Clinical trial results:
Use of acetylsalicylic acid (ASA) for enhanced early detection of colorectal neoplasms

Summary

EudraCT number	2011-005603-32
Trial protocol	DE
Global end of trial date	27 January 2017

Results information

Result version number	v1 (current)
This version publication date	27 January 2023
First version publication date	27 January 2023
Summary attachment (see zip file)	Trial results (ASTER_End of Trial Report_V2.0_2020_03_10_final.pdf)

Trial information

Trial identification

Sponsor protocol code	K357

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	German Cancer Research Center (DKFZ)
Sponsor organisation address	Im Neuenheimer Feld 280, Heidelberg, Germany, 69120
Public contact	German Cancer Research Center, German Cancer Research Center, +49 6221421349, k.tikk@dkfz.de
Scientific contact	German Cancer Research Center, German Cancer Research Center, +49 6221421349, k.tikk@dkfz.de

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	10 March 2020
Is this the analysis of the primary completion data?	Yes
Primary completion date	27 January 2017
Global end of trial reached?	Yes
Global end of trial date	27 January 2017
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate diagnostic performance (sensitivity, specificity, positive and negative predictive values, likelihood ratios, area under the curve) of 2 immunochemical Fecal Occult Blood Tests (iFOBTs) for detecting advanced colorectal neoplasms after a single dose of acetylsalicylic acid as compared to placebo

Protection of trial subjects:

Candidate-participants in the study will be excluded if they use potentially interacting medication or have illnesses that may be worsened by participation in this study (for details, see exclusion criteria). In the study information documents, participants will be informed about all relevant potential adverse effects.
Before being asked to participate in the study, the participants have all decided to undergo colonoscopy as a screening or diagnostic procedure. The time between drug intake and the planned colonoscopy allows for recovery of haemostatic functions (see below). Thus, the colonoscopy is not considered to be a part of the study.
In case of an emergency situation, in which a treating physician feels that information on whether the participant received acetylsalicylic acid or placebo is needed for adequate medical treatment of the participant, it is possible to unblind the randomization information

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	18 June 2013
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	Germany: 2422
Worldwide total number of subjects	2422
EEA total number of subjects	2422

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	0

months)	
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	1788
From 65 to 84 years	634
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Men and women aged 40 to 80 years with no recent use of aspirin or ther drugs with antithrombotic effects were recruited when visiting 1 of 18 trial centers in Germany for a pre-colonoscopy appointment.

Pre-assignment

Screening details:

Inclusion criteria: Age 40 to 80 years (both males and females), planned screening or diagnostic colonoscopy, no antithrombotic drug intake, able to speak and understand German sufficiently to give informed consent

Period 1

Period 1 title	overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	Verum

Arm description:

participants receiving trial medication

Arm type	Experimental
Investigational medicinal product name	Acetylsalicylic acid
Investigational medicinal product code	
Other name	ASS; ASA; aspirin
Pharmaceutical forms	Coated tablet
Routes of administration	Oral use

Dosage and administration details:

ASS-ratiopharm, 300 mg, single oral dose of administration

Arm title	Placebo

Arm description:

Participants receiving Placebo

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Coated tablet
Routes of administration	Oral use

Dosage and administration details:

Single oral dose

Number of subjects in period 1	Verum	Placebo
Started	1208	1214
Completed	1075	1059
Not completed	133	155
Physician decision	20	35
Drop-out	77	61
no stool samples	32	56
Protocol deviation	4	3

Baseline characteristics

Reporting groups	
Reporting group title	Verum
Reporting group description: participants receiving trial medication	
Reporting group title	Placebo
Reporting group description: Participants receiving Placebo	

Reporting group values	Verum	Placebo	Total
Number of subjects	1208	1214	2422
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)	801	780	1581
From 65-84 years	274	279	553
85 years and over	0	0	0
DropOut	133	155	288
Gender categorical Units: Subjects			
Female	528	531	1059
Male	547	528	1075
Drop-Out	133	155	288

Subject analysis sets	
Subject analysis set title	Per Protocol
Subject analysis set type	Per protocol
Subject analysis set description: final analysis per protocol	
Subject analysis set title	Safety
Subject analysis set type	Safety analysis
Subject analysis set description: subjects in safety follow up after medication	

Reporting group values	Per Protocol	Safety	
Number of subjects	2134	2134	
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)	1581	1581	
From 65-84 years	553	553	
85 years and over	0	0	
DropOut	0	0	
Gender categorical			
Units: Subjects			
Female	1059	1059	
Male	1075	1075	
Drop-Out	0	0	

End points

End points reporting groups

Reporting group title	Verum
Reporting group description: participants receiving trial medication	
Reporting group title	Placebo
Reporting group description: Participants receiving Placebo	
Subject analysis set title	Per Protocol
Subject analysis set type	Per protocol
Subject analysis set description: final analysis per protocol	
Subject analysis set title	Safety
Subject analysis set type	Safety analysis
Subject analysis set description: subjects in safety follow up after medication	

Primary: Sensitivity and Specificity of iFOBT 10 µg Hb

End point title	Sensitivity and Specificity of iFOBT 10 µg Hb[1]
End point description: Sensitivity and Specificity of immunochemical FOBT (fecal occult blood test) at cutoff 10.2 µg Hemoglobin / g stool	
End point type	Primary
End point timeframe: 2 days after tablet intake	

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: The statsistical analyses used in the trial were not compatible with the selectable parameters. Information on statistical analyses is provided in the attached Study Report.

End point values	Verum	Placebo	Per Protocol	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	1075	1059	2134	
Units: cutoff				
number (not applicable)	40.2	30.4	9.8	

Statistical analyses

No statistical analyses for this end point

Primary: Sensitivity and Specificity of iFOBT 17µg

End point title	Sensitivity and Specificity of iFOBT 17µg[2]
End point description: Sensitivity and Specificity of immunochemical FOBT (fecal occult blood test) at cutoff 17 µg Hemoglobin / g stool	
End point type	Primary

End point timeframe:

2 days after tablet intake

Notes:

[2] - 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: The statsistical analyses used in the trial were not compatible with the selectable parameters. Information on statistical analyses is provided in the attached Study Report.

End point values	Verum	Placebo	Per Protocol	
Subject group type	Reporting group	Reporting group	Subject analysis set	
Number of subjects analysed	1075	1059	2134	
Units: cutoff				
number (not applicable)	28.6	22.5	6.0	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events: overall trial	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	23.0
Reporting groups	
Reporting group title	Safety

Reporting group description: -

Serious adverse events	Safety		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 2134 (0.09%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Gastrointestinal disorders			
Appendicitis			
subjects affected / exposed	1 / 2134 (0.05%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Cholangitis acute			
subjects affected / exposed	1 / 2134 (0.05%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0.01 %

Non-serious adverse events	Safety		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 2134 (0.14%)		
Nervous system disorders			
Migraine			
subjects affected / exposed	1 / 2134 (0.05%)		
occurrences (all)	1		
Headache			

subjects affected / exposed occurrences (all)	1 / 2134 (0.05%) 1		
Immune system disorders Rash subjects affected / exposed occurrences (all)	 1 / 2134 (0.05%) 1		
Gastrointestinal disorders Abdominal pain upper subjects affected / exposed occurrences (all)	 1 / 2134 (0.05%) 1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
16 November 2012	- inclusion and exclusion criteria were changed with respect to pregnancy - study duration was updated - shipment of colonoscopy reports was specified - list of medication taken by the patient beforehand was specified - list of responsibilities of the investigators were deleted - check for completeness and plausibility of source documents was specified - the causality of an AE was changed from "unclassified" and "unclassifiable" to "not assessable" - reporting of SAEs by investigator was specified
11 March 2013	- Change of LKP - Responsibilities for data management and analysis were specified - terminology was specified - definition of drop-outs was specified
01 July 2013	Change of LKP within the same study center
14 August 2015	- Study duration prolonged - inclusion criteria changed - number of stool samples changed - observation period for AEs changed financial incentive for study centers was changed

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported