

Prostate cancer and heart health

Your role in the care of patients on hormone therapy for a prostate cancer

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For men living with prostate cancer, a short- or long-duration hormone therapy, combined with another treatment or not, offers hope for better-controlled disease and a longer life.

The hormone therapy (HT) allows for androgen blockade by reducing testosterone levels, a hormone well-known to stimulate prostate cancer growth.

Cardiovascular risk

Although it is a standard treatment, HT is not without adverse effects. More and more research reports that the cardiovascular (CV) health of your patients may be affected by the metabolic effects of the treatment. This risk is even more important if your patient has an underlying cardiovascular disease.

Metabolic effects of hormone therapy

While on treatment, your patient may experience some changes, including:

- a weight gain, especially at the level of the abdomen
- a decrease in muscle mass
- an increased blood pressure
- an insulin resistance or dysglycemia
- an increased cholesterol level or dyslipidemia
- one or more thromboembolic events
- an increased risk of cardiovascular mortality

You may notice that these changes are worsened by:

- fatigue limiting your patient's activities
- a poor diet - rich in fat, salt and sugar
- mood changes such as anxiety, stress, or even depression
- consumption of alcohol and/or tobacco

Your role as first line doctor

Your role, as well as your patient living with prostate cancer, is critical in terms of prevention and intervention. You will have to:

- identify your patients at high CV risk
- follow your patients periodically: before HT initiation and after 6 months
- assess their lipid profile, glycemia and HbA1C
- evaluate their CV risk factors each year



Table of risk factors and intervention

The table below offers a guide for your interventions with targets to reach according to the guidelines to optimize the overall health of your patients.

Risk factors	Interventions
 Patients at high CV risk	<input type="checkbox"/> Favour the LH-RH antagonists as hormone therapy if presence of: <ul style="list-style-type: none"> → Symptoms of atherosclerotic heart disease → Cerebrovascular impairment (TIA or CVA) → Peripheral arterial disease
Overweight and obesity	<input type="checkbox"/> Calculate BMI = weight (kg) / height (m ²) and targeted weight <ul style="list-style-type: none"> → 18.5 to 24.9 Normal weight → 25.0 to 29.9 Weight excess → 30.0 to 40.0 + Class I-II-III obesity
Sedentary	<input type="checkbox"/> Encourage 150 min/week of moderate to sustained exercise: walk, bicycle, aerobic
Poor eating habits	<input type="checkbox"/> Favour a Mediterranean diet on top of: <ul style="list-style-type: none"> → Sufficient intake of vitamin D (1000 IU/day) → Sufficient intake in calcium (1200 mg/day) → Limit alcohol consumption (1 to 2 glasses/day)
 Tobacco	<input type="checkbox"/> Refer to the toll-free line « Quit Now! » 1-866-366-3667
Anxiety and stress	<input type="checkbox"/> Refer to a stress management workshop
Blood pressure	<input type="checkbox"/> Target ≤ 140/90 mm Hg except if diabetes (≤130/80)
Cholesterol/Lipids	<input type="checkbox"/> Target total cholesterol < 2.0 mmol/L <ul style="list-style-type: none"> → C-LDL < 2.0 mmol/L or reduction > 50% → C-LDL < 1.8 mmol/L if clinical atherosclerosis → C-HDL > 1.0 mmol/L → Apo-B < 0.8 mg/L → Triglycerides < 1.5 mmol/L → C-Non HDL < 2.6 mmol/L
 Dysglycemia	<input type="checkbox"/> Target HbA1C < 7.0% <ul style="list-style-type: none"> → Fasting blood glucose < 7.0 mmol/L → Random blood sugar < 11.1 mmol/L → Treatment with metformin if necessary
Dyslipidemia	<input type="checkbox"/> Consider statin therapy in at-risk patients according to Canadian recommendations
Non-compliance	<input type="checkbox"/> Talk to your patient