

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 is the most frequently diagnosed cancer in Dutch men.
- Incidence rate: Approximately 110 per 100,000 men per year.
- Total new cases (2022): Around 13,000-15,000 men.
- Daily diagnoses (2022): Approximately 36-41 men per day.
- Deaths (2022): About 2,600-3,000 men.
- 5-year survival rate: Around 90% or higher.
- Most affected age group: Most common in men aged 70 and above.
- Screening participation: No formal national program; PSA testing is available opportunistically and widely used in clinical settings.



Infrastructure

Weakness

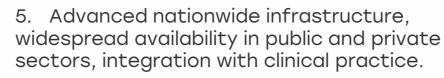
• The Netherlands has a highly developed oncology infrastructure, with designated Comprehensive Cancer Centres like the Netherlands Cancer Institute (NKI).

Strengths

- Digital patient data networks and tumor boards enable integrated, multispecialist decision-making.
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- Regional inequality may persist in waiting times for high-tech treatments like robotic surgery.
- Limited availability of PET imaging in smaller hospitals

Threats

- Infrastructure pressure due to rising prostate cancer incidence from population aging.
 - Workforce strain, particularly among urologists and radiation oncologists.





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 & Moleculo Testing Infrastructu |
|----------------|------------------------|--|
| South Africa | 0 | <u> </u> |
| Kenya | | |
| Nigeria | | |
| Egypt | | <u> </u> |
| Morocco | 0 | |
| Algeria | 0 | |
| Ethiopia | | |
| India | 0 | 0 |
| Japan | 0 | |
| South Korea | 0 | |
| China | 0 | 0 |
| Thailand | 0 | 0 |
| Singapore | 0 | |
| United Kingdom | 0 | |
| Germany | | 0 |
| France | 0 | 0 |
| Netherlands | | 0 |
| Sweden | | 0 |
| Italy | 0 | |
| Spain | 0 | |
| Poland | 0 | <u> </u> |
| Mexico | 0 | 0 |
| Brazil | 0 | <u> </u> |
| Argentina | 0 | 0 |
| Chile | 0 | 0 |
| Colombia | 0 | 0 |
| United States | | |
| Canada | | 0 |
| Australia | 0 | |
| New Zealand | 0 | 0 |
| Greece | 0 | 0 |
| Rwanda | | |
| Uganda | | |
| Serbia | 0 | <u> </u> |
| Saudi Arabia | 0 | 0 |
| UAE | 0 | 0 |
| Syria | 0 | |
| Indonesia | 0 | |
| Vietnam | 0 | <u> </u> |
| Philippines | 0 | |
| Russia | 0 | <u> </u> |
| Malaysia | | |

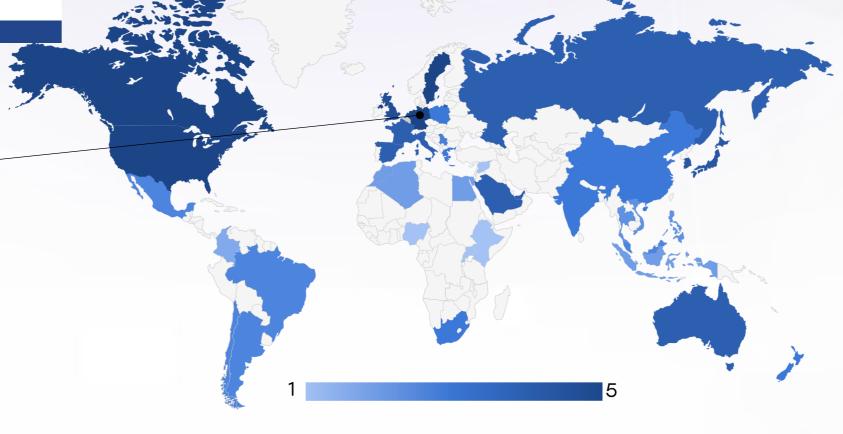
Opportunity

- Scale up digital diagnostic networks and remote pathology review systems.
- Expand cross-institutional treatment coordination through the national cancer registry.



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Treatment Access, Research Funding and Awareness Campaigns



Strengths

- Universal access under the Dutch health insurance system ensures broad treatment equity.
- The Netherlands is a leader in prostate cancer clinical trials and translational research.

Opportunity

- Promote genderequitable awareness through public media on male cancers.
- Further invest in personalized treatment trials leveraging Dutch biobank resources.

Weakness

- Access to newer generation hormonal therapies may involve bureaucratic delays.
- National awareness campaigns are less visible than for breast or colorectal cancer.

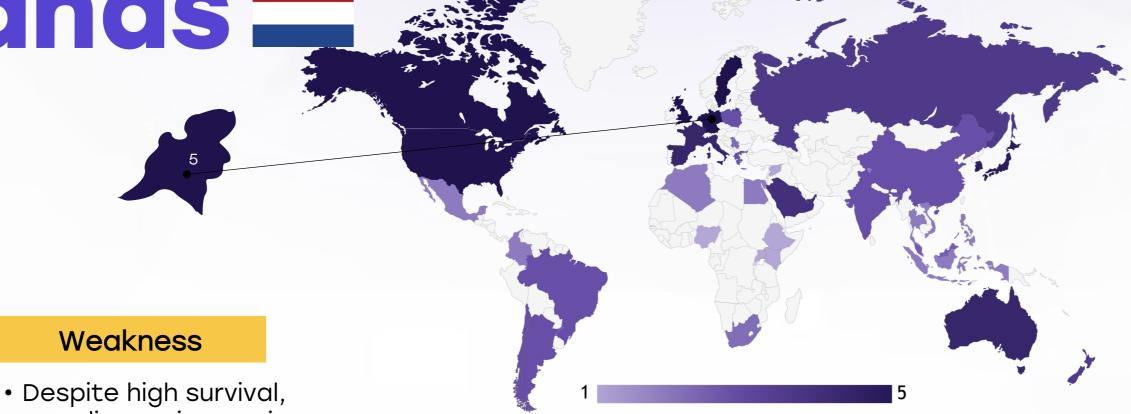
- Rising treatment complexity may increase system costs, challenging long-term sustainability.
- Language or cultural barriers in immigrant populations can hinder access and compliance.

- 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.
- 2. 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.

| Country | Treatment Access | Research Funding | Awareness Campaigns |
|-----------------------|---------------------|---------------------|------------------------|
| South Africa | <u> </u> | <u> </u> | 0 |
| Kenya | | | |
| Nigeria | | | |
| Egypt | 0 | | |
| Morocco | | | |
| Algeria | | | |
| Ethiopia | | | |
| India | | | |
| Japan | | | |
| South Korea | | | |
| China | \bigcirc | <u> </u> | <u> </u> |
| Thailand | | <u> </u> | 0 |
| Singapore | | | |
| United Kingdom | | | |
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| Italy | | | 0 |
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| Poland | <u> </u> | <u> </u> | 0 |
| Mexico | | | |
| Brazil | | <u> </u> | 0 |
| Argentina | 0 | 0 | 0 |
| Chile | 0 | 0 | 0 |
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| United States | | | |
| Canada | | | |
| Australia | 0 | 0 | 0 |
| New Zealand | | 0 | 0 |
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| Philippines Russia | | | |
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| Malaysia | | | |



Survival Rates, Early Detection and Palliative Care



Strengths

- The Netherlands boasts one of the highest 5-year prostate cancer survival rates in Europe (~93%).
- Strong palliative and end-of-life care systems integrated into national cancer care.

Opportunity

- Improve risk-based screening to avoid overtreatment while catching aggressive cases early.
- Expand community palliative services for rural and elderly patien

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- overdiagnosis remains a concern, especially in low-risk patients.
- Early detection initiatives are not uniformly applied, as national screening is not formalized.

