DECISION AID

Low-risk prostate cancer:
What are my options?

You have been diagnosed with low-risk prostate cancer. This means that

- cancer cells were found in some parts of your prostate,
- but the cancer cells haven't mutated (changed) much and aren't very aggressive, and
- the cancer is only in the prostate (it has not spread to your lymph nodes or formed metastatic tumors elsewhere in your body).

Even if the diagnosis can be worrying: Low-risk prostate cancer grows only very slowly, or sometimes doesn't grow at all. So the chances of recovery are very good. Over a time period of 10 years, only 1 out of 100 men who have low-risk prostate cancer will die of this disease. In other words: 99 out of 100 men will not die of prostate cancer in the 10 years after it is diagnosed.

There are various ways to deal with low-risk prostate cancer. This information was written to help you consider the various pros and cons.

THESE ARE THE TREATMENT OPTIONS:

- **Active surveillance:** The prostate cancer is monitored regularly and only treated if it grows.
- **External radiotherapy:** The cancer is exposed to radiation from outside of the body (through the skin).
- **Brachytherapy (internal radiotherapy):** The cancer is exposed to radiation from slightly radioactive „seeds" that are implanted inside the body.
- **Removal of the prostate gland (prostatectomy):** The prostate and cancer are surgically removed.

Find the pros and cons of the treatment options on the next few pages

"Active surveillance" is possible in men who are older or have serious illnesses, and do not want to undergo any more distressing treatments. In this approach, the aim of treatment is to relieve any resulting symptoms rather than curing the cancer. Then fewer check-ups are needed.

PERSONAL DECISION

The alternatives each have their advantages and disadvantages: So there's no one right or wrong decision. The treatment decision is mainly a matter of personal choice. Some men will want to be as sure as possible that the cancer is gone, and are willing to accept side effects such as erection problems or leakage of urine. Others would rather avoid these kinds of side effects wherever possible and are willing to have regular and sometimes time-consuming check-ups.

IMPORTANT: You have plenty of time to consider all options. Don't let anyone force you to choose a certain treatment.

ADVANTAGES AND DISADVANTAGES OF THE VARIOUS OPTIONS

	Active surveillance	External radiotherapy	Brachytherapy	Surgery to remove the prostate
What will be done?	The cancer is monitored by doing regular blood tests and taking tissue samples (biopsies). If it grows, the cancer is treated – either with radiotherapy or with surgery. Active surveillance is based on the fact that low-risk prostate cancer often grows very slowly or doesn‘t grow at all, so treatment often isn’t needed. It can help to avoid unnecessary treatments and the associated side effects.	The cancer is exposed to radiation from outside the body (through the skin). The goal is to destroy all of the cancer cells if possible. The radiation is applied to the cancer 5 days a week for about 2 months. Each treatment session takes about 30 to 45 minutes.	The cancer is exposed to radiation from inside the body. The goal is to destroy all of the cancer cells if possible. The cancer is exposed to radiation from slightly radioactive “seeds” (about the size of a grain of rice) that are im-planted inside the prostate using hollow needles. This procedure takes about 2 to 3 hours. Two other appointments need to be scheduled as well: one to plan the procedure and one follow-up visit. The procedure is carried out in a hospital.	The prostate is removed along with the cancer. The seminal vesicles and parts of the vas deferens are also removed. You have to stay in the hospital for a few days. It usually takes several weeks to recover from the operation. The operation is carried out under general anesthesia.
How many men will die of prostate cancer within the next 10 years?	1 out of 100 men will die of prostate cancer in the 10 years after it is diagnosed.	1 out of 100 men will die of prostate cancer in the 10 years after it is diagnosed.	There is no reliable scientific data for brachytherapy. Experts think that the number of deaths is similar in men who have brachytherapy and those who have external radiotherapy.	1 out of 100 men will die of prostate cancer in the next 10 years.
How many men develop metastases?	6 out of 100 men will develop metastases.	3 out of 100 men will develop metastases.	It isn’t known how many men will develop metastases.	2 out of 100 men will develop metastases.

	Active surveillance	External radiotherapy	Brachytherapy	Surgery to remove the prostate
How common are problems with urination and urine leakage (urinary incontinence)?	There is no risk of this during active surveillance. But you could develop urination problems if you have surgery or radiotherapy later on.	During radiotherapy and in the first weeks afterwards, the bladder and the urethra (tube that the urine travels through) can become inflamed. That may lead to an increased urgency to urinate or a burning sensation when peeing. There's also a low risk of urine leakage. It is estimated that 2 out of 100 men will need to use incontinence pads as a result.	When the seeds are implanted, the urinary tract might be damaged and the prostate may become very swollen. This can lead to extreme pain when peeing. The urge to urinate may increase as well and the stream of urine may become weaker. Sometimes a urinary catheter may be needed for a while because the urine can no longer flow out. Problems with urination or leakage usually go away or improve within 1 or 2 years.	The urethral sphincter may be damaged during the operation. That causes 30 out of 100 men to develop urinary incontinence. About half of those men will need to use incontinence pads over the long term as a result. Scar tissue on the neck of the bladder can also cause problems with urination.
How common are bowel problems and bowel leakage (fecal incontinence)?	There is no risk of this during active surveillance. But you could develop bowel movement problems if you have radiotherapy later on.	Especially during radiotherapy and in the first two years afterwards, about 4 out of 100 men will have accidental bowel leakage. Up to 4 out of 100 men will have loose stool or diarrhea over the long term. There may also be blood in the stool.	According to research so far, bowel problems seem to be less common following brachytherapy than after external radiotherapy.	There is no risk of bowel problems.

	Active surveillance	External radiotherapy	Brachytherapy	Surgery to remove the prostate
How common are erection problems?	There is no risk of this during active surveillance. But you could develop erection problems if you have surgery or radiotherapy later on.	Radiotherapy causes erection problems in 35 out of 100 men in the first few months. Half of those men continue to have erection problems after that.	Erection problems are less common following brachy-thrapy than after surgery to remove the prostate. They are similarly common in men who have had brachy-therapy and those of have had external radiotherapy.	This procedure causes erection problems in 45 out of 100 men in the first few months. These erection problems typically don‘t go away.
What else is important?	About half of the men who decide to follow the active surveillance approach decide to have surgery or radiotherapy later on. Some find the regular examina-tions too distressing, and others are very worried by the thought that they have cancer in their body. They also might end up needing treatment if the cancer starts to grow. The biopsies can be painful and temporarily lead to blood in the urine or semen. About 1 out of 100 biopsy procedures cause complications such as an infection. You can talk with your doctor about how often the biopsies are needed.	Over the long term, the radiation increases your risk of getting a different type of cancer. This risk is very low, though.	The seeds remain in the prostate. Sometimes individual seeds may travel to other parts of the body. It‘s not completely clear what health risks this leads to. As with any surgical procedure, there is a general risk of infection and anesthetic-related problems.	Most men need to use a urinary catheter for a few days after the surgery. The procedure can lead to complications, including bleeding, infections, thrombosis and wound-healing problems. There are also general risks associated with the use of a general anesthetic.

WHAT ARE THE OPTIONS?

You may still be unsure about which approach you would prefer. You can write down your thoughts and questions on the following two pages.

Which option would I consider?		What do I like about it?	What don't I like about it?
Active surveillance	○		
External radiotherapy	○		
Brachytherapy (Internal radiotherapy)	○		
Surgery to remove the prostate	○		

If you still aren't sure: What else do you need in order to make a decision?

It can be difficult to make a decision given the various choices. But you can take the time you need. Because low-risk prostate cancer grows very slowly, you don't need to make a decision for a few months. If you decide to opt for active surveillance, you can always change your mind and have radiotherapy or surgery after all.

If you need more help: You can also talk to a different doctor (get a second opinion). You have the option of being advised by a urologist as well as by a radiotherapist.

DECISION AID

Low-risk prostate cancer:
What are my options?

You will find in-depth information about the following topics on the internet:

- Low-risk prostate cancer: Active surveillance or treatment?
  www.informedhealth.org/lrpc

- Patient guideline for prostate cancer (in German):
  www.leitlinienprogramm-onkologie.de/patientenleitlinien/prostatakrebs

Preparing for the doctor's appointment

Many factors will influence your treatment decision, including your age, the exact stage of your cancer, any other medical conditions that you have and the size of your prostate gland. If you still have any questions about these things, you can ask your doctor. And that also applies to anything else that you're concerned or worried about.

It can be helpful to write down your questions and thoughts and to take this decision aid along to the appointment. What remains unclear? What is important to me? What am I most concerned about?

You will find a list of questions – and can choose those that are most important to you – here:

- www.informedhealth.org/questions

Publishing details

This decision aid was developed by the Institute for Quality and Efficiency in Health Care (IQWiG, Germany). You will find information about our work and the sources we use here:

- www.informedhealth.org/our-approach

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