Drug utilisation study of Radium 223 under routine clinical practice in Europe (DIRECT)

First published: 13/10/2020

Last updated: 08/07/2024

Study Finalised

Administrative details

EU PAS number

EUPAS37163

Study ID

46942

DARWIN EU® study

No

Study countries

- ☐ Denmark
- ☐ Germany
- ☐ Netherlands

Study description

Radium-223 is used as monotherapy or in combination with a luteinising hormone-releasing hormone (LHRH) analogue for the treatment of adult patients with metastatic castration-resistant prostate cancer (mCRPC), symptomatic bone metastases, and no known visceral metastases, or ineligible for any available systemic mCRPC therapy. A clinical trial found an imbalance of more fractures and deaths in the arm treated with radium-223 than in the control arm treated with placebo. These results triggered a change in the European Union product information in 2018. This study is to describe compliance with the label contraindication of using radium-223 in combination with abiraterone acetate or other systemic therapies for mCRPC and to describe the use of radium-223 without having received two prior lines of systemic therapy for mCRPC, but an assessment of whether this use represents on or off-label use is not possible.

Study status

Finalised

Research institutions and networks

Institutions

RTI Health Solutions (RTI-HS)

- ☐ France
- ☐ Spain
- ☐ Sweden
- ☐ United Kingdom
- ☐ United Kingdom (Northern Ireland)

United States

First published: 21/04/2010

Last updated: 13/03/2025

Institution | Not-for-profit | ENCePP partner

Leibniz Institute for Prevention Research and Epidemiology - BIPS

Germany

First published: 29/03/2010

Last updated: 26/02/2024

Institution | Not-for-profit | ENCePP partner

Aarhus University & Aarhus University Hospital DEPARTMENT OF CLINICAL EPIDEMIOLOGY

Denmark

First published: 20/07/2021

Last updated: 02/04/2024

Institution | Educational Institution | ENCePP partner

Castration-resistant Prostate Cancer Registry (CAPRI) Rotterdam, Netherlands

Contact details

Study institution contact

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Study contact

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Primary lead investigator

Bayer Clinical Trials BAYER AG

Primary lead investigator

Study timelines

Date when funding contract was signed

Planned: 17/10/2019

Actual: 17/10/2019

Study start date

Planned: 31/03/2022

Actual: 15/05/2021

Date of final study report

Planned: 30/04/2024

Actual: 01/06/2023

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

Bayer AG

Study protocol

20702_Study Protocol_Redacted_V2.0_2019-07-15.pdf(1.54 MB)

Regulatory

Was the study required by a regulatory body?

Yes

Is the study required by a Risk Management Plan (RMP)?

EU RMP category 3 (required)

Methodological aspects

Study type

Study type list

Study type:

Non-interventional study

Scope of the study:

Drug utilisation

Main study objective:

The main objective is to estimate, among the population of patients receiving radium-223, the proportion who receive radium-223 in combination with abiraterone acetate, the proportion who receive radium-223 in combination with other systemic therapies for mCRPC, and the proportion who receive radium-223 without having received at least two prior lines of systemic therapy for mCRPC.

Study Design

Non-interventional study design

Cohort

Study drug and medical condition

Name of medicine

XOFIGO

Study drug International non-proprietary name (INN) or common name

RADIUM RA 223 DICHLORIDE

Medical condition to be studied

Prostate cancer metastatic

Metastases to bone

Population studied

Age groups

Adults (18 to < 46 years)

Adults (46 to < 65 years)

Adults (65 to < 75 years)

Adults (75 to < 85 years)

Adults (85 years and over)

Estimated number of subjects

850

Study design details

Outcomes

1) use of radium-223 in combination with abiraterone acetate 2) use of radium-223 in combination with other systemic therapies for mCRPC (except LHRH analogues) 3) use of radium-223 among patients who have not received at least two previous systemic therapies for mCRPC. The difference between before and after label change in each of primary objective measures, Age, Calendar year, Time since first diagnosis, Confirmed diagnosis of mCRPC, Prior use systemic therapy, Presence of metastasis at baseline: bone or visceral, Total level of serum alkaline phosphatase, Prior use of bone-health agents, Prior use of systemic corticosteroids and History of osteoporosis.

Data analysis plan

The main analysis will estimate the proportion of patients who used (1) radium-223 in combination with abiraterone acetate for mCRPC, (2) radium-223 in combination with other systemic therapies for mCRPC, and (3) radium-223 in the first line or second line of therapy without having received at least two previous therapies for mCRPC. The denominator for the proportions is the total

number of new users of radium-223 during the study period (p), in each country-specific data source. The secondary analysis will (4) estimate the difference in these proportions before and after the label change and (5) describe the baseline variables in the study population (all users of radium-223, irrespective of combination therapies) during the study periods, using standard descriptive statistics (e.g. mean, median, and standard deviation for continuous variables and number and proportion for categorical variables).

Documents

Study results

20702_EU PAS Abstract_Redacted_V0.3_2023-06-01.pdf(211.45 KB)

Study report

20702_Study Report_Redacted_V0.3_2023-06-01.pdf(1.2 MB)

Data management

Data sources

Data source(s)

Danish registries (access/analysis)

German Pharmacoepidemiological Research Database

Data source(s), other

Castration Resistant Prostate Cancer (CAPRI) Registry Netherlands

Data sources (types)

Administrative healthcare records (e.g., claims)

Disease registry

Other

Data sources (types), other

Medical chart abstraction

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No