver injury | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[121] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Skin and subcutaneous tissue disorders | | | |
| Dermal cyst | | | |
| subjects affected / exposed ^[122] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Renal and urinary disorders | | | |
| Chronic kidney disease | | | |
| subjects affected / exposed ^[123] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Acute kidney injury | | | |
| subjects affected / exposed ^[124] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 2 / 2 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Endocrine disorders | | | |
| Hypercalcaemia of malignancy | | | |
| subjects affected / exposed ^[125] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypophysitis | | | |
| subjects affected / exposed ^[126] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Inappropriate antidiuretic hormone secretion | | | |
| subjects affected / exposed ^[127] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[128] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Back pain | | | |
| subjects affected / exposed ^[129] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Polymyositis | | | |
| subjects affected / exposed ^[130] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Neck pain | | | |
| subjects affected / exposed ^[131] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Fistula inflammation | | | |
| subjects affected / exposed ^[132] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infections and infestations | | | |
| Appendicitis | | | |
| subjects affected / exposed ^[133] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Beta haemolytic streptococcal infection | | | |
| subjects affected / exposed ^[134] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Bacteraemia | | | |
| subjects affected / exposed ^[135] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Bronchitis | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[136] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cellulitis | | | |
| subjects affected / exposed ^[137] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Candida infection | | | |
| subjects affected / exposed ^[138] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Clostridium difficile colitis | | | |
| subjects affected / exposed ^[139] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Device related sepsis | | | |
| subjects affected / exposed ^[140] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hepatic infection | | | |
| subjects affected / exposed ^[141] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Empyema | | | |
| subjects affected / exposed ^[142] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Herpes zoster | | | |
| subjects affected / exposed ^[143] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Liver abscess | | | |

| | | | |
|---|------------------|---------------|------------------|
| subjects affected / exposed ^[144] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infection | | | |
| subjects affected / exposed ^[145] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 2 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Lower respiratory tract infection viral | | | |
| subjects affected / exposed ^[146] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Peritonitis | | | |
| subjects affected / exposed ^[147] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Mediastinitis | | | |
| subjects affected / exposed ^[148] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Pneumonia aspiration | | | |
| subjects affected / exposed ^[149] | 12 / 314 (3.82%) | 0 / 5 (0.00%) | 5 / 296 (1.69%) |
| occurrences causally related to treatment / all | 1 / 13 | 0 / 0 | 1 / 5 |
| deaths causally related to treatment / all | 0 / 5 | 0 / 0 | 1 / 1 |
| Pneumonia | | | |
| subjects affected / exposed ^[150] | 14 / 314 (4.46%) | 0 / 5 (0.00%) | 22 / 296 (7.43%) |
| occurrences causally related to treatment / all | 3 / 15 | 0 / 0 | 12 / 26 |
| deaths causally related to treatment / all | 0 / 3 | 0 / 0 | 1 / 5 |
| Pneumonia bacterial | | | |
| subjects affected / exposed ^[151] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 2 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pneumonia necrotising | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[152] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pulmonary sepsis | | | |
| subjects affected / exposed ^[153] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Sepsis | | | |
| subjects affected / exposed ^[154] | 4 / 314 (1.27%) | 0 / 5 (0.00%) | 3 / 296 (1.01%) |
| occurrences causally related to treatment / all | 0 / 4 | 0 / 0 | 3 / 4 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 1 / 1 |
| Respiratory tract infection | | | |
| subjects affected / exposed ^[155] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Septic shock | | | |
| subjects affected / exposed ^[156] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Subcutaneous abscess | | | |
| subjects affected / exposed ^[157] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Stoma site infection | | | |
| subjects affected / exposed ^[158] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tracheitis | | | |
| subjects affected / exposed ^[159] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Tracheostomy infection | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[160] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Upper respiratory tract infection | | | |
| subjects affected / exposed ^[161] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Urinary tract infection | | | |
| subjects affected / exposed ^[162] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Varicella zoster virus infection | | | |
| subjects affected / exposed ^[163] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Vascular device infection | | | |
| subjects affected / exposed ^[164] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Metabolism and nutrition disorders | | | |
| Decreased appetite | | | |
| subjects affected / exposed ^[165] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 1 / 2 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Dehydration | | | |
| subjects affected / exposed ^[166] | 2 / 314 (0.64%) | 0 / 5 (0.00%) | 4 / 296 (1.35%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 1 / 4 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hyperglycaemia | | | |
| subjects affected / exposed ^[167] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypercalcaemia | | | |

| | | | |
|---|-----------------|---------------|-----------------|
| subjects affected / exposed ^[168] | 3 / 314 (0.96%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Electrolyte imbalance | | | |
| subjects affected / exposed ^[169] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypoglycaemia | | | |
| subjects affected / exposed ^[170] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypokalaemia | | | |
| subjects affected / exposed ^[171] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hyponatraemia | | | |
| subjects affected / exposed ^[172] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 2 / 296 (0.68%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypophosphataemia | | | |
| subjects affected / exposed ^[173] | 0 / 314 (0.00%) | 0 / 5 (0.00%) | 1 / 296 (0.34%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Type 1 diabetes mellitus | | | |
| subjects affected / exposed ^[174] | 1 / 314 (0.32%) | 0 / 5 (0.00%) | 0 / 296 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

Notes:

[1] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[2] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[36] - The number of subjects exposed to this adverse event is less than the total number of subjects

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[86] - The number of subjects exposed to this adverse event is less than the total number of subjects

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

treatment.

[170] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[171] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[172] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[173] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

[174] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed to this adverse event. These numbers are expected to be equal.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

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

| Non-serious adverse events | Pembrolizumab First Course | Pembrolizumab Second Course | Chemotherapy |
|---|-----------------------------------|------------------------------------|---------------------|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 285 / 314 (90.76%) | 5 / 5 (100.00%) | 281 / 314 (89.49%) |
| Investigations | | | |
| Blood creatinine increased | | | |
| subjects affected / exposed ^[175] | 8 / 314 (2.55%) | 1 / 5 (20.00%) | 3 / 296 (1.01%) |
| occurrences (all) | 11 | 1 | 4 |
| Aspartate aminotransferase increased | | | |
| subjects affected / exposed ^[176] | 26 / 314 (8.28%) | 1 / 5 (20.00%) | 14 / 296 (4.73%) |
| occurrences (all) | 33 | 1 | 16 |
| Alanine aminotransferase increased | | | |
| subjects affected / exposed ^[177] | 22 / 314 (7.01%) | 0 / 5 (0.00%) | 10 / 296 (3.38%) |
| occurrences (all) | 26 | 0 | 16 |
| Blood sodium decreased | | | |
| subjects affected / exposed ^[178] | 0 / 314 (0.00%) | 1 / 5 (20.00%) | 1 / 296 (0.34%) |
| occurrences (all) | 0 | 1 | 1 |
| Blood thyroid stimulating hormone increased | | | |
| subjects affected / exposed ^[179] | 3 / 314 (0.96%) | 1 / 5 (20.00%) | 3 / 296 (1.01%) |
| occurrences (all) | 4 | 1 | 3 |
| Lymphocyte count decreased | | | |
| subjects affected / exposed ^[180] | 9 / 314 (2.87%) | 1 / 5 (20.00%) | 9 / 296 (3.04%) |
| occurrences (all) | 10 | 1 | 15 |
| Weight decreased | | | |

| | | | |
|---|-------------------------|---------------------|--------------------------|
| subjects affected / exposed ^[181] occurrences (all) | 39 / 314 (12.42%) 39 | 1 / 5 (20.00%) 1 | 34 / 296 (11.49%) 43 |
| Neutrophil count decreased subjects affected / exposed ^[182] occurrences (all) | 2 / 314 (0.64%) 2 | 0 / 5 (0.00%) 0 | 50 / 296 (16.89%) 113 |
| White blood cell count decreased subjects affected / exposed ^[183] occurrences (all) | 1 / 314 (0.32%) 1 | 0 / 5 (0.00%) 0 | 52 / 296 (17.57%) 114 |
| Nervous system disorders Dementia Alzheimer's type subjects affected / exposed ^[184] occurrences (all) | 0 / 314 (0.00%) 0 | 1 / 5 (20.00%) 1 | 0 / 296 (0.00%) 0 |
| Neuropathy peripheral subjects affected / exposed ^[185] occurrences (all) | 6 / 314 (1.91%) 7 | 0 / 5 (0.00%) 0 | 25 / 296 (8.45%) 28 |
| Peripheral sensory neuropathy subjects affected / exposed ^[186] occurrences (all) | 3 / 314 (0.96%) 3 | 0 / 5 (0.00%) 0 | 52 / 296 (17.57%) 53 |
| Blood and lymphatic system disorders Anaemia subjects affected / exposed ^[187] occurrences (all) | 52 / 314 (16.56%) 60 | 1 / 5 (20.00%) 2 | 83 / 296 (28.04%) 110 |
| Neutropenia subjects affected / exposed ^[188] occurrences (all) | 0 / 314 (0.00%) 0 | 0 / 5 (0.00%) 0 | 36 / 296 (12.16%) 65 |
| General disorders and administration site conditions Fatigue subjects affected / exposed ^[189] occurrences (all) | 67 / 314 (21.34%) 70 | 0 / 5 (0.00%) 0 | 87 / 296 (29.39%) 121 |
| Asthenia subjects affected / exposed ^[190] occurrences (all) | 45 / 314 (14.33%) 48 | 0 / 5 (0.00%) 0 | 43 / 296 (14.53%) 58 |
| Malaise subjects affected / exposed ^[191] occurrences (all) | 15 / 314 (4.78%) 18 | 0 / 5 (0.00%) 0 | 19 / 296 (6.42%) 26 |
| Oedema peripheral | | | |