- Societal resistance to discussing palliative care can delay timely referrals.
- Long-term survivor care needs more structured psychosocial support services.

- 5. High survival rates, strong early detection programs, and well-established palliative care services. Patients have access to timely diagnosis, advanced treatments, and comprehensive end-of-life care.
- 4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative care. Some disparities may exist in rural areas or for specific cancer types.
 - 3. Moderate survival rates, early detection available but not widespread, and palliative care services mainly in urban centers. Some patients experience delays in diagnosis or limited end-of-life care.
 - 2. Low survival rates, early detection efforts are inconsistent or underfunded, and palliative care is minimal or only available in select hospitals. Cancer patients face significant access barriers.
 - 1. Very low survival rates, poor early detection infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

| Country | Survival Rates | Early Detection | Palliative Care |
|----------------|-------------------|--------------------|--------------------|
| South Africa | 0 | <u> </u> | 0 |
| Kenya | | | |
| Nigeria | | | |
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| Ethiopia | | | |
| India | \bigcirc | <u> </u> | \bigcirc |
| Japan | | 0 | |
| South Korea | | | |
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| United Kingdom | | | |
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| France | | | |
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| Italy | | | |
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| Poland | \bigcirc | <u> </u> | <u> </u> |
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| United States | | | |
| Canada | | | |
| Australia | | 0 | |
| New Zealand | | 0 | <u> </u> |
| Greece | <u> </u> | 0 | <u> </u> |
| Rwanda | | | |
| Uganda | | | |
| Serbia | <u> </u> | 0 | |
| Saudi Arabia | | 0 | |
| UAE | <u> </u> | 0 | 0 |
| Syria | | | |
| Indonesia | 0 | 0 | |
| Vietnam | <u> </u> | 0 | |
| Philippines | <u> </u> | 0 | |
| Russia | 0 | 0 | <u> </u> |
| Malaysia | <u> </u> | <u> </u> | <u> </u> |
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Utilization of Biomarkers

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Strengths

- PSA testing is widely used and supported by clinical algorithms for monitoring and biopsy decisions.
- BRCA1/2 testing is available for patients with strong family history or high-risk tumors.

Opportunity

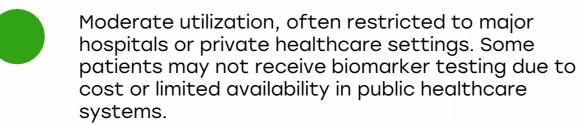
- Expand use of genomic classifiers and molecular stratification in treatment pathways.
- Integrate multibiomarker panels into early diagnosis for highrisk patients

Weakness

- PTEN loss and TMPRSS2-ERG fusion detection are mostly confined to academic centers and research.
- Interpretation of genetic tests for treatment planning is still not standardized nationwide.

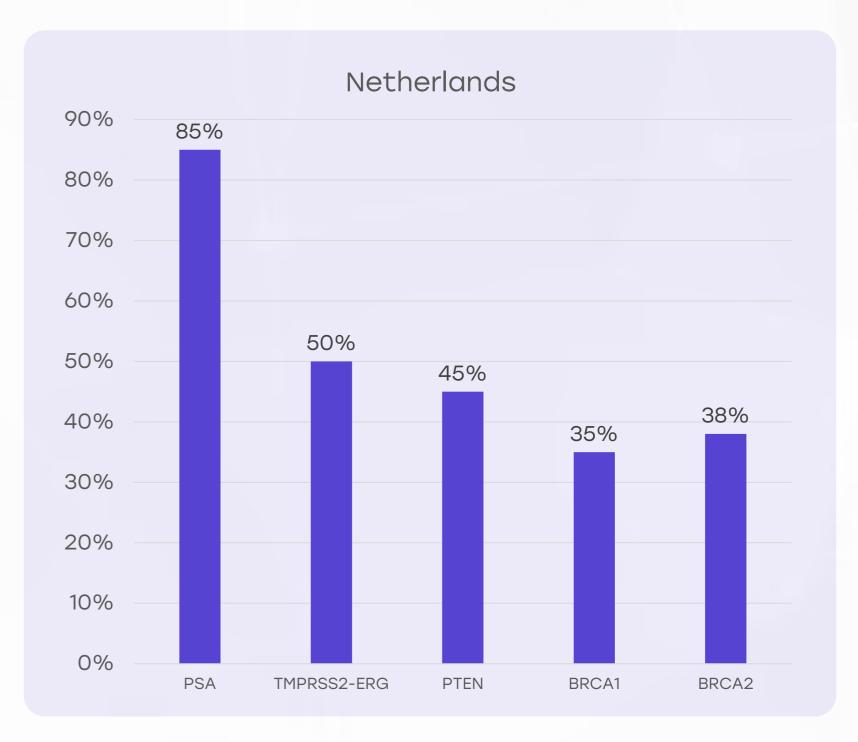
Threats

- Cost and test complexity may hinder broad use in community settings.
- Ethical and regulatory concerns around genetic privacy and test use could delay rollout.





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.





Clinical Guidelines

Strengths

- The Dutch Association of Urology and oncology societies maintain evidencebased national guidelines, regularly updated.
- Guidelines promote active surveillance, reducing overtreatment in low-risk cases.

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Opportunity

- Revise national guidelines to integrate genetic profiling, particularly BRCArelated cases.
- Develop decisionsupport tools for community oncologists.

Weakness

- Incorporation of molecular diagnostics is limited and not uniformly applied.
- Some smaller hospitals may lag behind in updating practice based on newer guidelines.

- Clinical inertia and budget constraints may delay adoption of advanced practices.
- Pressure from public demand may push for unnecessary PSA testing.



| | 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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Reimbursement



Strengths

- The Dutch universal healthcare system covers most standard prostate cancer treatments and diagnostics.
- High-cost drugs like abiraterone and enzalutamide are generally reimbursed post-HTA review.

Opportunity

- Include genomic tools in the reimbursement system through health technology assessments.
- Pilot bundled payment models for prostate cancer pathways.

Weakness

- Reimbursement for genetic testing and new biomarkers is case-specific and limited.
- Delays in coverage approval for emerging therapies can cause access disparities.

- Budgetary pressures could lead to costcontainment measures, especially in genomic medicine.
- Rising costs of long-term hormonal therapy use may strain payer systems.

| 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 | | |
| United Kingdom | | |
| Canada | | |
| Australia | | |
| Germany | | |
| France | | |
| Netherlands | | |
| Sweden | | |
| Italy | | |
| Spain | | |
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| Japan | | |
| South Korea | | |
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| South Africa | \bigcirc | 0 |
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| Nigeria | \bigcirc | 0 |
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| Greece | | |
| Rwanda | 0 | 0 |
| Uganda | | 0 |
| Serbia | | |
| Saudi Arabia | | |
| UAE | | |
| Syria | 0 | 0 |
| Indonesia | | 0 |
| Vietnam | | 0 |
| Philippines | 0 | 0 |
| Russia | | |
| Malaysia | | |



Prostate Cancer Screening

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Strengths

- PSA testing is readily available through general practitioners upon patient request.
- Opportunistic screening is guided by informed consent and shared decisionmaking.

Weakness

- The Netherlands has no organized national PSA screening program.
- Risk-based screening is not systematized despite availability of genetic and clinical risk tools.

Opportunity

- Launch targeted PSA screening pilots for high-risk groups (e.g., family history, BRCA carriers).
- Use AI-supported tools to guide primary care screening decisions.

- Risk of overdiagnosis and overtreatment without proper stratification.
- Public misunderstanding of PSA testing may lead to inappropriate expectations.

| Country | Prostate Cancer Screening |
|----------------|---|
| 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 |
| | |

| 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 |