

Identification of gene markers associated with prognosis for patients with prostate cancer

Submission date 30/11/2021	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 01/12/2021	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 21/01/2025	Condition category Cancer	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Prostate cancer is a public health priority in men and the impact of this disease will be more pronounced with the aging of the world's population. The aim of this study is to identify gene markers associated with the prognosis of prostate cancer to guide clinical practice.

Who can participate?

Patients with prostate cancer in The Cancer Genome Atlas Program (TCGA) and Gene Expression Omnibus (GEO) databases.

What does the study involve?

The researchers will obtain data on prostate cancer from public databases to identify genes related to the prognosis of prostate cancer.

What are the possible benefits and risks of participating?

There are no expected benefits or risks for the participants.

Where is the study run from?

Sichuan University (China)

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

November 2021 to December 2021

Who is funding the study?

1. National Natural Science Foundation of China (China)
2. Science and Technology Department of Sichuan Province (China)
3. Sichuan University (China)
4. Chengdu Science and Technology Bureau (China)
5. West China Hospital, Sichuan University (China)

Who is the main contact?

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Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Prognostic biomarkers in prostate cancer identified through bioinformatic analysis

Acronym

PBPCBA

Study objectives

The prognosis of prostate cancer can be predicted by gene markers.

Ethics approval required

Old ethics approval format

Ethics approval(s)

All data is derived from public databases, such as The Cancer Genome Atlas Program (TCGA) and Gene Expression Omnibus (GEO) databases. Thus, ethics approval is not required.

Study design

Retrospective observational study

Primary study design

Observational

Study type(s)

Other

Health condition(s) or problem(s) studied

Prognostic markers of prostate cancer

Interventions

The Genematrix and clinical data of prostate cancer patients are extracted from the TCGA and GEO databases to compare tumor and normal tissue samples. Univariate and multivariate COX regression analysis is conducted to identify independent factors associated with biochemical recurrence and metastasis.

Intervention Type

Other

Primary outcome(s)

Genes associated with biochemical recurrence, identified through bioinformatic analysis of data obtained from the TCGA and GEO database from 01/12/2021 to 05/12/2021

Key secondary outcome(s)

There are no secondary outcome measures

Completion date

10/12/2021

Eligibility**Key inclusion criteria**

Patients with prostate cancer in the TCGA and GEO databases

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Male

Total final enrolment

3000

Key exclusion criteria

Patients without prognostic information in the TCGA and GEO databases

Date of first enrolment

01/12/2021

Date of final enrolment

05/12/2021

Locations**Countries of recruitment**

China

Study participating centre

Sichuan University

West China Hospital

Chengdu

China

610041

Sponsor information**Organisation**

Sichuan University

ROR

<https://ror.org/011ashp19>

Funder(s)**Funder type**

Hospital/treatment centre

Funder Name

West China Hospital, Sichuan University

Alternative Name(s)

West China Hospital, West China School of Medicine and West China Hospital, Sichuan University, WCH, WCSM/WCH

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

China

Funder Name

National Natural Science Foundation of China (Grant Nos. 81974099, 82170785, 81974098, 82170784)

Alternative Name(s)

Chinese National Science Foundation, Natural Science Foundation of China, National Science Foundation of China, NNSF of China, NSF of China, National Nature Science Foundation of China, Guójiā Zìrán Kēxué Jījīn Wěiyuánhùi, , NSFC, NNSF, NNSFC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

China

Funder Name

Department of Science and Technology of Sichuan Province (Grant Nos. 21GJHZ0246)

Alternative Name(s)

Sichuan Provincial Department of Science and Technology, Department of Science and Technology of Sichuan Province, Science & Technology Department of Sichuan Province, , SPDST

Funding Body Type

Government organisation

Funding Body Subtype

Local government

Location

China

Funder Name

Sichuan University (Grant No. 2017SCU04A17)

Alternative Name(s)

, , Sichuan Union University, SCU

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

China

Funder Name

Chengdu Science and Technology Bureau (2019-YF05-00296-SN)

Alternative Name(s)

Funding Body Type

Government organisation

Funding Body Subtype

Local government

Location

China

Results and Publications

Individual participant data (IPD) sharing plan

All data is derived from the public database online, thus the IPD sharing statement is not applicable.

IPD sharing plan summary

Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		29/09/2022	06/01/2023	Yes	No
Results article		24/02/2022	06/01/2023	Yes	No
Results article		15/09/2022	06/01/2023	Yes	No
Results article		06/04/2022	06/01/2023	Yes	No
Results article		15/09/2022	06/01/2023	Yes	No
Results article		03/06/2022	06/01/2023	Yes	No
Results article		12/01/2022	06/01/2023	Yes	No
Results article		01/03/2023	21/01/2025	Yes	No

Results article		01/03/2023	21/01/2025	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes