



# Prostate Cancer Factsheet: Insights & Key Developments

Key Insights on Prostate Cancer Care and Infrastructure

# Core Pillars:

- 1. Infrastructure
- 2. Treatment Access, Research Funding and Awareness Campaigns
- 3. Survival Rates, Early Detection and Palliative Care
- 4. Utilization of Biomarkers
- 5. Clinical Guidelines
- 6. Reimbursement
- 7. Prostate Cancer Screening

Prostate cancer remains one of the most prevalent cancers worldwide, affecting millions of individuals each year. Despite advancements in diagnostics, treatment, and awareness, disparities in access to care, molecular testing, and specialized centers persist.

This factsheet provides a comprehensive overview of key pillars shaping Prostate cancer care, including specialized infrastructure, treatment accessibility, research funding, early detection, and palliative care.

- Incidence share: Prostate cancer ranks around 6th most common cancer among Chinese men.
- Incidence rate: Approximately 9.7 per 100,000 men per year (age-standardized).
- Total new cases (2022): About 134,156 men.
- Daily diagnoses (2022): Roughly ~367 men per day.
- Deaths (2022): Approximately 47,522 men.
- 5-year survival rate: Estimated at ≈60-70%.
- Most affected age group: Primarily men aged 65 and above, with incidence rising sharply in the 70-80+ age band.
- Screening participation: PSA testing coverage is very low, estimated below 20% in the past decade; mostly opportunistic with limited uptake.





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# Strengths

- China hosts several premier cancer centers (e.g. Sun Yat-sen University Cancer Center, Fuda Cancer Hospital) with advanced radiotherapy, robotic surgery and molecular diagnostics.
- Modern surgical infrastructure including robotic radical prostatectomy and intensity-modulated radiotherapy (IMRT) is available in major cities.

# Opportunity

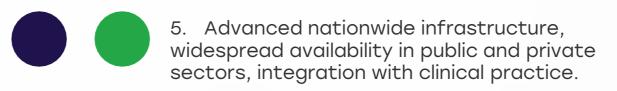
- Developing regional oncology hubs in mid-tier cities could decentralize access and reduce rural-urban disparities.
- Expanding tele-oncology networks and referral systems could connect rural healthcare centers with top urban specialists.

# Weakness

- Diagnostic and treatment facilities are highly unevenly distributed-most high-tech centers are in eastern and southern urban regions; rural and western areas remain underserved.
- Patients may face significant delays (often months) for imaging (MRI, CT) or specialist appointments in public hospitals outside major cities.

# Threats

- Rapidly increasing prostate cancer incidence tied to aging and lifestyle shifts may outpace current infrastructure growth.
- Economic or policy shifts that undervalue cancer infrastructure development risk exacerbating equipment and workforce gaps.



4. Strong infrastructure in major hospitals and cancer centers, some regional disparities.

3. Moderate infrastructure, primarily in private settings or research institutions.

2. Limited infrastructure, available only in select centers or for high-cost private testing.

> 1. Minimal or no infrastructure, testing mostly unavailable or sent abroad.

Country	Specialized Centers	Genetic & Molecular Testing Infrastructure
South Africa	<u> </u>	
Kenya		
Nigeria		
Egypt		
Morocco		
Algeria		
Ethiopia		
India		
Japan		
South Korea		
China		
Thailand		
Singapore		
United Kingdom		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		
Mexico		
Brazil		
Argentina		
Chile		
Colombia		
United States		
Canada		
Australia		
New Zealand		
Greece		
Rwanda		
Uganda		
Serbia		
Saudi Arabia		
UAE		
Syria		
Indonesia		
Vietnam		
Philippines		
Russia		<u> </u>
Malaysia		



# China \*

Treatment Access, Research Funding and Awareness Campaigns

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# Strengths

- National clinical guidelines and hospital networks support multidisciplinary prostate cancer care, including surgery, radiotherapy, hormone therapy and emerging treatments.
- Large cancer centers engage in significant clinical research, including molecular studies and trials involving novel therapies (e.g. PARP inhibitors, PSMA-targeted treatments).

# Opportunity

- Scaling community-based screening campaigns, modeled on pilot programs in cities like Shanghai and Beijing, can extend outreach nationwide.
- New public-private collaborations and targeted grants could fund genetic studies and trials in high-risk populations.

# Weakness

- Prostate cancer-specific research funding remains limited relative to burden; national investment tends to favor lung, liver, stomach cancers.
- Public awareness of prostate health remains low, especially in rural areas; PSA testing uptake is low unless offered through organized screening in selected cities.

- If access to PSA-based screening and follow-up services remains limited to urban populations, diagnostic inequities will widen.
- Cultural stigma and low male engagement with routine health checks may limit screening uptake even where awareness exists.

- 5. Strong healthcare infrastructure with comprehensive treatment access, high research funding, and nationwide awareness campaigns. Patients have access to advanced therapies, clinical trials, and widespread early detection programs.
- 4. Well-developed system with good treatment availability, strong research funding, and effective but regionally focused awareness campaigns. Some disparities may exist in rural areas or between public and private sectors.
- 3. Moderate development, with specialized treatments available in major hospitals, research funding concentrated on specific cancers, and occasional but limited awareness efforts. Healthcare access may be restricted by cost or geography.
- Limited system where cancer treatment is available only in select urban centers, research funding is minimal or sporadic, and awareness campaigns are rare or underfunded. Patients often face long wait times or financial barriers.
- 1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack of structured awareness campaigns. Cancer care is largely inaccessible, with many patients relying on out-of-pocket expenses or external aid.

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Survival Rates, Early **Detection** and Palliative Care

# Strengths

- In tertiary centers, lowstage prostate cancer treated with surgery yields high short-term survival (e.g. ~99% one-year survival for low-stage post-surgery).
- Many urban hospitals integrate palliative and supportive care into prostate cancer services.

# Weaknes

- Population-wide survival averages only ~66%, far lower than Western countries (~98%), due to high late-stage presentation.
- Approximately 30-40% of patients are metastatic at diagnosis, and ~40% have high-grade tumors (Gleason ≥8) at presentation.

# Opportunity

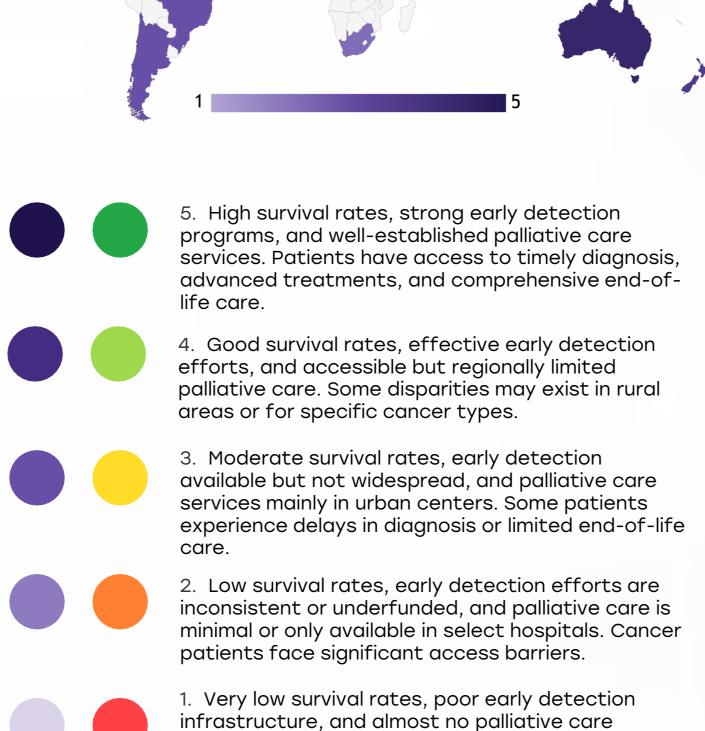
- Systematic use of PSA screening in men aged 50+, especially in high-risk groups, can shift stage at presentation earlier and boost survival.
- Expansion of palliative care and psychosocial support **services** in secondary hospitals could better support advanced-stage patients

