



## Clinical trial results:

**A randomised open-labelled multicentre trial of the efficacy of epirubicin, oxaliplatin and capecitabine (EOX) with or without panitumumab in previously untreated advanced oesophago-gastric cancer (REAL3)**

### Summary

|                          |                  |
|--------------------------|------------------|
| EudraCT number           | 2007-005976-15   |
| Trial protocol           | GB               |
| Global end of trial date | 28 February 2014 |

### Results information

|                                |              |
|--------------------------------|--------------|
| Result version number          | v1 (current) |
| This version publication date  | 14 June 2019 |
| First version publication date | 14 June 2019 |

### Trial information

#### Trial identification

|                       |         |
|-----------------------|---------|
| Sponsor protocol code | CCR3024 |
|-----------------------|---------|

#### Additional study identifiers

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

Notes:

### Sponsors

|                              |  |
|------------------------------|--|
| Sponsor organisation name    | Royal Marsden NHS Foundation Trust   |
| Sponsor organisation address | Downs Road, Sutton, London, United Kingdom, sm25pt   |
| Public contact               | Claire Saffery, The Royal Marsden NHS Foundation Trust, 020 8661 3637, claire.saffery@rmh.nhs.uk |
| Scientific contact           | Claire Saffery, The Royal Marsden NHS Foundation Trust, 020 8661 3637, claire.saffery@rmh.nhs.uk |

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:

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**Results analysis stage**

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|  |                  |
|--|------------------|
| Analysis stage                                       | Final            |
| Date of interim/final analysis                       | 16 July 2012     |
| Is this the analysis of the primary completion data? | Yes              |
| Primary completion date                              | 16 July 2012     |
| Global end of trial reached?                         | Yes              |
| Global end of trial date                             | 28 February 2014 |
| Was the trial ended prematurely?                     | Yes              |

Notes:

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**General information about the trial**

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Main objective of the trial:

To determine whether adding panitumumab to standard chemotherapy with epirubicin, oxaliplatin and capecitabine (EOX), improves the median overall survival of patients with advanced oesophago-gastric cancer.

Protection of trial subjects:

Any safety concerns generated from this or other studies of panitumumab could lead to stopping this trial

prematurely. Serious adverse events will be reported and evaluated regularly. Any significant observations would

result in a formal review and dependent upon the outcome of that review, the study would be terminated or continue.

Serious adverse events are also reported to the regulatory authorities within timelines dictated by law. Interim analyses will take place approximately annually to examine safety, scientific validity and the conduct of the trial.

Background therapy: -

Evidence for comparator: -

|   |              |
|---|--------------|
| Actual start date of recruitment                          | 02 June 2008 |
| Long term follow-up planned                               | No           |
| Independent data monitoring committee (IDMC) involvement? | Yes          |

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

|                                      |                     |
|--------------------------------------|---------------------|
| Country: Number of subjects enrolled | United Kingdom: 553 |
| Worldwide total number of subjects   | 553                 |
| EEA total number of subjects         | 553                 |

Notes:

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**Subjects enrolled per age group**

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|   |   |
|---|---|
| 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) | 326 |
| From 65 to 84 years  | 227 |
| 85 years and over    | 0   |

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

The following assessments will take place during the screening period; Clinical examination & history, WHO performance status, CT scan (chest/abdomen/pelvis), Full blood count, Serum biochemistry, Creatinine clearance, ECG, Pregnancy testing, Quality of life, Biomarkers

### Period 1

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

### Arms

|                              |           |
|------------------------------|-----------|
| Are arms mutually exclusive? | Yes       |
| <b>Arm title</b>             | EOC alone |

Arm description:

epirubicin, oxaliplatin and capecitabine.

|  |                                     |
|--|-------------------------------------|
| Arm type                               | Active comparator                   |
| Investigational medicinal product name | epirubicin                          |
| Investigational medicinal product code |                                     |
| Other name                             |                                     |
| Pharmaceutical forms                   | Solution for solution for injection |
| Routes of administration               | Intravenous use                     |

Dosage and administration details:

50mg/m<sup>2</sup> IV on day 1.

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

Dosage and administration details:

130mg/m<sup>2</sup> IV on day 1.

|  |              |
|--|--------------|
| Investigational medicinal product name | Capecitabine |
| Investigational medicinal product code |              |
| Other name                             |              |
| Pharmaceutical forms                   | Tablet       |
| Routes of administration               | Oral use     |

Dosage and administration details:

1250mg/m<sup>2</sup> PO in two divided doses continuously from days 1-21.

|                  |                   |
|------------------|-------------------|
| <b>Arm title</b> | EOC + Panitumumab |
|------------------|-------------------|

Arm description:

epirubicin, oxaliplatin, capecitabine and panitumumab

|          |                   |
|----------|-------------------|
| Arm type | Active comparator |
|----------|-------------------|

|  |                       |
|--|-----------------------|
| Investigational medicinal product name   | Epirubicin            |
| Investigational medicinal product code   |                       |
| Other name   |                       |
| Pharmaceutical forms   | Solution for infusion |
| Routes of administration   | Intravenous use       |
| Dosage and administration details:<br>50mg/m2 IV on day 1.   |                       |
| Investigational medicinal product name   | oxaliplatin           |
| Investigational medicinal product code   |                       |
| Other name   |                       |
| Pharmaceutical forms   | Solution for infusion |
| Routes of administration   | Intravenous use       |
| Dosage and administration details:<br>100mg/m2 IV on day 1.  |                       |
| Investigational medicinal product name   | Capecitabine          |
| Investigational medicinal product code   |                       |
| Other name   |                       |
| Pharmaceutical forms   | Tablet                |
| Routes of administration   | Oral use              |
| Dosage and administration details:<br>1000mg/m2 PO in two divided doses continuously from days 1-21. |                       |
| Investigational medicinal product name   | Panitumumab           |
| Investigational medicinal product code   |                       |
| Other name   |                       |
| Pharmaceutical forms   | Solution for infusion |
| Routes of administration   | Intrauterine use      |
| Dosage and administration details:<br>9mg/kg IV on day 1 of each cycle after mEOX chemotherapy.      |                       |

| <b>Number of subjects in period 1</b>  | EOC alone | EOC + Panitumumab |
|--|-----------|-------------------|
| Started                                | 275       | 278               |
| Completed                              | 266       | 276               |
| Not completed                          | 9         | 2                 |
| Consent withdrawn by subject           | 4         | -                 |
| Physician decision                     | 5         | 1                 |
| Had not started prior to study closure | -         | 1                 |

## Baseline characteristics

### Reporting groups

|   |                   |
|---|-------------------|
| Reporting group title   | EOC alone         |
| Reporting group description:<br>epirubicin, oxaliplatin and capecitabine.             |                   |
| Reporting group title   | EOC + Panitumumab |
| Reporting group description:<br>epirubicin, oxaliplatin, capecitabine and panitumumab |                   |

| Reporting group values                                | EOC alone | EOC + Panitumumab | Total |
|---|-----------|-------------------|-------|
| Number of subjects                                    | 275       | 278               | 553   |
| Age categorical<br>Units: Subjects                    |           |                   |       |
| In utero  | 0         | 0                 | 0     |
| Preterm newborn infants<br>(gestational age < 37 wks) | 0         | 0                 | 0     |
| Newborns (0-27 days)                                  | 0         | 0                 | 0     |
| Infants and toddlers (28 days-23<br>months)           | 0         | 0                 | 0     |
| Children (2-11 years)                                 | 0         | 0                 | 0     |
| Adolescents (12-17 years)                             | 0         | 0                 | 0     |
| Adults (18-64 years)                                  | 168       | 158               | 326   |
| From 65-84 years                                      | 107       | 120               | 227   |
| 85 years and over                                     | 0         | 0                 | 0     |
| Age continuous<br>Units: years                        |           |                   |       |
| median  | 62        | 63                |       |
| inter-quartile range (Q1-Q3)                          | 54 to 68  | 56 to 68          | -     |
| Gender categorical<br>Units: Subjects                 |           |                   |       |
| Female  | 49        | 46                | 95    |
| Male  | 226       | 232               | 458   |

### Subject analysis sets

|  |                    |
|--|--------------------|
| Subject analysis set title   | Intention to treat |
| Subject analysis set type  | Intention-to-treat |
| Subject analysis set description:<br>All patients randomised to the study analysed according to the arm to which they were initially randomised.<br>However, patients still on treatment on the 19th October 2011 were censored at this point to ensure that the crossover of patients to standard chemotherapy does not interfere with this analysis. |                    |

| Reporting group values             | Intention to treat |  |  |
|------------------------------------|--------------------|--|--|
| Number of subjects                 | 553                |  |  |
| Age categorical<br>Units: Subjects |                    |  |  |
| In utero                           |                    |  |  |

|  |                                    |  |  |
|--|------------------------------------|--|--|
| Preterm newborn infants<br>(gestational age < 37 wks)<br>Newborns (0-27 days)<br>Infants and toddlers (28 days-23 months)<br>Children (2-11 years)<br>Adolescents (12-17 years)<br>Adults (18-64 years)<br>From 65-84 years<br>85 years and over | <br><br><br><br><br><br>326<br>227 |  |  |
| Age continuous<br>Units: years<br>median<br>inter-quartile range (Q1-Q3)   |                                    |  |  |
| Gender categorical<br>Units: Subjects  |                                    |  |  |
| Female<br>Male   | 95<br>458                          |  |  |

## End points

### End points reporting groups

|  |                    |
|--|--------------------|
| Reporting group title  | EOC alone          |
| Reporting group description:<br>epirubicin, oxaliplatin and capecitabine.  |                    |
| Reporting group title  | EOC + Panitumumab  |
| Reporting group description:<br>epirubicin, oxaliplatin, capecitabine and panitumumab  |                    |
| Subject analysis set title   | Intention to treat |
| Subject analysis set type  | Intention-to-treat |
| Subject analysis set description:<br>All patients randomised to the study analysed according to the arm to which they were initially randomised.<br>However, patients still on treatment on the 19th October 2011 were censored at this point to ensure that the crossover of patients to standard chemotherapy does not interfere with this analysis. |                    |

### Primary: Overall survival at 1 year

|  |                            |
|--|----------------------------|
| End point title  | Overall survival at 1 year |
| End point description:<br>Time from Randomisation to death or censored at time last followed up.<br>Data for patients still on treatment were censored at the time of crossover to allow accurate comparison between 2 trial groups. |                            |
| End point type   | Primary                    |
| End point timeframe:<br>One year post last patient randomised  |                            |

| End point values                 | EOC alone       | EOC + Panitumumab |  |  |
|----------------------------------|-----------------|-------------------|--|--|
| Subject group type               | Reporting group | Reporting group   |  |  |
| Number of subjects analysed      | 275             | 278               |  |  |
| Units: survival percent alive    |                 |                   |  |  |
| number (confidence interval 95%) | 46 (38 to 54)   | 33 (26 to 41)     |  |  |

### Statistical analyses

|   |                               |
|---|-------------------------------|
| Statistical analysis title  | Overall Survival              |
| Statistical analysis description:<br>Overall survival was estimated the Kaplan-Meier method. Groups were compared with the log-rank test and Cox regression analysis to generate Hazard Ratios and 95% CIs. |                               |
| Comparison groups   | EOC + Panitumumab v EOC alone |



|   |                         |
|---|-------------------------|
| Number of subjects included in analysis | 553                     |
| Analysis specification                  | Pre-specified           |
| Analysis type                           | superiority             |
| P-value                                 | = 0.013                 |
| Method                                  | Regression, Cox         |
| Parameter estimate                      | Cox proportional hazard |
| Point estimate                          | 1.37                    |
| Confidence interval                     |                         |
| level                                   | 95 %                    |
| sides                                   | 2-sided                 |
| lower limit                             | 1.07                    |
| upper limit                             | 1.76                    |

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From randomisation to 30 days post last trial treatment

Adverse event reporting additional description:

Grade 3-5 toxicities

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

### Dictionary used

|                 |               |
|-----------------|---------------|
| Dictionary name | No dictionary |
|-----------------|---------------|

|                    |   |
|--------------------|---|
| Dictionary version | 0 |
|--------------------|---|

### Reporting groups

|                       |           |
|-----------------------|-----------|
| Reporting group title | EOC alone |
|-----------------------|-----------|

Reporting group description: -

|                       |                   |
|-----------------------|-------------------|
| Reporting group title | EOC + Panitumumab |
|-----------------------|-------------------|

Reporting group description: -

| Serious adverse events                            | EOC alone          | EOC + Panitumumab  |  |
|---|--------------------|--------------------|--|
| Total subjects affected by serious adverse events |                    |                    |  |
| subjects affected / exposed                       | 125 / 266 (46.99%) | 133 / 276 (48.19%) |  |
| number of deaths (all causes)                     | 110                | 141                |  |
| number of deaths resulting from adverse events    | 8                  | 5                  |  |
| Vascular disorders                                |                    |                    |  |
| Hypotension                                       |                    |                    |  |
| subjects affected / exposed                       | 2 / 266 (0.75%)    | 1 / 276 (0.36%)    |  |
| occurrences causally related to treatment / all   | 1 / 1              | 1 / 1              |  |
| deaths causally related to treatment / all        | 0 / 0              | 0 / 0              |  |
| Hypertension                                      |                    |                    |  |
| subjects affected / exposed                       | 1 / 266 (0.38%)    | 0 / 276 (0.00%)    |  |
| occurrences causally related to treatment / all   | 0 / 1              | 0 / 0              |  |
| deaths causally related to treatment / all        | 0 / 0              | 0 / 0              |  |
| Vascular disorders - Other, specify               |                    |                    |  |
| subjects affected / exposed                       | 0 / 266 (0.00%)    | 1 / 276 (0.36%)    |  |
| occurrences causally related to treatment / all   | 0 / 0              | 1 / 1              |  |
| deaths causally related to treatment / all        | 0 / 0              | 0 / 0              |  |
| Peripheral ischaemia                              |                    |                    |  |

