Clinical trial results:
ESSAI DE PHASE I-II DE RADIOCHIMIOTHERAPIE ASSOCIEE AU PANITUMUMAB DANS LE TRAITEMENT DES CARCINOMES EPIDERMOIDES LOCALISES DE L'ANUS

Summary

EudraCT number	2011-005436-26
Trial protocol	FR
Global end of trial date	30 November 2019

Results information

Result version number	v1 (current)
This version publication date	23 July 2025
First version publication date	23 July 2025

Trial information

Trial identification

Sponsor protocol code	FFCD0904

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01581840
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Fédération Francophone de Cancérologie Digestive (FFCD)
Sponsor organisation address	7 BD JEANNE D'ARC, Dijon, France, 21079
Public contact	FFCD, Fédération Francophone de Cancérologie Digestive, 33 380668013, marie.moreau@u-bourgogne.fr
Scientific contact	FFCD, Fédération Francophone de Cancérologie Digestive, 33 380668013, marie.moreau@u-bourgogne.fr

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	06 December 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	04 December 2018
Global end of trial reached?	Yes
Global end of trial date	30 November 2019
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of Phase I is to determine the dose-limiting toxicity (DLT) of 5FU and panitumumab in combination with radiotherapy and mitomycin, and to derive the maximum tolerated dose (MTD) in patients with localized squamous cell carcinoma of the anus.
The primary objective of phase II is to determine the complete response rate 8 weeks after the end of standard radio-chemotherapy treatment (theoretically in week 15) in patients with localized squamous cell carcinoma of the anus, as defined by MRI, endorectal echoendoscopy if necessary, and proctological examination.

Protection of trial subjects:

This research complies with the recommendations of the Declaration of Helsinki (1964) and its amendments (2000), as well as the Public Health Code (Law No. 2004-806 of August 9, 2004 on public health policy).
The investigator undertook to obtain the patient's consent for the clinical and biological studies in writing, after providing adequate information (information sheet and consent forms)

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	05 November 2012
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	France: 45
Worldwide total number of subjects	45
EEA total number of subjects	45

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)	31
From 65 to 84 years	14
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Between January 2016 and November 2017, 45 patients were include to receive Panitumuma plus 5FU plus Mitomycine C plus Radiotherapy

Pre-assignment

Screening details: -

Pre-assignment period milestones

Number of subjects started	45
Number of subjects completed	45

Period 1

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

Blinding implementation details:

No blinding

Arms

Arm title	5Fu-mitomycine-panitumumab + Radiotherapy

Arm description:

5 FU = 400 mg days 1 to 4 weeks 1, 5 and 8 mitomicyne = 10 mg/m² day 1 week 1 and days 1, weeks 5 and 8 Panitumumab = 3 mg/kg days 1, weeks: 1, 3, 5, 8 and 10
radiochemotherapy: Radiotherapy : PTV1 45 Gy 5 weeks PTV2 20 Gy 2 weeks

Arm type	Experimental
Investigational medicinal product name	5FU
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intravenous use

Dosage and administration details:

5 FU = 400 mg days 1 to 4 weeks 1, 5 and 8

Investigational medicinal product name	Mitomycin C
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intravenous use

Dosage and administration details:

10 mg/m² day 1 week 1 and days 1, weeks 5 and 8

Investigational medicinal product name	Panitumumab
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Intravenous use

Dosage and administration details:

3 mg/kg days 1, weeks: 1, 3, 5, 8 and 10

Investigational medicinal product name	Radiotherapy
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for infusion
Routes of administration	External use

Dosage and administration details:

PTV1 45 Gy 5 weeks PTV2 20 Gy 2 weeks

Number of subjects in period 1	5Fu-mitomycine-panitumumab + Radiotherapy
Started	45
Completed	45

Baseline characteristics

Reporting groups

Reporting group title	Baseline Period

Reporting group description: -

Reporting group values	Baseline Period	Total	
Number of subjects	45	45	
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)	31	31	
From 65-84 years	14	14	
85 years and over	0	0	
Age continuous Units: years			
median	60.19		
inter-quartile range (Q1-Q3)	56.50 to 67.20	-	
Gender categorical Units: Subjects			
Female	36	36	
Male	9	9	

Subject analysis sets

Subject analysis set title	ITT
Subject analysis set type	Intention-to-treat

Subject analysis set description:

All patients included in the study.
Note: all patients included are part of the per protocol and safety analysis.

Reporting group values	ITT		
Number of subjects	45		
Age categorical Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	0		
Newborns (0-27 days)	0		
Infants and toddlers (28 days-23 months)	0		
Children (2-11 years)	0		
Adolescents (12-17 years)	0		

Adults (18-64 years)	34		
From 65-84 years	11		
85 years and over	0		
Age continuous			
Units: years			
median	60.19		
inter-quartile range (Q1-Q3)	56.50 to 67.20		
Gender categorical			
Units: Subjects			
Female	36		
Male	9		

End points

End points reporting groups

Reporting group title	5Fu-mitomycine-panitumumab + Radiotherapy

Reporting group description:

5 FU = 400 mg days 1 to 4 weeks 1, 5 and 8 mitomicyne = 10 mg/m² day 1 week 1 and days 1, weeks 5 and 8 Panitumumab = 3 mg/kg days 1, weeks: 1, 3, 5, 8 and 10
radiochemotherapy: Radiotherapy : PTV1 45 Gy 5 weeks PTV2 20 Gy 2 weeks

Subject analysis set title	ITT
Subject analysis set type	Intention-to-treat

Subject analysis set description:

All patients included in the study.
Note: all patients included are part of the per protocol and safety analysis.

Primary: Percentage of Patients with Complete Responde to Treatment

End point title	Percentage of Patients with Complete Responde to Treatment[1]

End point description:

Complete response was defined by the complete disappearance of the tumor on proctological examination and morphological examinations (MRI and/or echo-endoscopy) and the absence of secondary lesion appearance.
The responses were validated by an independent committee:
• In the event of a discrepancy between the investigator and the independent committee, the independent committee's response was used;
• in case of uncertainty of the investigator on the response, the committee decided on the response in view of the clinical and morphological data; This endpoint was assessed 8 weeks after the end of treatment (week 15). A patient who died (regardless of cause) was considered a failure for the primary endpoint

if 32 or fewer patients have a complete response at 8 weeks (71%), the complete response rate cannot be considered significantly higher than 60%.
if 33 or more patients have a complete response at 8 weeks (73%), the complete response rate is significantly higher than 60%.

End point type	Primary

End point timeframe:

8 weeks evaluations after the end of the treatment by radiochemotherapy

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: Given that this is a single-arm study (and therefore not comparative), no inferential statistics were performed.

End point values	5Fu-mitomycine-panitumumab + Radiotherapy			
Subject group type	Reporting group			
Number of subjects analysed	45			
Units: Percentage				
Complete response	30			
Partial response	10			
Stability	0			
Progression	4			
Death before the evaluation	1			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Patients With Complete Response to Treatment

End point title	Percentage of Patients With Complete Response to Treatment

End point description:

Complete response was defined by the complete disappearance of the tumor on proctological examination and morphological examinations (MRI and/or echo-endoscopy) and the absence of secondary lesion appearance according to the investigator's opinion

End point type	Secondary

End point timeframe:

16 weeks after the end of the treatement by radiotherapy

End point values	5Fu-mitomycine-panitumumab + Radiotherapy			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Number				
Complete response	27			
Partial response	9			
Stability	1			
Progression	7			

Statistical analyses

No statistical analyses for this end point

Secondary: 3 Years Colostomy-free Survival (CFS)

End point title	3 Years Colostomy-free Survival (CFS)

End point description:

It was defined as the time from inclusion to the date of colostomy or death (from any cause). Patients alive without colostomy were censored at date of last news. If a patient had a shunt colostomy and continuity was restored, the patient was counted among the patients without a colostomy.

End point type	Secondary

End point timeframe:

At 3 years after inclusion

End point values	5Fu-mitomycine-panitumumab + Radiotherapy			
Subject group type	Reporting group			
Number of subjects analysed	45			
Units: Number (95% Confidence Interval)				
number (confidence interval 95%)	68.8 (53.1 to 80.2)			

Statistical analyses

No statistical analyses for this end point

Secondary: Recurrence-free Survival (RFS) at 3 Years

End point title	Recurrence-free Survival (RFS) at 3 Years

End point description:

It was defined as the time from inclusion to the date of first recurrence (local, regional, metastatic and second anal cancer) or death. Patients alive without recurrence were censored at date of last news

End point type	Secondary

End point timeframe:

At 3 years after inclusion

End point values	5Fu-mitomycine-panitumumab + Radiotherapy			
Subject group type	Reporting group			
Number of subjects analysed	45			
Units: Number (95% Confidence Interval)				
number (confidence interval 95%)	62.2 (46.5 to 74.6)			

Statistical analyses

No statistical analyses for this end point

Secondary: Overall Survival (OS) at 12 Months

End point title	Overall Survival (OS) at 12 Months

End point description:

The percentage was evaluated at 12 months using the Kaplan Meier estimation.
In the safety part all the death collected during the study will be reported.

End point type	Secondary

End point timeframe:

At 12 months after inclusion

End point values	5Fu-mitomycine-panitumumab + Radiotherapy			
Subject group type	Reporting group			
Number of subjects analysed	45			
Units: Number (95% Confidence Interval)				
number (confidence interval 95%)	95.6 (83.5 to 99.7)			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse Events were collected before each cycles of treatment until the end of the treatment period

Assessment type	Systematic

Dictionary used

Dictionary name	NCI CTCAE
Dictionary version	4.0

Reporting groups

Reporting group title	Safety population

Reporting group description: -

Serious adverse events	Safety population		
Total subjects affected by serious adverse events			
subjects affected / exposed	14 / 45 (31.11%)		
number of deaths (all causes)	10		
number of deaths resulting from adverse events	1		
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	2 / 45 (4.44%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
General physical health deterioration			
subjects affected / exposed	2 / 45 (4.44%)		
occurrences causally related to treatment / all	2 / 3		
deaths causally related to treatment / all	0 / 0		
Catheter site pain			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Catheter site oedema			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			

Abdominal pain				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Diarrhoea				
subjects affected / exposed	4 / 45 (8.89%)			
occurrences causally related to treatment / all	5 / 5			
deaths causally related to treatment / all	0 / 0			
Nausea				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Enteritis				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Small intestinal obstruction				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	1 / 1			
Vomiting				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Reproductive system and breast disorders				
Prostatitis				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Vaginal fistula				
subjects affected / exposed	1 / 45 (2.22%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			

Psychiatric disorders			
Anxiety			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Septic shock			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Orchitis			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
Hypokalaemia			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Decreased appetite			
subjects affected / exposed	1 / 45 (2.22%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	Safety population		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	45 / 45 (100.00%)		
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Aspartate aminotransferase increased			

subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Gamma-glutamyltransferase increased			
subjects affected / exposed	4 / 45 (8.89%)		
occurrences (all)	4		
White blood cell count decreased			
subjects affected / exposed	33 / 45 (73.33%)		
occurrences (all)	33		
Lymphocyte count decreased			
subjects affected / exposed	39 / 45 (86.67%)		
occurrences (all)	39		
Neutrophil count decreased			
subjects affected / exposed	23 / 45 (51.11%)		
occurrences (all)	23		
Blood alkaline phosphatase increased			
subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Weight decreased			
subjects affected / exposed	28 / 45 (62.22%)		
occurrences (all)	28		
Platelet count decreased			
subjects affected / exposed	24 / 45 (53.33%)		
occurrences (all)	24		
Dehydration			
subjects affected / exposed	4 / 45 (8.89%)		
occurrences (all)	4		
Injury, poisoning and procedural complications			
Radiation skin injury			
subjects affected / exposed	14 / 45 (31.11%)		
occurrences (all)	14		
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	30 / 45 (66.67%)		
occurrences (all)	30		
General disorders and administration site conditions			

Fatigue			
subjects affected / exposed	35 / 45 (77.78%)		
occurrences (all)	35		
Pyrexia			
subjects affected / exposed	7 / 45 (15.56%)		
occurrences (all)	7		
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	10 / 45 (22.22%)		
occurrences (all)	10		
Proctalgia			
subjects affected / exposed	19 / 45 (42.22%)		
occurrences (all)	19		
Diarrhoea			
subjects affected / exposed	34 / 45 (75.56%)		
occurrences (all)	34		
Mucosal inflammation			
subjects affected / exposed	15 / 45 (33.33%)		
occurrences (all)	15		
Nausea			
subjects affected / exposed	24 / 45 (53.33%)		
occurrences (all)	24		
Proctitis			
subjects affected / exposed	24 / 45 (53.33%)		
occurrences (all)	24		
Vomiting			
subjects affected / exposed	12 / 45 (26.67%)		
occurrences (all)	12		
Rectal haemorrhage			
subjects affected / exposed	3 / 45 (6.67%)		
occurrences (all)	3		
Anal inflammation			
subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Constipation			

subjects affected / exposed	7 / 45 (15.56%)		
occurrences (all)	7		
Reproductive system and breast disorders			
Vulvovaginal inflammation			
subjects affected / exposed	22 / 45 (48.89%)		
occurrences (all)	22		
Skin and subcutaneous tissue disorders			
Dermatitis acneiform			
subjects affected / exposed	25 / 45 (55.56%)		
occurrences (all)	25		
Skin exfoliation			
subjects affected / exposed	11 / 45 (24.44%)		
occurrences (all)	11		
Erythema			
subjects affected / exposed	25 / 45 (55.56%)		
occurrences (all)	25		
Pruritus			
subjects affected / exposed	12 / 45 (26.67%)		
occurrences (all)	12		
Dry skin			
subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Palmar-plantar erythrodysaesthesia syndrome			
subjects affected / exposed	5 / 45 (11.11%)		
occurrences (all)	5		
Ulcer			
subjects affected / exposed	6 / 45 (13.33%)		
occurrences (all)	6		
Renal and urinary disorders			
Cystitis			
subjects affected / exposed	19 / 45 (42.22%)		
occurrences (all)	19		
Pollakiuria			
subjects affected / exposed	7 / 45 (15.56%)		
occurrences (all)	7		
Urinary tract pain			

subjects affected / exposed occurrences (all)	6 / 45 (13.33%) 6		
Infections and infestations Skin infection subjects affected / exposed occurrences (all)	 3 / 45 (6.67%) 3		
Metabolism and nutrition disorders Decreased appetite subjects affected / exposed occurrences (all) Hypokalaemia subjects affected / exposed occurrences (all) Hypoalbuminaemia subjects affected / exposed occurrences (all) Hypocalcaemia subjects affected / exposed occurrences (all) Hypomagnesaemia subjects affected / exposed occurrences (all) Hyponatraemia subjects affected / exposed occurrences (all)	 29 / 45 (64.44%) 29 9 / 45 (20.00%) 9 5 / 45 (11.11%) 5 7 / 45 (15.56%) 7 4 / 45 (8.89%) 4 4 / 45 (8.89%) 4		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
09 February 2017	Enrolment was suspended at the end of stage 1, pending the results of the interim analysis	01 August 2017

Notes:

Limitations and caveats

None reported