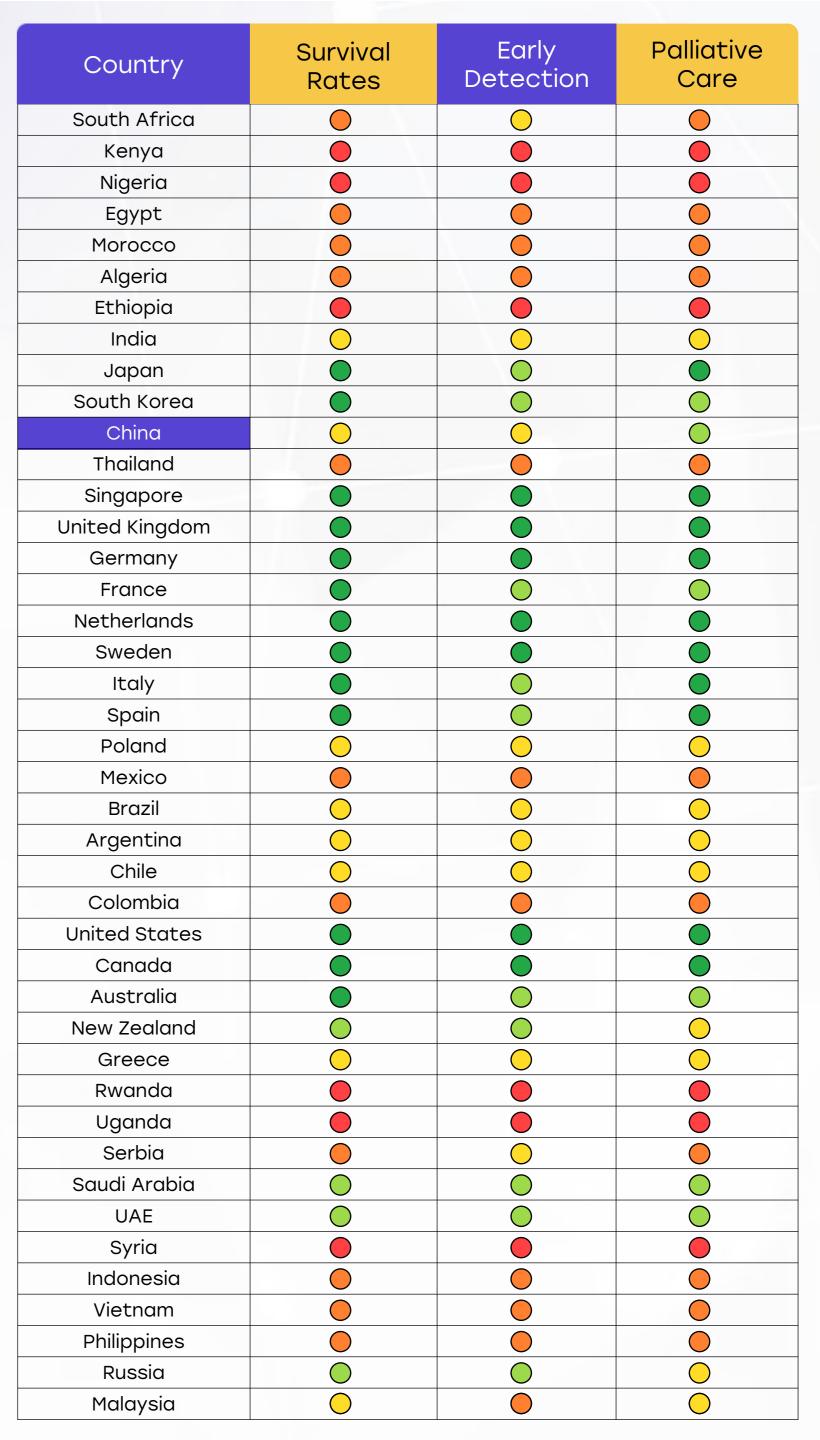
# **Threats**

- Persistent late diagnosis continues to limit chances of curative treatment.
- Rural areas continue to lag in access to early detection and symptom management services due to systemic resource gaps.

infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

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# China \*\* Utilization of Biomarkers

# Strengths

- PSA testing is the standard for prostate cancer detection and monitoring, widely used in healthcare.
- Major medical centers are researching advanced diagnostics like genomic testing, molecular diagnostics, and novel biomarkers (e.g., Decipher, percent-free PSA).

# Opportunity

- Low-cost biomarker triaging tools (e.g. risk calculators, percent-free PSA) could be integrated into public screening, improving diagnostic accuracy.
- Participation in national and global biomarker research may foster tools tailored to China's genetic and environmental context.

# Weakness

- often lead to false positives or negatives, and advanced diagnostic tools like mpMRI or genomic panels are largely absent in public rural clinics.
- Unequal access: The lack of a national reimbursement framework for advanced biomarker testing restricts equitable access to these

# Threats

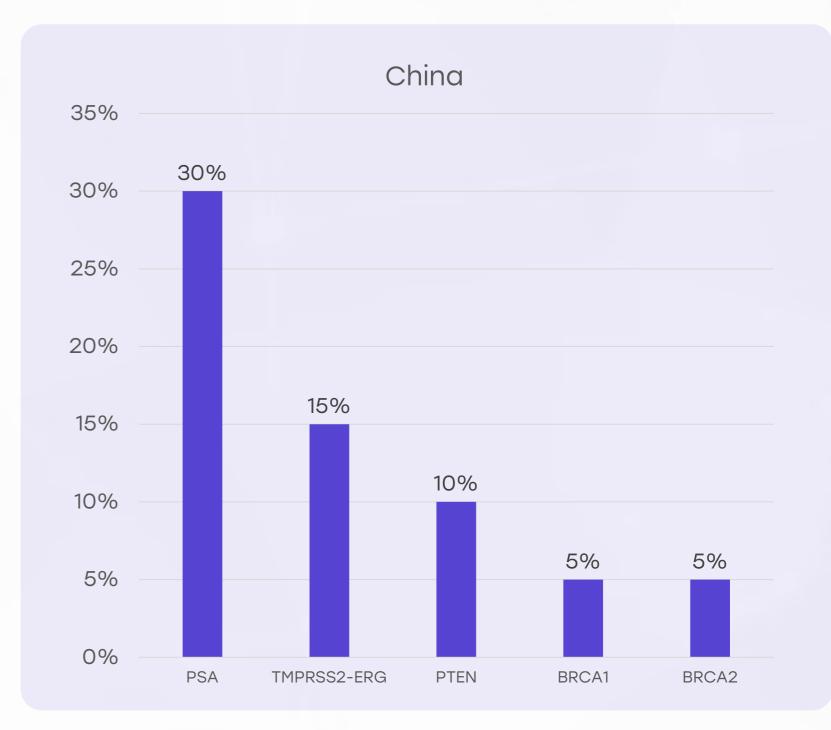
- · Continued reliance on PSA alone may result in overtreatment of indolent tumors or underdetection of aggressive disease.
- Without policy-level support for biomarker access, precision diagnostics remain confined to a minority of patients.

Moderate utilization, often restricted to major hospitals or private healthcare settings. Some patients may not receive biomarker testing due to cost or limited availability in public healthcare systems.

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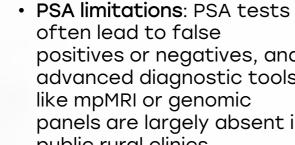
Biomarker testing is available but underutilized, with significant barriers such as high costs, lack of awareness, or limited infrastructure. Many patients may not receive recommended biomarker assessments.

