Treatment

This brochure provides information about different treatments for prostate cancer, including what to expect and the risks and side effects of treatment.

Treating prostate cancer

To determine the best treatment option for you, work with your healthcare team and consider the following factors:

• Your age
• The stage and grade of your cancer (i.e., how far the cancer has spread and how fast it is capable of growing)
• Your general health
• Your values and preferences

Prostate cancer can grow at different speeds. Talk to your doctor and if needed, get a second opinion to learn about your treatment options.

Common treatments

The most common treatments for prostate cancer are:

• Active Surveillance – Involves close monitoring of small, slow-growing prostate cancer with relatively normal-looking cells (as determined by your biopsy results).
• Radical Prostatectomy (Open, Laparoscopic, Robotic) – Surgery that completely removes the prostate gland, as well as the seminal vesicles and part of the urethra within the prostate.
• Radiation Therapy (External Beam, Brachytherapy) – Radiation therapy uses high-energy radiation to shrink tumours and kill cancer cells.
• Hormone Therapy – Hormone therapy works by depriving cancer cells of the male hormones (androgens) they need to grow.
• Chemotherapy – Drugs that treat cancer. These drugs affect both cancer cells and healthy cells. Healthy cells tend to regenerate whereas cancer cells struggle to do so.

See more detailed information about the most common treatments on the back of this brochure. For more information about drugs to treat prostate cancer visit our website: www.prostatecancer.ca and search ‘Prostate Cancer Drugs’.

Clinical trials

One way to access new treatments before they become widely available is to participate in a clinical trial. A clinical trial is a research study that uses volunteers (called participants) to test new ways to prevent, detect, treat or manage prostate cancer or other illnesses. Some clinical trials help determine whether or not a new treatment, drug or device is effective and safe.

Participating in a clinical trial is a valuable contribution to research as clinical trials answer important questions and can lead to improved health outcomes. Participating can be a good way for participants to access free treatments and get monitored closely by healthcare professionals.

If you are interested in learning more about clinical trials please visit www.prostatecancer.ca, search ‘clinical trials’ and talk to your healthcare team.

For further information, please visit:
• ClinicalTrials.gov: www.clinicaltrials.gov
• Canadian Cancer Trials: www.canadiancancertrials.ca
• National Cancer Institute: www.cancer.gov/clinicaltrials

Complementary and alternative therapies

Complementary and alternative therapies include a wide range of approaches and therapies. It is important to understand the differences between conventional medicine, complementary therapies and alternative therapies.

• Conventional (Mainstream) Medicine – Medical or surgical treatments that are accepted and practiced in the Canadian healthcare system. The best available research has shown these treatments to be effective and safe. An example of conventional medicine is radiation therapy.
• Complementary Therapies – Therapies used with or alongside conventional medicine, often to help people cope with cancer, treatment side effects or other outcomes. Further research is needed to find out if or how they are safe and effective.
• Alternative Therapies – Therapies used instead of or in place of conventional medicine. These therapies have not been scientifically proven to be safe and effective. An example of alternative therapies is using a special diet, in place of conventional treatments, to treat prostate cancer. Delaying or refusing conventional therapies to use alternative therapies may have serious health consequences.

Discuss all treatment decisions with your healthcare team.
### Active Surveillance
- Involves close monitoring of small, slow-growing prostate cancer with relatively normal-looking and well-behaved cells (as determined by your biopsy results).
- May be recommended if:
  - Your cancer is small and low-grade.
  - The possible side-effects of other treatments are felt to outweigh the benefits at this time.

### Radical Prostatectomy: Open/Laparoscopic/Robotic
- Surgery that completely removes the prostate gland and surrounding tissue, as well as the seminal vesicles and part of the urethra.
- Potentially removes all cancer cells.
- May be recommended if your cancer has not spread outside the prostate (stage T1 or T2).
- May be used in combination with other treatments e.g., surgery followed by radiation if indicated.

### RADIATION THERAPY

<table>
<thead>
<tr>
<th>External Beam</th>
<th>Brachytherapy</th>
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<tbody>
<tr>
<td><em>Low-dose seed implant brachytherapy</em></td>
<td><em>Brachytherapy delivers radiation internally. There are 2 main types: low-dose seed implant brachytherapy and high-dose rate brachytherapy (HDR)</em></td>
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<tr>
<td>Usually recommended to men with lower-grade cancers that are contained within the prostate gland.</td>
<td>Between 80 and 100 radioactive seeds, the size of a grain of rice, are implanted directly into the prostate.</td>
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<td><em>Each seed releases low-energy level radiation steadily over several months.</em></td>
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<td>Usually treatment is given Monday–Friday, with a break on weekends to give the healthy cells some time to recover.</td>
<td><em>HDR</em></td>
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<td>HDR is usually supplemented by a course of external beam radiation.</td>
<td>Reserved for patients with high-grade cancers.</td>
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<td>High-dose radiation is received through approximately 15 needles in the prostate, concentrating on the cancerous areas.</td>
<td>In patients with high-grade cancers.</td>
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### Hormone Therapy
- Hormone therapy works by depriving cancer cells of androgens (the male hormones) they need to grow.
- *Affects the whole body rather than a particular area.*
- *Most often used to treat:* Cancer that has spread outside the prostate, Recurrence of prostate cancer after another therapy has been used. Men who are at a high risk of experiencing a recurrence after surgery or radiation therapy.

### Chemotherapy
- The use of specific drugs to treat cancer.
- *Normally used to treat recurring or metastatic prostate cancer if hormone therapy does not work anymore.*
- *Chemotherapy drugs affect both cancer cells and healthy cells. Healthy cells tend to regenerate whereas cancer cells struggle to do so.*
- *It is sometimes used to treat more advanced cancer in conjunction with surgical removal of the prostate.*

### What Is It?

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<tr>
<th>Active Surveillance</th>
<th>Radial Prostatectomy: Open/Laparoscopic/Robotic</th>
<th>Radiation Therapy</th>
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<td><em>Most often used to treat:</em> Cancer that has spread outside the prostate, Recurrence of prostate cancer after another therapy has been used. Men who are at a high risk of experiencing a recurrence after surgery or radiation therapy.</td>
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<td><em>HDR</em></td>
<td><em>Chemotherapy is usually given through the vein but some forms can be taken as a pill.</em></td>
<td><em>Chemotherapy is typically used to slow the prostate cancer’s spread, prolong life, and relieve pain associated with the late stages of cancer.</em></td>
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</table>

### What’s Done?

- A responsible program of active surveillance will include regular PSA tests and DREs.
- Your doctor will track your PSA levels over time, and any changes in DRE findings.
- Repeat biopsies will be required to determine if there has been a significant change or progression of the cancer.

### Side-effects and Risks
- There are no physical side-effects in the short term.
- Some men may experience anxiety or depression.
- With time, some of the more common symptoms of prostate cancer may progress.
- Talk to your doctor or local support group for help.

### Day of Surgery:
- You will be admitted to hospital.
- Procedure takes 2–4 hours and is carried out under anaesthetic.
- A catheter is inserted at the end of the surgery.

### After Surgery:
- Hospital stay is typically 2–3 days.
- Most men have minimal pain and discomfort after surgery.
- Catheter is removed after 1–2 weeks.
- Recovery process at home takes 4–6 weeks.

- It is important to have regular PSA tests to monitor your PSA level for any changes, even after the prostate gland is removed, since some cancer cells may remain in the body after surgery and they can produce PSA. As well, a small amount of prostate tissue may remain and it can produce PSA also.

### Before Treatment:
- You will have one or more planning sessions (with different scans or x-rays) to identify the exact area to be treated.

### During Treatment:
- A machine sends painless high-energy beams into your body. You will be fully awake for the treatment.
- Usually treatment is given Monday–Friday, with a break on weekends to give the healthy cells some time to recover.

### After Treatment:
- You will have follow-up appointments and PSA tests to check how effective the treatment has been.

### Immediate side-effects:
- May appear after a few weeks of radiation and disappear some weeks after treatment has ended.
- Some men experience fatigue, decreased energy, weight loss or changes in appetite.
- Less common are gastrointestinal or rectal problems such as diarrhea, pain during defecation and rectal bleeding.
- Urinary problems are also possible e.g., blood in the urine, frequent urination, burning with urination, urine leakage.

### Long-term side-effects:
- These may occur anywhere from 6 months to several years after treatment.
- Side-effects can range from scar tissue in the urinary passage (causing a slow urinary stream) to infertility.
- Erectile dysfunction may occur in up to 50% of patients.
- Blood in the urine and rectal bleeding may occasionally still be a problem years after radiation treatment.

### Possible side-effects include:
- Hot flashes.
- Erectile dysfunction.
- Loss of energy, general weakness
- Breast enlargement and tenderness
- Irritability
- Emotional disturbance including depression
- Headache
- Itching, dry skin, rash
- Gastrointestinal issues: diarrhea, nausea, vomiting
- Loss of muscle mass
- Weight gain (mainly due to increased body fat)
- Sudden increase in appetite

### Specific side-effects depend on the type of drugs that are given. The following side-effects are common with most types of chemotherapy:
- Gastrointestinal side-effects such as vomiting and diarrhea
- Anemia
- Total or partial hair loss
- Sensitive skin
- Infertility
- Vulnerability to infection (most commonly chest, mouth, throat and urinary infections)
- Nails changes

### For more information on prostate cancer drugs please visit: www.prostatecancer.ca/Prostate-Cancer/Treatment/Drugs-to-Treat-Prostate-Cancer