



Clinical trial results:

Predictive value of in-vitro testing anti-cancer therapy sensitivity on tumorspheres from patients with metastatic colorectal cancer

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2017-000456-26 |
| Trial protocol | DK |
| Global end of trial date | 23 August 2021 |

Results information

| | |
|--------------------------------|------------------|
| Result version number | v1 (current) |
| This version publication date | 30 December 2022 |
| First version publication date | 30 December 2022 |

Trial information

Trial identification

| | |
|-----------------------|---------------------|
| Sponsor protocol code | Tumorspheres_Colrec |
|-----------------------|---------------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT03251612 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|-------------------------------------------------------|
| Sponsor organisation name | Vejle Hospital |
| Sponsor organisation address | Beriderbakken 4, Vejle, Denmark, |
| Public contact | Clinical Trial Unit, Vejle Hospital, kfe.onko@rsyd.dk |
| Scientific contact | Clinical Trial Unit, Vejle Hospital, kfe.onko@rsyd.dk |

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 | 31 January 2022 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 23 August 2021 |
| Global end of trial reached? | Yes |
| Global end of trial date | 23 August 2021 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

The purpose of the present study is to investigate the benefit to patients with metastatic colorectal cancer of post standard anti-cancer therapy based on pretreatment in-vitro testing of drug sensitivity to patient-derived tumorspheres.

Protection of trial subjects:

Antiemetics and other supportive treatment as necessary

Background therapy: -

Evidence for comparator: -

| | |
|-----------------------------------------------------------|-------------------|
| Actual start date of recruitment | 25 September 2017 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | No |

Notes:

Population of trial subjects**Subjects enrolled per country**

| | |
|--------------------------------------|-------------|
| Country: Number of subjects enrolled | Denmark: 34 |
| Worldwide total number of subjects | 34 |
| EEA total number of subjects | 34 |

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) | 20 |
| From 65 to 84 years | 14 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

Patients were enrolled from September 2017 to September 2020.

Pre-assignment

Screening details:

Adult patients were screened for inclusion if they had progressive metastatic colorectal cancer and had already been exposed to, or not considered candidates for, available therapies including fluoropyrimidine-, oxaliplatin- and irinotecan-based chemotherapies, anti-VEGF agents and, if RAS/RAF wild-type, anti-EGFR agents.

Pre-assignment period milestones

| | |
|------------------------------|----|
| Number of subjects started | 34 |
| Number of subjects completed | 34 |

Period 1

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

Arms

| | |
|-----------|------------------|
| Arm title | Precision cohort |
|-----------|------------------|

Arm description:

Patients with one histopathologic tumor type, colorectal adenocarcinoma, are subdivided into treatment groups based on functional characteristics.

| | |
|----------------------------------------|--------------------------------------------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Targeted treatment |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Powder and solvent for concentrate for solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

Drugs were given based on sensitivity analysis of individual patient-derived tumoroids.

The combination of vinorelbine and capecitabine was given in 3-weekly cycles as oral vinorelbine 80 mg/m² (after a first cycle at 60 mg/m²) on day 1 and day 8 together with capecitabine 1000 mg/m² (750 if age ≥ 65 years) twice daily on days 1-14 in 3-weekly cycles.

Gemcitabine 1000 mg/m² i.v. was given in 2-weekly cycles on day 1 together with capecitabine 1000 mg/m² twice daily on days 1-7.

Temozolomide 150 mg/m² on days 1-5 was given with irinotecan 100 mg/m² on days 1 and 15 every 28 days.

The following drugs were given according to SPC:

Regorafenib
Olaparib
TAS-102
Sorafenib
Epirubicin
FOLFIRI

| Number of subjects in period 1 | Precision cohort |
|---------------------------------------|------------------|
| Started | 34 |
| Completed | 34 |

Baseline characteristics

Reporting groups

Reporting group title

Overall trial

Reporting group description: -

| Reporting group values | Overall trial | Total | |
|-------------------------------------------------------|---------------|-------|--|
| Number of subjects | 34 | 34 | |
| Age categorical | | | |
| Units: Subjects | | | |
| In utero | 0 | 0 | |
| Preterm newborn infants (gestational age < 37 wks) | 0 | 0 | |
| Newborns (0-27 days) | 0 | 0 | |
| Infants and toddlers (28 days-23 months) | 0 | 0 | |
| Children (2-11 years) | 0 | 0 | |
| Adolescents (12-17 years) | 0 | 0 | |
| Adults (18-64 years) | 20 | 20 | |
| From 65-84 years | 14 | 14 | |
| 85 years and over | 0 | 0 | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 20 | 20 | |
| Male | 14 | 14 | |

End points

End points reporting groups

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Reporting group title | Precision cohort |
| Reporting group description: Patients with one histopathologic tumor type, colorectal adenocarcinoma, are subdivided into treatment groups based on functional characteristics. | |

Primary: PFS eight weeks (time frame 42-63 days) after start of treatment

| | |
|-----------------|---------------------------------------------------------------------------------|
| End point title | PFS eight weeks (time frame 42-63 days) after start of treatment ^[1] |
|-----------------|---------------------------------------------------------------------------------|

End point description:

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

End point timeframe:

8 weeks after start of treatment

Notes:

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

Justification: This is a single arm study. There is no intra-study comparison.

| End point values | Precision cohort | | | |
|-----------------------------|------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 34 | | | |
| Units: Number | 34 | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information^[1]

Timeframe for reporting adverse events:

Every 4 weeks

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

Dictionary used

| | |
|-----------------|-------|
| Dictionary name | CTCAE |
|-----------------|-------|

| | |
|--------------------|---|
| Dictionary version | 4 |
|--------------------|---|

Reporting groups

| | |
|-----------------------|----------|
| Reporting group title | Toxicity |
|-----------------------|----------|

Reporting group description: -

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.

Justification: Non-serious adverse events were not collected.

| Serious adverse events | Toxicity | | |
|------------------------------------------------------|-----------------|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 8 / 34 (23.53%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |
| General disorders and administration site conditions | | | |
| cancer progression | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Gastrointestinal disorders | | | |
| Constipation | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Ileus | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| abdominal | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

| | | | |
|-------------------------------------------------|----------------------------------------------|--|--|
| Obstruction | Additional description: Obstruction of stent | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Skin and subcutaneous tissue disorders | | | |
| Rash maculo-papular | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Renal and urinary disorders | | | |
| Hydronephrosis | | | |
| subjects affected / exposed | 1 / 34 (2.94%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Infections and infestations | | | |
| Infection | | | |
| subjects affected / exposed | 4 / 34 (11.76%) | | |
| occurrences causally related to treatment / all | 1 / 4 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

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

| | | | |
|-------------------------------------------------------|----------------|--|--|
| Non-serious adverse events | Toxicity | | |
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 0 / 34 (0.00%) | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported