Assessing demographic, clinical and pathological determinants of advances prostate cancer in Indonesia for delayed diagnosis, treatment, and risk for secondary progression and survival

Submission date 14/10/2020	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 18/10/2020	Overall study status Ongoing	 Statistical analysis plan Results
Last Edited 16/10/2020	Condition category Cancer	 Individual participant data Record updated in last year

Plain English summary of protocol

Background and study aims

The prostate is a small gland in the pelvis, found only in men. The causes of prostate cancer are largely unknown.

Several treatment options for patients range from active surveillance for less aggressive cancer to surgery and radiation for more advanced diseases. Androgen deprivation therapy (ADT) is an anti-hormone therapy for treating prostate cancer. But recently, tumors were identified that generally grow independent to the androgen hormone levels. This study aims to identify measures that can predict the outcome of ADT in Indonesian men.

Who can participate?

Patients aged 18 - 80 years old with a diagnosis of prostate cancer from 2017 to 2027

What does the study involve?

The study involves collecting information from patient records on the risk factors, course of the disease, the response to different treatments, recurrence rates, progression into other cancers, and death rates. There is an optional choice to provide a number of blood or tissue samples for the duration of diagnosis, treatment, and follow-up.

What are the possible benefits and risks of participating? There are no specific risks or benefits to participants.

Where is the study run from? Universitas Gadjah Mada / Dr Sardjito Hospital, Yogyakarta (Indonesia)

When is the study starting and how long is it expected to run for? January 2017 to January 2027 Who is funding the study? Universitas Gadjah Mada (Indonesia)

Who is the main contact? 1. Dr Andy Zulfiqqar zulfiqqar.andy@mail.ugm.ac.id 2. Dr Indrawarman Sp.U indrawarman@mail.ugm.ac.id

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers Nil known

Study information

Scientific Title

Surrogate biomarkers for Castration-resistant Prostate Cancer (CRPC): Indonesian population

Acronym

INA-BIOPRO

Study objectives

Surrogate Biomarker, Demographic, social, clinical, and pathological determinants are associated with delayed diagnosis, risks of relapse, and survival of Prostate Cancer diagnosed and treated according to the local and national guidelines in Indonesia. we downregulation TP53, RB1, PTEN and others associated RNA and MIR suggested predict the outcome of therapy.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 03/04/2020, Ethics Committee of the Faculty of Medicine, Public Health, and Nursing -Universitas Gadjah Mada Yogyakarta (Jl. Farmako Sekip Utara, Yogyakarta 55281, Surabaya, 84311, Indonesia; +62 274 588688 ext 17225; mhrec_fmugm@ugm.ac.id), ref: KE/0158/02/2020

Study design

Observational cohort retrospective study

Primary study design Observational

Secondary study design Cohort study

Study setting(s) Hospital

Study type(s) Diagnostic

Participant information sheet No participant information sheet available

Health condition(s) or problem(s) studied

Biomarker predicting the outcome of Androgen Deprivation Therapies and Chemotherapies in Prostate Cancer patients

Interventions

All patients who underwent prostate biopsy were enrolled in this study.

The biopsied prostate cancer will be tested for several biomarkers. mRNA expression of targeted biomarkers are conducted using Real Time-Polymerase Chain Reaction (qRT-PCR) in Anatomical Pathology Laboratory of the Faculty of Medicine, Universitas Gadjah Mada, Yogyakarta. RNA purification from prostate tissue are conducted using RibospinTM II (GeneAll®) kit and NEXproTM 1-step qRT-PCR 2x Master Mix (SYBR) were used in this study. All of the procedures followed the manufacturer's recommendations.

Clinical data are collected from medical records to evaluate the clinical features and confirmation of diagnosis.

The targeted gene is quantified using reverse transcription-polymerase chain reaction. For the relative quantification, the target gene expression is determined by the $(2-\Delta\Delta Ct)$ method after normalization to the gene of GAPDH for CT values. RNA Isolation and cDNA Synthesis.

Patient outcome is evaluated each month on outpatients setting or inpatient setting.

Intervention Type

Not Specified

Primary outcome measure

1. Time to achieve Castration resistant therapy (CRPC). CRPC is defined as castrate level of serum testosterone <50 ng/mL plus either

(i) biochemical progression – three consecutive rises of PSA, resulting in two 50% increases above the nadir value, with PSA >2 ng/mL, or

(ii) radiological progression – the appearance of two or more bone lesions on bone scan or enlargement of a soft tissue lesion based on RECIST criteria

Secondary outcome measures

1. Progression-free survival (PFS) measured using the methods described in the primary outcome measure at the end of the study

Overall study start date

01/01/2017

Completion date 01/01/2027

Eligibility

Key inclusion criteria

1. Diagnosed with advanced prostate cancer 2. Aged 18 - 80 years

Participant type(s)

Patient

Age group Senior

Lower age limit 18 Years

Upper age limit 80 Years

Sex Male

Target number of participants 300

Key exclusion criteria 1. Received systemic chemotherapy, targeted therapy, and immunomodulatory therapy prior study 2. Received local therapy including radical prostatectomy, radiotherapy, and other local therapy

Date of first enrolment 10/04/2020

Date of final enrolment 01/06/2025

Locations

Countries of recruitment Indonesia

Study participating centre RSUP Dr Sardjito Hospital

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Sponsor information

Organisation Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan UGM

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Funder(s)

Funder type University/education

Funder Name Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan UGM

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed international journal. Raw data without any identification of participants will be shared according to the WHO and ICMJE.

Intention to publish date 30/06/2027

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

IPD sharing plan summary

Available on request