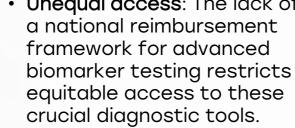
Biomarker testing is rarely performed, often due to lack of infrastructure, awareness, or financial barriers. Patients typically do not receive targeted therapies based on biomarker status.





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# Strengths

- The 2022 national Chinese guidelines have aligned local practice with international standards, adjusting for resource variability across regions.
- Guidelines cover screening, staging, active surveillance, surgery, radiotherapy and advanced treatment options, tailored to urban and rural capacities.

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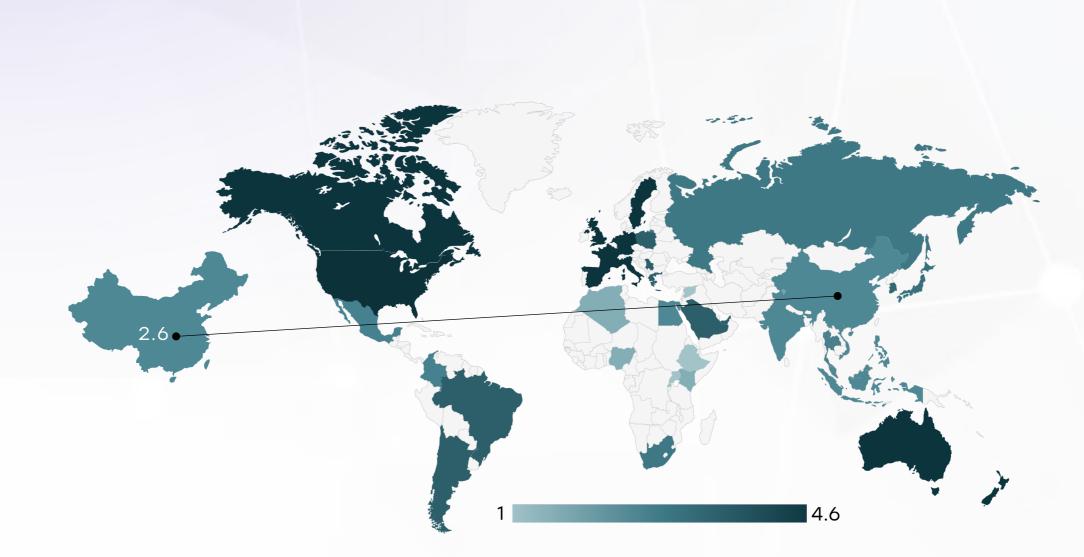
# Weakness

- Guideline enforcement and uptake vary significantly by province and hospital tier; primary care providers in rural areas may lack awareness or training on guideline components.
- Cultural resistance to active surveillance leads many physicians and families to favor surgery even in low-risk cases.

# Opportunity

- Targeted training programs and guideline dissemination through e-health platforms could standardize care across regions.
- Embedding decision aids into primary care could support risk-based screening and shared decision-making.

- If guideline updates are not paired with infrastructure and training support, recommendations may remain theoretical.
- Misalignment between provider practices and guideline intent may limit improvements in early detection and overtreatment reduction.



	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	*	*	0	*	*
Feasibility of Integration	*	*	0	*	*
Adoption of International Guidelines	*	*	0	*	*
Engagement with Updates	*	*	0	*	*
ESMO Guidelines Implementation	*	*	*	0	*





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- China's basic public health insurance (urban and rural schemes) covers PSA testing, surgery, radiotherapy and basic hormone therapies.
- In many provinces, firstgeneration antiandrogens and chemotherapy are partially reimbursed under formularies.

# Opportunity

- Negotiated inclusion of effective advanced therapies into national insurance lists can improve equity, especially for metastatic or high-risk cases.
- Bundled reimbursement models linking screening, diagnostics, and navigation may reduce delays and improve outcomes.

# Weakness

- Newer therapies (e.g. PARP inhibitors, advanced hormone drugs, PSMA-targeted therapy) are often not fully covered, leaving high out-of-pocket payments.
- Bureaucratic access pathways may delay approval for advanced diagnostics and drugs, particularly for rural or migrant populations.

- Rising treatment costs without matched insurance expansion risk financial burden for families especially for imported advanced drugs.
- Geographic inequality may deepen if reimbursement formularies remain inconsistent across provinces.



- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
- A reimbursement framework is in place, but patients may still have out-of-pocket expenses such as co-pays, limited coverage, or financial caps on testing.
- No formal reimbursement system exists, meaning patients must fully cover the cost of biomarker testing out-of-pocket.

Country	Reimbursement Framework	No-cost Access
United States		0
United Kingdom		
Canada		
Australia		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		
Japan		
South Korea		
China		
India	0	$\bigcirc$
Singapore		
Thailand		
South Africa		
Kenya		
Nigeria	0	
Egypt		
Morocco		
Algeria	0	
Ethiopia	0	
Mexico	0	
Brazil		
Argentina	0	
Chile	0	
Colombia	0	
New Zealand		
Greece		
Rwanda	0	0
Uganda	0	0
Serbia		
Saudi Arabia	0	
UAE		
Syria	0	
Indonesia		$\bigcirc$
Vietnam		0
Philippines	0	$\bigcirc$
Russia		
Malaysia		





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# Strengths

- PSA testing exists in both public and private settings; pilot screening programs in urban areas have detected early disease in substantial proportions (e.g. 65% earlystage detection in some rural programs).
- National guidelines now formally promote screening in high-risk populations (men ≥50 years, ≥45 with family history, ≥40 if PSA elevated).

# Opportunity

- Nationwide roll-out of standardized screening guidelines could enable systematic identification of high-risk men and improve early detection.
- Community health platforms in rural regions could coordinate screening outreach and followup.

# Weakness

- There is no national organized screening program; testing is largely opportunistic, self-paid, or limited to selected pilot areas.
- PSA screening rates remain low in general population, particularly in rural and lessdeveloped regions.

- Screening uptake without adequate follow-up imaging or biopsy access can lead to overtreatment or missed diagnoses.
- Without effective risk stratification and public education, screening may remain inconsistent and uneven across regions.

Country	Prostate Cancer Screening
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United States	Annual LDCT (50-80 years, high-risk smokers)
United Kingdom	LDCT for high-risk individuals (55-74 years)
Canada	LDCT for high-risk individuals (55-74 years)
Australia	No national program, high-risk groups advised LDCT
Germany	No national program, under evaluation
France	No national LDCT screening
Netherlands	Participating in European screening studies
Sweden	No national LDCT screening
Italy	Regional pilot LDCT screening
Spain	No national LDCT program
Poland	No national program
Japan	No national LDCT program
South Korea	LDCT for high-risk individuals (50-74 years)
China	No national LDCT program
India	No national LDCT program
Singapore	No national LDCT program
Saudi Arabia	No national LDCT program; some hospital-based opportunistic screening
UAE	No national LDCT program; early-stage pilot studies ongoing in select hospitals
Syria	No national LDCT program; screening not prioritized due to conflict
Malaysia	No program; high-risk CT pilots

Country	Prostate Cancer Screening
Thailand	No national LDCT program
South Africa	No national LDCT program
Kenya	No national LDCT program
Nigeria	No national LDCT program
Egypt	No national LDCT program
Morocco	No national LDCT program
Algeria	No national LDCT program
Ethiopia	No national LDCT program
Mexico	No national LDCT program
Brazil	No national LDCT program
Argentina	No national LDCT program
Chile	No national LDCT program
Colombia	No national LDCT program
New Zealand	No national LDCT program
Greece	No national LDCT program
Rwanda	No national LDCT program
Uganda	No national LDCT program
Serbia	No national LDCT program
Indonesia	No national LDCT program; opportunistic screening in private sector
Vietnam	No national LDCT program; early pilot screening studies in Hanoi and Ho Chi Minh
Philippines	No national LDCT program; feasibility and awareness programs under discussion
Russia	No formal national LDCT program; regional pilot screening programs in large cities