

# Evaluation of colon cancer screening on colon cancer mortality

<b>Submission date</b> 01/02/2019	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 05/02/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 26/11/2020	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Background and study aims

The impact of colorectal cancer population screening strategies on mortality outside of randomized controlled trials remains unknown. The objective of this study was to measure the mid-term impact of the introduction of colorectal cancer screening programmes on colorectal cancer mortality rates across Spain.

Who can participate?

The entire population of Spain

What does the study involve?

The research team review the number of deaths by colon cancer by reviewing Spanish Statistical Office data of mortality recorded in a database every 6 months for the 17-year study period. Information about the screening implementation and uptake is also observed using from regional registries.

What are the possible benefits and risks of participating?

There are no direct benefits or risks involved with participating

Where is the study run from?

Hospital Clínic de Barcelona (Spain)

When is the study starting and how long is it expected to run for?

January 2019 to February 2019.

Who is funding the study?

Investigator-initiated and funded.

Who is the main contact?

Miquel Serra-Burriel  
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## Contact information

**Type(s)**

Scientific

**Contact name**

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## **Additional identifiers**

**Protocol serial number**

HCB/2018/0109

## **Study information**

**Scientific Title**

Impact of population screening on colorectal cancer mortality: a natural experiment

**Study objectives**

1. Has the implementation of colorectal cancer screening in Spanish provinces that adopted it been effective in reducing colorectal cancer mortality?
2. Has the implementation of colorectal cancer screening in Spanish provinces had a differential effect by gender?

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 19/02/2019 Ethics Committee, Hospital Clínic de Barcelona (Villarroel, 170, 08036 Barcelona, Spain; +34 93 227 57 66; ceic@clinic.cat), ref HCB/2018/0109.

**Study design**

Observational natural experiment

**Primary study design**

Observational

**Study type(s)**

Other

## Health condition(s) or problem(s) studied

Colorectal cancer

## Interventions

The present study is an ecological analysis of colorectal cancer-specific deaths at a province level. We compare age-standardised mortality rates in provinces that were exposed to screening with provinces that did not.

The individual's data comes from the Spanish Statistical Office, and only includes death certificate data combined with population census data at a province level. The data was obtained through the INE

[https://www.ine.es/dyngs/INEbase/es/operacion.htm?](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176780&menu=resultados&secc=1254736195294&idp=1254735573)

[c=Estadistica\\_C&cid=1254736176780&menu=resultados&secc=1254736195294&idp=1254735573](https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176780&menu=resultados&secc=1254736195294&idp=1254735573)

## Intervention Type

Other

## Primary outcome(s)

Current primary outcome measure as of 25/02/2019:

Mortality rates will be measured using the biannual CRC-specific 1999 age-standardised mortality rates (measured by the National Statistical Office of Spain) for the population aged 50-69 years old.

Previous primary outcome measure:

Mortality rates will be measured using the biannual CRC-specific 1999 age-standardised mortality rates (measured by the National Statistical Office of Spain) for the population aged 50-79 years old.

## Key secondary outcome(s)

1. Biannual CRC-specific 1999 Age-standardised mortality rates for overall population, measured by the National Statistical Office of Spain (INE)
2. Biannual CRC-specific 1999 Age-standardised mortality rates for population aged between 40 to 49 years old, measured by the National Statistical Office of Spain (INE)
3. Biannual CRC-specific 1999 Age-standardised mortality rates for population aged between 0 to 39 years old, measured by the National Statistical Office of Spain (INE)

## Completion date

28/02/2019

## Eligibility

### Key inclusion criteria

The entire population of Spain

### Participant type(s)

All

### Healthy volunteers allowed

No

**Age group**

All

**Sex**

All

**Key exclusion criteria**

Resident of Spanish provinces that started screening after 2009.

**Date of first enrolment**

10/01/2019

**Date of final enrolment**

30/01/2019

**Locations****Countries of recruitment**

Spain

**Study participating centre**

Hospital Clínic de Barcelona

Villarroel, 170

Bacelona

Spain

08036

**Sponsor information****Organisation**

Pompeu Fabra University

**ROR**

<https://ror.org/04n0g0b29>

**Funder(s)****Funder type**

Other

**Funder Name**

Investigator initiated and funded

# Results and Publications

## Individual participant data (IPD) sharing plan

Due to compliance with the Spanish Statistical Office regulation, data will not be available at the end of the study, but can be accessed through: <https://www.ine.es/welcome.shtml>.

## IPD sharing plan summary

Not expected to be made available

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	03/03/2021	26/11/2020	Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes