

Overview of Prostate Cancers landscape in Asia – 2019 update



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1. Clinical landscape in Asia-Pacific

Epidemiology overview and Clinical activity

The Asia-Pacific region has about one in six of all prostate cancer cases, and prostate cancer is the most diagnosed male cancer in China, Australia, and New Zealand. Globally, it is the second leading cause of cancer death.

Developing economies of Asia-Pacific such as the Philippines and India have witnessed a sharp increase in the number of prostate cancers in the past years due to ageing population and changing dietary habits. The prevalence of the disease is estimated to have reached over 700,000 cases in the region.

Source: *Epidemiology of Prostate Cancers in the Asia-Pacific region. Prostate International. 2013;1(2):47–58.*

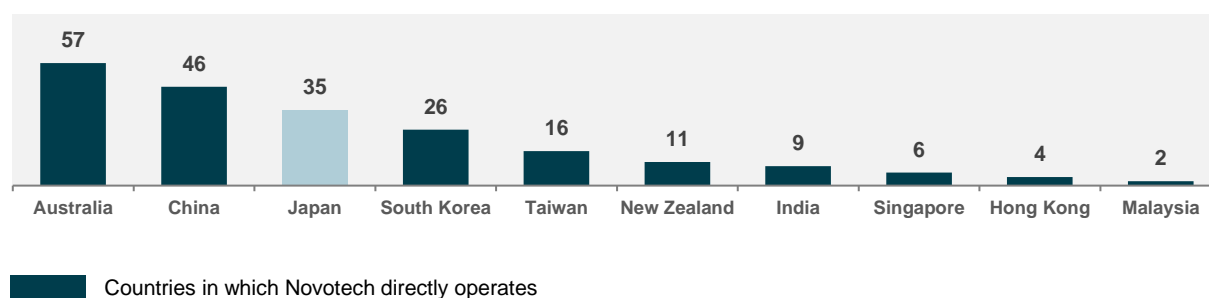
Estimated prevalence of Prostate Cancers in countries where Novotech operates

Country	Prevalence per 1,000	Population	Prevalence
China	0.2	1,355,693,000	208,916
Australia	7.1	22,508,000	160,450
India	0.1	1,236,345,000	127,636
South Korea	1.5	49,040,000	72,252
South Africa	1.0	54,002,000	51,444
Thailand	0.5	67,741,000	35,904
The Philippines	0.2	100,617,000	24,440
New Zealand	5.5	4,401,916	24,314
Singapore	1.3	5,567,000	7,342
Malaysia	0.2	30,073,000	6,006
Total	0.3	2,925,987,916	718,704

Source IPD

Biopharma companies initiated 578 trials in prostate cancers between 2016 and 2018, about a fourth of which (138/578) involved a country from Asia-Pacific. Australia, China, Japan and South Korea were the most frequently involved countries.

Top 10 countries in Asia-Pacific in relation to the number of prostate cancers studies initiated by biopharma companies between 2016 and 2018.



Source: GlobalData

2. Recruitment and data from Novotech network

Information collected through Novotech study feasibility assessments found many investigators believed there were unmet prostate cancer clinical needs in the region.

In most countries in the region, diagnosis of prostate cancer is routinely performed through PSA test, cystoscopy, transrectal ultrasound with prostate biopsy, and Magnetic Resonance Imaging (MRI).

Standard of care treatment of prostate cancer depends on the progression of the disease and can range from observation to radiotherapy, usually used in combination with LHRH antagonist.

Prostate cancer patient enrolment estimates (patient/site/year) and key MDT clinics in a selection of countries with Novotech offices

Country	Recruitment (p/s/y)	Key MDT clinics
China	30-80	Most of the Major Public Hospitals and Private Hospitals e.g., Cancer Hospital - Chinese Academy of Medical Sciences
India	45-50	Apollo Hospitals and Saket City Hospital, New Delhi; HCG Hospital, Bengaluru
Australia	20-30	Most of the Major Public Hospitals and Private Hospitals e.g., Royal Melbourne Hospitals
New Zealand	20	Auckland Hospital
Singapore	15-24	Most of the Major Public Hospitals and Private Hospitals e.g., National University Hospital
Taiwan	10-12	Taipei Veterans General Hospital
Malaysia	10	Sarawak General Hospital
South Korea	10	Gangnam Severance Hospital and Asan Medical Center
Hong Kong	10	Tuen Mun Hospital and Queen Mary Hospital
Thailand	5-10	Most of the Major Public Hospitals and Private Hospitals e.g., Songklanagarind Hospital
The Philippines	5-7	Mary Mediatrix Medical Center and Makati Medical Center
South Africa	2-3	Most of the Major Public Hospitals and Private Hospitals e.g., GVI Oncology Institute

Key Opinion Leaders in Prostate Cancer

Prof. JIN JIE

Peking University First Hospital – CHINA

Prof. Jin is Director at the Institute of Urology at the Peking University First Hospital (China). Prof. Jin is a specialist in male genitourinary system diseases. He is the co-author of over 100 scientific publications and he was involved in 23 clinical studies, including 10 in renal and bladder cancer, for BMS, Johnson & Johnson, Roche, BeiGene, Patheon, and Ono Pharmaceuticals.



Prof. YOUNG DEUK CHOI

Yonsei University College of Medicine - SOUTH KOREA

Prof. Choi is a Professor at the Department of Urology at the Yonsei University College of Medicine in Seoul (S. Korea). He has been nominated for the 'Best Reviewer Award' from the American Urological Association. Prof. Choi is the co-author of over 200 scientific publications and he participated in 9 clinical studies, including 5 in prostate cancers, for Pfizer, and Astellas.

Dr. KANG HYUN LEE

National Cancer Center – SOUTH KOREA

Dr. Lee is the President of the WHO Collaborating Centers in Korea. He is an Editorial Board Reviewer for the *European Urology Journal* and is the co-author of over 100 scientific publications. He was involved in 4 clinical studies in prostate cancers for Pfizer, Takeda Oncology, Astellas Bio Pharma, and Johnson & Johnson.



Prof. IAN DAVIS

Monash University – AUSTRALIA

Prof. Davis heads the Uro-Oncology Laboratory at the Ludwig Institute for Cancer Research. He is a member of the Australian and New Zealand Urogenital and Prostate Cancers Trials Group, and is Associate Professor at the University of Melbourne. He is the co-author of over 100 scientific publications and participated in 49 clinical studies, including 12 clinical studies in prostate cancers, for Astellas Pharma, Avipep and BMS.

Dr. FONG C PETER

Auckland District Health Board – NEW ZEALAND

Dr. Peter is Medical Oncologist at the Auckland Hospital and the Canopy Cancer Center. He is the co-author of over 60 scientific publications and was involved in 35 clinical studies, including 20 in prostate cancers, for Astellas Bio Pharma, Merck, and Novartis.



3. Novotech Overview

Novotech is internationally recognized as the leading Asia-Pacific region full-service contract research organization (CRO). Novotech provides clinical development services across all therapeutic areas and has been instrumental in the success of hundreds of Phase I - IV clinical trials.



Full service CRO with on-the-ground operations in Australia, New Zealand, India, South Korea, Taiwan, Thailand, Malaysia, Singapore, Philippines, Hong Kong and mainland China.

600+ full-time employees

Best in class technology solutions including CTMS (Oracle Siebel), eDC (Medidata Rave, Oracle Inform), eTMF (SureClinical) and Safety (Oracle Argus)

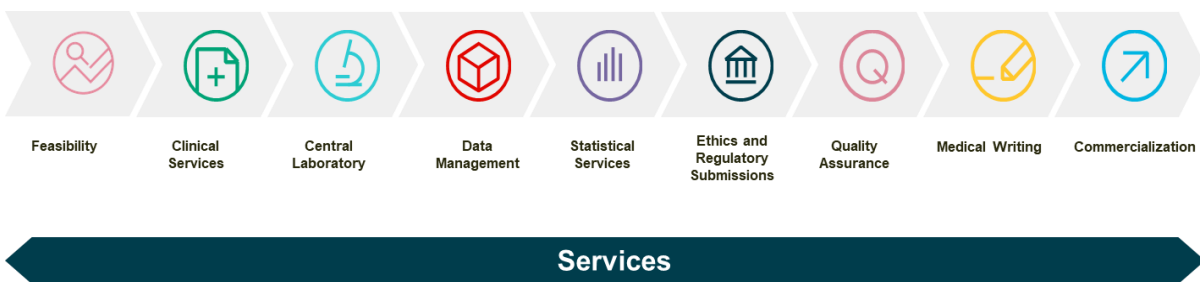
Extensive therapeutic area experience handling clinical studies with biopharma companies across all phases of clinical trials

Managed APAC component of pivotal trials for multiple FDA, EMA registered products since 2001

Established in 1996, with head office in Sydney, Australia

Recipient of the 2019 Frost & Sullivan **Asia Pacific Biotech CRO Company of the Year** award for the 4th consecutive year.

Full service CRO



Registered product experience

Novotech has successfully managed the APAC component of over 20 FDA and EMA registered compounds and devices. This speaks to the quality of the data generated from Novotech sites across the region and to our experience working on large pivotal studies for US and EU based biotech.

Abraxane (breast, lung, and pancreatic cancer)	Nerlynx (HER2-positive breast cancer)
Cellegesic (hemorrhoids)	Nothera (orthostatic hypertension)
Depodur (post-operative pain)	Ocaliva (primary biliary cirrhosis)
Firazyr (hereditary angioedema)	Solaraze (actinic and solar keratosis)
Galafold (Fabry's disease)	Tarceva (NSCLC and pancreatic cancer)
GC Flu H5N1 Multi Injection (influenza)	Vimpat (partial-onset seizures)
Hismanal (allergic rhinitis)	Xiaflex (Dupuytren's and Peyronie's contracture)
Istodax (T-cell lymphomas)	Xtandi (Prostate Cancers)
Levact (chronic lymphocytic leukemia)	Zilretta (osteoarthritic knee pain)
Lucentis (wet AMD)	Zurampic (gout)
Metvix PDT (skin cancer)	Zytiga (Prostate Cancers)

Novotech people expertise and experience

Novotech has many of the most experienced professionals in the industry.

Average years of Novotech staff experience