| | | | |
|--|-------------------|----------------|-------------------|
| subjects affected / exposed ^[192] | 19 / 314 (6.05%) | 0 / 5 (0.00%) | 19 / 296 (6.42%) |
| occurrences (all) | 20 | 0 | 19 |
| Pyrexia | | | |
| subjects affected / exposed ^[193] | 31 / 314 (9.87%) | 0 / 5 (0.00%) | 45 / 296 (15.20%) |
| occurrences (all) | 41 | 0 | 58 |
| Gastrointestinal disorders | | | |
| Abdominal distension | | | |
| subjects affected / exposed ^[194] | 7 / 314 (2.23%) | 1 / 5 (20.00%) | 2 / 296 (0.68%) |
| occurrences (all) | 7 | 1 | 2 |
| Abdominal pain | | | |
| subjects affected / exposed ^[195] | 34 / 314 (10.83%) | 0 / 5 (0.00%) | 27 / 296 (9.12%) |
| occurrences (all) | 36 | 0 | 32 |
| Abdominal pain upper | | | |
| subjects affected / exposed ^[196] | 14 / 314 (4.46%) | 0 / 5 (0.00%) | 17 / 296 (5.74%) |
| occurrences (all) | 16 | 0 | 19 |
| Diarrhoea | | | |
| subjects affected / exposed ^[197] | 38 / 314 (12.10%) | 1 / 5 (20.00%) | 79 / 296 (26.69%) |
| occurrences (all) | 65 | 1 | 120 |
| Constipation | | | |
| subjects affected / exposed ^[198] | 56 / 314 (17.83%) | 0 / 5 (0.00%) | 56 / 296 (18.92%) |
| occurrences (all) | 63 | 0 | 63 |
| Dyspepsia | | | |
| subjects affected / exposed ^[199] | 6 / 314 (1.91%) | 1 / 5 (20.00%) | 11 / 296 (3.72%) |
| occurrences (all) | 7 | 1 | 13 |
| Dysphagia | | | |
| subjects affected / exposed ^[200] | 40 / 314 (12.74%) | 1 / 5 (20.00%) | 26 / 296 (8.78%) |
| occurrences (all) | 44 | 1 | 27 |
| Nausea | | | |
| subjects affected / exposed ^[201] | 59 / 314 (18.79%) | 0 / 5 (0.00%) | 83 / 296 (28.04%) |
| occurrences (all) | 66 | 0 | 110 |
| Stomatitis | | | |
| subjects affected / exposed ^[202] | 9 / 314 (2.87%) | 0 / 5 (0.00%) | 28 / 296 (9.46%) |
| occurrences (all) | 9 | 0 | 30 |
| Vomiting | | | |
| subjects affected / exposed ^[203] | 37 / 314 (11.78%) | 0 / 5 (0.00%) | 53 / 296 (17.91%) |
| occurrences (all) | 45 | 0 | 74 |

| | | | |
|---|-------------------|----------------|-------------------|
| Respiratory, thoracic and mediastinal disorders | | | |
| Dyspnoea | | | |
| subjects affected / exposed ^[204] | 31 / 314 (9.87%) | 0 / 5 (0.00%) | 17 / 296 (5.74%) |
| occurrences (all) | 36 | 0 | 21 |
| Cough | | | |
| subjects affected / exposed ^[205] | 40 / 314 (12.74%) | 0 / 5 (0.00%) | 30 / 296 (10.14%) |
| occurrences (all) | 46 | 0 | 33 |
| Skin and subcutaneous tissue disorders | | | |
| Alopecia | | | |
| subjects affected / exposed ^[206] | 4 / 314 (1.27%) | 0 / 5 (0.00%) | 88 / 296 (29.73%) |
| occurrences (all) | 4 | 0 | 88 |
| Pruritus | | | |
| subjects affected / exposed ^[207] | 23 / 314 (7.32%) | 1 / 5 (20.00%) | 8 / 296 (2.70%) |
| occurrences (all) | 27 | 1 | 8 |
| Rash | | | |
| subjects affected / exposed ^[208] | 20 / 314 (6.37%) | 0 / 5 (0.00%) | 25 / 296 (8.45%) |
| occurrences (all) | 24 | 0 | 27 |
| Psychiatric disorders | | | |
| Insomnia | | | |
| subjects affected / exposed ^[209] | 25 / 314 (7.96%) | 0 / 5 (0.00%) | 16 / 296 (5.41%) |
| occurrences (all) | 25 | 0 | 42 |
| Irritability | | | |
| subjects affected / exposed ^[210] | 0 / 314 (0.00%) | 1 / 5 (20.00%) | 1 / 296 (0.34%) |
| occurrences (all) | 0 | 1 | 1 |
| Endocrine disorders | | | |
| Hypothyroidism | | | |
| subjects affected / exposed ^[211] | 37 / 314 (11.78%) | 1 / 5 (20.00%) | 7 / 296 (2.36%) |
| occurrences (all) | 40 | 1 | 7 |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed ^[212] | 24 / 314 (7.64%) | 0 / 5 (0.00%) | 19 / 296 (6.42%) |
| occurrences (all) | 26 | 0 | 22 |
| Back pain | | | |
| subjects affected / exposed ^[213] | 38 / 314 (12.10%) | 0 / 5 (0.00%) | 24 / 296 (8.11%) |
| occurrences (all) | 40 | 0 | 27 |
| Myalgia | | | |

| | | | |
|---|-------------------------|---------------------|-------------------------|
| subjects affected / exposed ^[214] occurrences (all) | 8 / 314 (2.55%) 10 | 0 / 5 (0.00%) 0 | 25 / 296 (8.45%) 31 |
| Pain in extremity subjects affected / exposed ^[215] occurrences (all) | 8 / 314 (2.55%) 10 | 1 / 5 (20.00%) 1 | 8 / 296 (2.70%) 9 |
| Infections and infestations Upper respiratory tract infection subjects affected / exposed ^[216] occurrences (all) | 12 / 314 (3.82%) 17 | 1 / 5 (20.00%) 2 | 13 / 296 (4.39%) 15 |
| Metabolism and nutrition disorders Decreased appetite subjects affected / exposed ^[217] occurrences (all) | 76 / 314 (24.20%) 82 | 1 / 5 (20.00%) 1 | 76 / 296 (25.68%) 97 |
| Gout subjects affected / exposed ^[218] occurrences (all) | 1 / 314 (0.32%) 1 | 1 / 5 (20.00%) 1 | 0 / 296 (0.00%) 0 |
| Hyperglycaemia subjects affected / exposed ^[219] occurrences (all) | 16 / 314 (5.10%) 21 | 0 / 5 (0.00%) 0 | 14 / 296 (4.73%) 14 |
| Hyperkalaemia subjects affected / exposed ^[220] occurrences (all) | 8 / 314 (2.55%) 13 | 1 / 5 (20.00%) 1 | 6 / 296 (2.03%) 7 |
| Hypoalbuminaemia subjects affected / exposed ^[221] occurrences (all) | 17 / 314 (5.41%) 23 | 0 / 5 (0.00%) 0 | 15 / 296 (5.07%) 16 |
| Hypokalaemia subjects affected / exposed ^[222] occurrences (all) | 15 / 314 (4.78%) 15 | 0 / 5 (0.00%) 0 | 29 / 296 (9.80%) 40 |
| Hyponatraemia subjects affected / exposed ^[223] occurrences (all) | 19 / 314 (6.05%) 27 | 0 / 5 (0.00%) 0 | 17 / 296 (5.74%) 24 |
| Iron deficiency subjects affected / exposed ^[224] occurrences (all) | 1 / 314 (0.32%) 1 | 1 / 5 (20.00%) 1 | 1 / 296 (0.34%) 1 |

Notes:

[175] - The number of subjects exposed to this adverse event is less than the total number of subjects

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

Justification: The analysis population includes all participants who received at least 1 dose of study treatment.

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|--|
| 14 December 2016 | Amendment 02: Primary reason for amendment was to incorporate revisions to descriptions of gene expression profile (GEP) cut-off and how objectives and endpoints would be met and analyzed, respectively. |
| 07 April 2017 | Amendment 03: Primary reason for amendment was to incorporate revisions to the enrollment period to achieve the required sample size of the China Cohort. |
| 30 August 2017 | Amendment 04: Primary reason for amendment was to incorporate revisions to primary objectives, based on recommendations from emerging data. |
| 09 March 2018 | Amendment 05: Primary reason for amendment was to incorporate revisions to statistical tests for testing the OS and PFS hypotheses in all subjects. |
| 26 August 2021 | Amendment 06: Primary reason for amendment was to incorporate revisions to update the dose modification and toxicity management guidelines for immune-related AEs and to clarify the concomitant use of COVID-19 vaccines. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported