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Treatment of recurrence (when the tumour comes back)

The underlined terms are listed in the glossary.

### Local recurrence

Local recurrence takes place in the soft tissues of the original surgical site or location of the lymph nodes that were removed. Most local recurrences appear within the first 2 years. Local recurrence after complete removal of the urinary bladder is associated with poor overall prognosis but can be treated (surgery, chemotherapy, targeted radiation therapy).

### Distant recurrence

If the cancer recurs outside the pelvis, it is a distant recurrence. The risks of distant recurrences are malignant disease and the presence of cancer in the lymph nodes. This type of recurrence is fairly common after bladder removal in patients with high risk of recurrence. Distant recurrence happens mostly within the first 2 years after bladder removal but also can happen more than 10 years after the operation. Sites of distant recurrences are lymph nodes, lungs, liver, and bones.

Distant recurrence confers a risk of systemic disease and can be treated only by chemotherapy. If there is a

single or very few metastases, surgical removal may be used in addition to systemic treatment.

### Recurrence in the urothelial tract (urethra and ureters)

After complete removal of the bladder, the cancer can recur in the urethra and ureters (urothelial tract). Most recurrences of the urothelial tract happen within the first 3 years after the operation. This type of recurrence is relatively rare.

If possible, a local treatment should be chosen to eliminate the cancer, unless systemic disease is suspected. In that case, chemotherapy or palliation should be used. For a superficial (non-muscle-invasive) recurrence, washing the bladder with drugs to prevent the growth or spread of cancer cells (instillation therapy) is advised.

Risk factors for recurrence in the urethra after removal of the bladder:

- Prior superficial (non-muscle-invasive) bladder cancer
- Multiple bladder tumours

- Tumour involvement of the bladder neck (and/or the prostate in men)
- Bladder diversion that does not include the urethra
- Cancer growth at the original surgical site

Although routine removal of the urethra (urethrectomy) is considered overtreatment, monitoring of the urethra is indicated in men.

Risk factors for recurrence in the ureters after removal of the bladder:

- Prior superficial (non–muscle-invasive) bladder cancer
- Multiple bladder tumours
- Tumour involvement at the opening (orifice) of the ureter
- Cancer growth at the original surgical site

For patients with risk factors for urothelial recurrences, stringent or adapted monitoring is indicated.

## Follow-up

After any kind of cancer treatment follow-up is essential to minimize complications and to detect and treat recurrences early. After complete removal of the bladder or other treatments, you will be asked to see your general practitioner, urologist, oncologist, radiologist, or a nurse practitioner at specific, fixed time intervals for monitoring and evaluation.

A specialist should have the lead in coordinating and interpreting all of the results from the follow-up visits. That specialist—in most countries, the urologist—should also be the main contact for questions about your disease or related issues.

## Symptoms of complications

After monitoring of cancer, the functional results must be observed and controlled. Functional complications after bladder removal include vitamin B12 deficiency, high acid levels in the blood (metabolic acidosis), worsening kidney function, urinary infections, urinary

stone formation, tightening of stoma openings, stoma complications in patients with ileal conduit diversions, neobladder continence problems, and emptying dysfunction. Ask your doctor for information about the major symptoms of these complications and their prevention.

## Bladder cancer prevention

Several biological factors and harmful substances can increase the risk of developing bladder cancer. A higher risk does not necessarily mean that someone gets cancer. Sometimes bladder cancer develops without any known cause.

Risk factors for bladder cancer:

- Age: Bladder cancer develops slowly and is more common in older people (age 60 and older).
- Tobacco use: Smoking contains many harmful substances and is responsible for almost half of bladder cancer cases.
- Occupational chemical exposure. Chemicals used in the production of paint, dye, metal and petroleum have been associated with bladder cancer, although workplace safety guidelines have helped reduce this risk.
- Infections: Certain viruses, bacteria, or parasites and chronic urinary tract infections increase risk of developing bladder cancer.

It is important to maintain a healthy lifestyle. If you smoke, try to stop. Follow workplace safety rules and avoid exposure to harmful chemicals. Some evidence suggests that drinking a lot of fluids, mainly water, might lower bladder cancer risk. Eating a balanced diet with lots of fruits and vegetables has health benefits and might protect against cancer. If you have questions or need support to maintain a healthy lifestyle, ask your health care team for assistance or referrals.

This information was last updated in March 2016 and is subject to change following review by the European Cancer Patient Coalition (ECPC) and EAU Guidelines Office.

This leaflet is part of a series of EAU Patient Information on Bladder Cancer. It contains general information about bladder cancer. If you have any specific questions about your individual medical situation you should consult your doctor or other professional healthcare provider.

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The content of this leaflet is in line with the EAU Guidelines.

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