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

Submission date 30/11/2021	**Recruitment status** No longer recruiting	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 01/12/2021	**Overall study status** Completed	
Last Edited 21/01/2025	**Condition category** Cancer	

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

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Additional identifiers

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.

Primary study design
Observational

Study design
Retrospective observational study

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 Wěiyuánhuì, , 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