|  |                  |                 |  |
|--|------------------|-----------------|--|
| subjects affected / exposed                          | 0 / 266 (0.00%)  | 2 / 276 (0.72%) |  |
| occurrences causally related to treatment / all      | 0 / 0            | 2 / 2           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| General disorders and administration site conditions |                  |                 |  |
| Fatigue  |                  |                 |  |
| subjects affected / exposed                          | 9 / 266 (3.38%)  | 6 / 276 (2.17%) |  |
| occurrences causally related to treatment / all      | 10 / 10          | 6 / 6           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Fever  |                  |                 |  |
| subjects affected / exposed                          | 2 / 266 (0.75%)  | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all      | 1 / 2            | 0 / 0           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Injection site reaction                              |                  |                 |  |
| subjects affected / exposed                          | 1 / 266 (0.38%)  | 2 / 276 (0.72%) |  |
| occurrences causally related to treatment / all      | 1 / 1            | 2 / 2           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Pain   |                  |                 |  |
| subjects affected / exposed                          | 11 / 266 (4.14%) | 9 / 276 (3.26%) |  |
| occurrences causally related to treatment / all      | 9 / 13           | 8 / 12          |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Immune system disorders                              |                  |                 |  |
| Allergic reaction to excipient                       |                  |                 |  |
| subjects affected / exposed                          | 3 / 266 (1.13%)  | 3 / 276 (1.09%) |  |
| occurrences causally related to treatment / all      | 3 / 3            | 3 / 3           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Respiratory, thoracic and mediastinal disorders      |                  |                 |  |
| Dyspnoea   |                  |                 |  |
| subjects affected / exposed                          | 4 / 266 (1.50%)  | 3 / 276 (1.09%) |  |
| occurrences causally related to treatment / all      | 1 / 4            | 1 / 3           |  |
| deaths causally related to treatment / all           | 0 / 0            | 0 / 0           |  |
| Hiccups  |                  |                 |  |

|   |                 |                 |  |
|---|-----------------|-----------------|--|
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Pneumonitis                                     |                 |                 |  |
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 1 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 1 / 1           | 0 / 0           |  |
| Neurology - Other (Specify)                     |                 |                 |  |
| subjects affected / exposed                     | 3 / 266 (1.13%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 2 / 3           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Investigations                                  |                 |                 |  |
| Hemoglobin increased                            |                 |                 |  |
| subjects affected / exposed                     | 9 / 266 (3.38%) | 4 / 276 (1.45%) |  |
| occurrences causally related to treatment / all | 1 / 9           | 1 / 4           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Creatinine increased                            |                 |                 |  |
| subjects affected / exposed                     | 3 / 266 (1.13%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 1 / 3           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Haptoglobin decreased                           |                 |                 |  |
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 1 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Neutrophil count decreased                      |                 |                 |  |
| subjects affected / exposed                     | 7 / 266 (2.63%) | 8 / 276 (2.90%) |  |
| occurrences causally related to treatment / all | 7 / 7           | 9 / 9           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Platelet count decreased                        |                 |                 |  |
| subjects affected / exposed                     | 3 / 266 (1.13%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 3 / 3           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Injury, poisoning and procedural complications  |                 |                 |  |

|   |                  |                  |  |
|---|------------------|------------------|--|
| Fracture  |                  |                  |  |
| subjects affected / exposed                     | 1 / 266 (0.38%)  | 0 / 276 (0.00%)  |  |
| occurrences causally related to treatment / all | 0 / 1            | 0 / 0            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |
| Radiation recall reaction (dermatologic)        |                  |                  |  |
| subjects affected / exposed                     | 3 / 266 (1.13%)  | 2 / 276 (0.72%)  |  |
| occurrences causally related to treatment / all | 3 / 3            | 2 / 2            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |
| Thrombosis                                      |                  |                  |  |
| subjects affected / exposed                     | 12 / 266 (4.51%) | 17 / 276 (6.16%) |  |
| occurrences causally related to treatment / all | 12 / 12          | 18 / 18          |  |
| deaths causally related to treatment / all      | 0 / 0            | 1 / 1            |  |
| Cardiac disorders                               |                  |                  |  |
| Cardiac infarction                              |                  |                  |  |
| subjects affected / exposed                     | 4 / 266 (1.50%)  | 2 / 276 (0.72%)  |  |
| occurrences causally related to treatment / all | 4 / 4            | 2 / 2            |  |
| deaths causally related to treatment / all      | 2 / 2            | 0 / 0            |  |
| Ventricular arrhythmia                          |                  |                  |  |
| subjects affected / exposed                     | 0 / 266 (0.00%)  | 1 / 276 (0.36%)  |  |
| occurrences causally related to treatment / all | 0 / 0            | 1 / 1            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |
| Nervous system disorders                        |                  |                  |  |
| Ischaemia                                       |                  |                  |  |
| subjects affected / exposed                     | 1 / 266 (0.38%)  | 2 / 276 (0.72%)  |  |
| occurrences causally related to treatment / all | 0 / 1            | 1 / 2            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |
| Peripheral motor neuropathy                     |                  |                  |  |
| subjects affected / exposed                     | 1 / 266 (0.38%)  | 1 / 276 (0.36%)  |  |
| occurrences causally related to treatment / all | 1 / 1            | 1 / 1            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |
| Vasovagal reaction                              |                  |                  |  |
| subjects affected / exposed                     | 1 / 266 (0.38%)  | 1 / 276 (0.36%)  |  |
| occurrences causally related to treatment / all | 0 / 1            | 1 / 1            |  |
| deaths causally related to treatment / all      | 0 / 0            | 0 / 0            |  |

|  |                   |                  |  |
|--|-------------------|------------------|--|
| Peripheral sensory neuropathy<br>subjects affected / exposed | 1 / 266 (0.38%)   | 0 / 276 (0.00%)  |  |
| occurrences causally related to<br>treatment / all           | 1 / 1             | 0 / 0            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Syncope<br>subjects affected / exposed                       | 1 / 266 (0.38%)   | 0 / 276 (0.00%)  |  |
| occurrences causally related to<br>treatment / all           | 0 / 1             | 0 / 0            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Blood and lymphatic system disorders                         |                   |                  |  |
| Febrile neutropenia<br>subjects affected / exposed           | 32 / 266 (12.03%) | 19 / 276 (6.88%) |  |
| occurrences causally related to<br>treatment / all           | 36 / 36           | 22 / 22          |  |
| deaths causally related to<br>treatment / all                | 2 / 2             | 0 / 0            |  |
| Leukocytosis<br>subjects affected / exposed                  | 1 / 266 (0.38%)   | 0 / 276 (0.00%)  |  |
| occurrences causally related to<br>treatment / all           | 1 / 1             | 0 / 0            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Eye disorders  |                   |                  |  |
| Glaucoma<br>subjects affected / exposed                      | 0 / 266 (0.00%)   | 1 / 276 (0.36%)  |  |
| occurrences causally related to<br>treatment / all           | 0 / 0             | 1 / 1            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Gastrointestinal disorders                                   |                   |                  |  |
| Ascites<br>subjects affected / exposed                       | 0 / 266 (0.00%)   | 1 / 276 (0.36%)  |  |
| occurrences causally related to<br>treatment / all           | 0 / 0             | 0 / 1            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Constipation<br>subjects affected / exposed                  | 2 / 266 (0.75%)   | 5 / 276 (1.81%)  |  |
| occurrences causally related to<br>treatment / all           | 1 / 2             | 5 / 7            |  |
| deaths causally related to<br>treatment / all                | 0 / 0             | 0 / 0            |  |
| Colitis  |                   |                  |  |

|   |                   |                   |  |
|---|-------------------|-------------------|--|
| subjects affected / exposed                     | 1 / 266 (0.38%)   | 0 / 276 (0.00%)   |  |
| occurrences causally related to treatment / all | 1 / 1             | 0 / 0             |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Diarrhoea                                       |                   |                   |  |
| subjects affected / exposed                     | 40 / 266 (15.04%) | 51 / 276 (18.48%) |  |
| occurrences causally related to treatment / all | 50 / 50           | 62 / 63           |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Dysphagia                                       |                   |                   |  |
| subjects affected / exposed                     | 3 / 266 (1.13%)   | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all | 1 / 3             | 0 / 1             |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Gastrointestinal fistula                        |                   |                   |  |
| subjects affected / exposed                     | 0 / 266 (0.00%)   | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all | 0 / 0             | 0 / 1             |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Hemorrhoids                                     |                   |                   |  |
| subjects affected / exposed                     | 0 / 266 (0.00%)   | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all | 0 / 0             | 0 / 0             |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Esophagitis                                     |                   |                   |  |
| subjects affected / exposed                     | 1 / 266 (0.38%)   | 0 / 276 (0.00%)   |  |
| occurrences causally related to treatment / all | 1 / 1             | 0 / 0             |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Nausea  |                   |                   |  |
| subjects affected / exposed                     | 14 / 266 (5.26%)  | 20 / 276 (7.25%)  |  |
| occurrences causally related to treatment / all | 18 / 19           | 22 / 22           |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Vomiting  |                   |                   |  |
| subjects affected / exposed                     | 29 / 266 (10.90%) | 29 / 276 (10.51%) |  |
| occurrences causally related to treatment / all | 31 / 36           | 39 / 41           |  |
| deaths causally related to treatment / all      | 0 / 0             | 0 / 0             |  |
| Ileus   |                   |                   |  |

|   |                 |                 |  |
|---|-----------------|-----------------|--|
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 1 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 1 / 1           | 0 / 0           |  |
| Pancreatitis                                    |                 |                 |  |
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Gastrointestinal disorders - Other, specify     |                 |                 |  |
| subjects affected / exposed                     | 0 / 266 (0.00%) | 3 / 276 (1.09%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 2 / 3           |  |
| deaths causally related to treatment / all      | 0 / 0           | 1 / 1           |  |
| Hemorrhage                                      |                 |                 |  |
| subjects affected / exposed                     | 5 / 266 (1.88%) | 6 / 276 (2.17%) |  |
| occurrences causally related to treatment / all | 1 / 5           | 0 / 6           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Constitutional symptoms                         |                 |                 |  |
| subjects affected / exposed                     | 2 / 266 (0.75%) | 4 / 276 (1.45%) |  |
| occurrences causally related to treatment / all | 2 / 2           | 3 / 4           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Perforation, GI – Select                        |                 |                 |  |
| subjects affected / exposed                     | 1 / 266 (0.38%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Skin and subcutaneous tissue disorders          |                 |                 |  |
| Acne  |                 |                 |  |
| subjects affected / exposed                     | 0 / 266 (0.00%) | 1 / 276 (0.36%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 1 / 1           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Rash  |                 |                 |  |
| subjects affected / exposed                     | 0 / 266 (0.00%) | 2 / 276 (0.72%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 2 / 2           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| Renal and urinary disorders                     |                 |                 |  |



|   |                  |                   |  |
|---|------------------|-------------------|--|
| Renal and urinary disorders - Other, specify                    |                  |                   |  |
| subjects affected / exposed                                     | 2 / 266 (0.75%)  | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all                 | 2 / 2            | 1 / 1             |  |
| deaths causally related to treatment / all                      | 1 / 1            | 0 / 0             |  |
| Musculoskeletal and connective tissue disorders                 |                  |                   |  |
| Musculoskeletal and connective tissue disorder - Other, specify |                  |                   |  |
| subjects affected / exposed                                     | 1 / 266 (0.38%)  | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all                 | 0 / 1            | 0 / 1             |  |
| deaths causally related to treatment / all                      | 0 / 0            | 0 / 0             |  |
| Infections and infestations                                     |                  |                   |  |
| Infections and infestations - Other, specify                    |                  |                   |  |
| subjects affected / exposed                                     | 19 / 266 (7.14%) | 30 / 276 (10.87%) |  |
| occurrences causally related to treatment / all                 | 17 / 19          | 43 / 49           |  |
| deaths causally related to treatment / all                      | 0 / 0            | 3 / 3             |  |
| pulmonary   |                  |                   |  |
| subjects affected / exposed                                     | 1 / 266 (0.38%)  | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all                 | 0 / 1            | 1 / 1             |  |
| deaths causally related to treatment / all                      | 0 / 0            | 0 / 0             |  |
| Metabolism and nutrition disorders                              |                  |                   |  |
| Anorexia nervosa  |                  |                   |  |
| subjects affected / exposed                                     | 1 / 266 (0.38%)  | 4 / 276 (1.45%)   |  |
| occurrences causally related to treatment / all                 | 1 / 1            | 3 / 4             |  |
| deaths causally related to treatment / all                      | 0 / 0            | 0 / 0             |  |
| Dehydration   |                  |                   |  |
| subjects affected / exposed                                     | 18 / 266 (6.77%) | 13 / 276 (4.71%)  |  |
| occurrences causally related to treatment / all                 | 19 / 21          | 14 / 16           |  |
| deaths causally related to treatment / all                      | 0 / 0            | 0 / 0             |  |
| Hypercalcaemia  |                  |                   |  |
| subjects affected / exposed                                     | 0 / 266 (0.00%)  | 1 / 276 (0.36%)   |  |
| occurrences causally related to treatment / all                 | 0 / 0            | 2 / 2             |  |
| deaths causally related to treatment / all                      | 0 / 0            | 0 / 0             |  |
| Hypocalcaemia   |                  |                   |  |

|   |                 |                 |  |
|---|-----------------|-----------------|--|
| subjects affected / exposed                     | 0 / 266 (0.00%) | 2 / 276 (0.72%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 2 / 2           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| <b>Hypokalemia</b>                              |                 |                 |  |
| subjects affected / exposed                     | 4 / 266 (1.50%) | 4 / 276 (1.45%) |  |
| occurrences causally related to treatment / all | 4 / 4           | 5 / 5           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| <b>Hypomagnesaemia</b>                          |                 |                 |  |
| subjects affected / exposed                     | 0 / 266 (0.00%) | 9 / 276 (3.26%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 12 / 12         |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |
| <b>Metabolic/Lab - Other (Specify)</b>          |                 |                 |  |
| subjects affected / exposed                     | 3 / 266 (1.13%) | 0 / 276 (0.00%) |  |
| occurrences causally related to treatment / all | 2 / 3           | 0 / 0           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           |  |

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

| <b>Non-serious adverse events</b>                            | EOC alone          | EOC + Panitumumab  |  |
|--|--------------------|--------------------|--|
| <b>Total subjects affected by non-serious adverse events</b> |                    |                    |  |
| subjects affected / exposed                                  | 166 / 266 (62.41%) | 187 / 276 (67.75%) |  |
| <b>Nervous system disorders</b>                              |                    |                    |  |
| <b>Lethargy</b>  |                    |                    |  |
| subjects affected / exposed                                  | 35 / 266 (13.16%)  | 48 / 276 (17.39%)  |  |
| occurrences (all)  | 35                 | 48                 |  |
| <b>Peripheral motor neuropathy</b>                           |                    |                    |  |
| subjects affected / exposed                                  | 18 / 266 (6.77%)   | 4 / 276 (1.45%)    |  |
| occurrences (all)  | 18                 | 4                  |  |
| <b>Blood and lymphatic system disorders</b>                  |                    |                    |  |
| <b>Febrile neutropenia</b>                                   |                    |                    |  |
| subjects affected / exposed                                  | 37 / 266 (13.91%)  | 20 / 276 (7.25%)   |  |
| occurrences (all)  | 37                 | 20                 |  |
| <b>Neutropenia</b>   |                    |                    |  |
| subjects affected / exposed                                  | 74 / 266 (27.82%)  | 35 / 276 (12.68%)  |  |
| occurrences (all)  | 74                 | 35                 |  |

|  |                         |                         |  |
|--|-------------------------|-------------------------|--|
| Anaemia<br>subjects affected / exposed<br>occurrences (all)              | 15 / 266 (5.64%)<br>15  | 11 / 276 (3.99%)<br>11  |  |
| Gastrointestinal disorders   |                         |                         |  |
| Vomiting<br>subjects affected / exposed<br>occurrences (all)             | 23 / 266 (8.65%)<br>23  | 23 / 276 (8.33%)<br>23  |  |
| Mucositis management<br>subjects affected / exposed<br>occurrences (all) | 0 / 266 (0.00%)<br>0    | 14 / 276 (5.07%)<br>14  |  |
| Diarrhoea<br>subjects affected / exposed<br>occurrences (all)            | 30 / 266 (11.28%)<br>30 | 48 / 276 (17.39%)<br>48 |  |
| Respiratory, thoracic and mediastinal disorders                          |                         |                         |  |
| Pulmonary embolism<br>subjects affected / exposed<br>occurrences (all)   | 11 / 266 (4.14%)<br>11  | 20 / 276 (7.25%)<br>20  |  |
| Skin and subcutaneous tissue disorders                                   |                         |                         |  |
| Rash<br>subjects affected / exposed<br>occurrences (all)                 | 2 / 266 (0.75%)<br>2    | 29 / 276 (10.51%)<br>29 |  |
| Hand-foot-syndrome<br>subjects affected / exposed<br>occurrences (all)   | 13 / 266 (4.89%)<br>13  | 16 / 276 (5.80%)<br>16  |  |
| Infections and infestations  |                         |                         |  |
| Infection<br>subjects affected / exposed<br>occurrences (all)            | 33 / 266 (12.41%)<br>33 | 28 / 276 (10.14%)<br>28 |  |
| Metabolism and nutrition disorders                                       |                         |                         |  |
| Hyperkalaemia<br>subjects affected / exposed<br>occurrences (all)        | 16 / 266 (6.02%)<br>16  | 10 / 276 (3.62%)<br>10  |  |
| Hypomagnesaemia<br>subjects affected / exposed<br>occurrences (all)      | 0 / 266 (0.00%)<br>0    | 13 / 276 (4.71%)<br>13  |  |

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date              | Amendment  |
|-------------------|--|
| 01 September 2008 | <p>Update on capecitabine dose for patients on ARM2</p> <p>Inclusion criteria updated to reflect that patients receiving palliative radiotherapy to sites of disease that are not measurable may be eligible and should be discussed with the chief investigator.</p> <p>Guidance for duration of panitumumab administration for larger patients updated.</p> <p>Info regarding pre medication for panitumumab updated.</p> <p>Updated guidance for capping surface area for largewr patients.</p> <p>Instructions to take water with capecitabine included.</p> <p>Dose banding for cape for patients in Arm B updated.</p> <p>Additional guidance for management of neutropenia with infection/fever, neutrophil count, renal toc, neurotox, palmar plantarerythmia and allergic reactions.</p> <p>Clarification that certain investigations must take place within 7 days prior to randomization.</p> <p>Updated guidance for management of blood specimens.</p> <p>Updated info stating that copies of all SARs should be copied to Amgen Ltd</p> <p>Panitumumab accountability updated.</p> |
| 01 October 2008   | <p>Starting dose for panitumumab for dose level -2 updated.</p> <p>amendment to doses for EOX following dose level implementation.</p> <p>Further dose reduction for cape and oxali implemented due to a further case of G3 diarrhoea and G5 infection.</p> <p>Updated guidance for the management of diarrhoea.</p>   |
| 01 April 2009     | <p>The word Experimental changed to investigational changes throughout.</p> <p>Dose level clarifications provided.</p>   |
| 30 July 2009      | <p>Subsection regarding the safety analysis of dose finding exercise added.</p> <p>Information regarding trial team meetings added.</p>  |
| 01 December 2009  | <p>EOX in Arm B is referred to as mEOX (modified EOX) throughout.</p> <p>Panitumumab dose is confirmed as 9mg/kg.</p> <p>Cape dose in arm b is confirmed as 1000mg/m2</p> <p>Results of dosefinding exercise and reason for choice of dose level 0 inserted.</p> <p>Two fatal infusion reactions to panitumumab have been included in the protocol.</p> <p>Background section updated with the resiltis of two phase III studies of Pan presented in 2009.</p> <p>Removal of details of dose finding exercise. Now situated in appendix I.</p> <p>Insertion of text regarding management of diarrhea.</p> <p>Insetion of text stating that use of aprepitant is permitted.</p> <p>Removal of dose banding tables for dose level 1.</p> <p>Clairification for procedure regarding blood samples.</p> <p>Addition of KRas wild type versus mutant as an exploratory sub group analysis.</p>  |

|                 |   |
|-----------------|---|
| 12 July 2010    | <p>Update on the number of patients treated with Panitumumab included.</p> <p>Info on preemptive treatment to reduce likelihood of grade 2 skin tox.</p> <p>Addition of the use of a second quality of life form EQ-5D.</p> <p>ALT or AST can be done, doesn't have to be both.</p> <p>EGFR and KRAS wild type are not required for study entry.</p> <p>Saline volume requirements updated. Infusion reactions guidance updated.</p> <p>Skin tox management updated.</p> <p>Dose banding for epi and oxali using local practice is updated.</p> <p>Guidance for management of persistent fatigue updated.</p> <p>Inclusion of O'Rourke dysphagia grading.</p>   |
| 12 January 2011 | <p>Sample size updated.</p> <p>Info that consent must be taken by a clinician only.</p> <p>Doxycycline dose updated.</p> <p>Additional text regarding the first 10 patients who were randomized to arm b with a different dose.</p> <p>Information amended regarding the formal no-comparative interim analysis.</p> <p>Information regarding the interim analysis updated.</p>   |
| 31 March 2011   | <p>Information regarding the continued use of panitumumab past 8 cycles included.</p> <p>Panitumumab monotherapy and 12 week CT scans included.</p> <p>Rationale for continuing panitumumab until disease progression inserted.</p> <p>Information regarding the exclusion of the first 19 patients randomized during the dose finding phase. Clarity of assessments which should take place during treatment.</p> <p>Updated information regarding when quality of life questionnaires should be completed.</p> <p>Additional text regarding follow up after disease progression.</p> <p>Additional text regarding an additional optional blood test and biopsy for ARM B patients.</p> <p>Additional text regarding the sensitivity analyses.</p> |

Notes:

## Interruptions (globally)

Were there any global interruptions to the trial? No

## Limitations and caveats

None reported