

# Osteoporosis and hormone replacement therapy (HRT) Summaries and decision aid

## Information about osteoporosis and treatment

### What is osteoporosis?

Osteoporosis is a condition of weak, brittle bones that break easily. The most common breaks or fractures are in the spine, hip, wrist or forearm, and these may occur without a fall. Osteoporosis is detected using a bone density test that measures the amount of bone loss. A result that is at least 2.5 “standard deviations” below normal confirms the diagnosis. This means people have lost at least 25 per cent of their bone mass or density.

Hip fractures can cause severe disability or death.

- Among 100 women with normal bone density, about **15** may break a hip in their lifetime.
- Among 100 women with low bone density, about **35 to 75** may break a hip in their lifetime.

This number depends on *amount of bone loss*, *age*, and other risk factors, such as:

- *major bone-related risks*: previous broken bones since age 50 (not from trauma); family history of fracture (e.g. mother who broke a hip, wrist, spine)
- *major fall-related risks*: poor health; unable to rise from a chair without help; use of sleeping pills.

Spine fractures are more common, disabling, and painful. They can cause stooped posture and loss of height of up to 6 inches.

To find out your personal risk of broken bones, ask your doctor.

### What can I do on my own to manage my disease?

- ✓ Calcium and vitamin D
- ✓ Regular impact exercises (e.g. walking)

### What treatments are used for osteoporosis?

Three kinds of treatment may be used alone or together. The common (generic) names of treatment are shown below.

1. *Bone-specific drugs*
  - Alendronate
  - Calcitonin
  - Etidronate
  - Risedronate
2. *Hormones that affect bones and other organs*
  - Parathyroid hormone
  - Raloxifene
  - Hormone replacement therapy (oestrogen and progestin)
3. *Other*
  - Hip protector pads

### What about other treatments I have heard about?

There is not enough evidence about the effects of some treatments. Other treatments do not work. For example:

- Calcitonin for non-spinal fractures
- Etidronate for non-spinal fractures
- Raloxifene for non-spinal fractures

### What are my choices? How can I decide?

Treatment for your disease will depend on your condition. You need to know the good points (pros) and bad points (cons) about each treatment before you can decide.

## Osteoporosis decision aid

### Should I take hormone replacement therapy (HRT)?

This guide can help you make decisions about the treatment your doctor is asking you to consider.

It will help you to:

1. Clarify what you need to decide.
2. Consider the pros and cons of different choices.
3. Decide what role you want to have in choosing your treatment.
4. Identify what you need to help you make the decision.
5. Plan the next steps.
6. Share your thinking with your doctor.

#### Step 1: Clarify what you need to decide

##### What is the decision?

Should I take hormone replacement therapy (HRT) to slow bone loss or prevent breaks?

Hormone replacement therapy (HRT) may be a combination of oestrogen and/or progestin and may be taken as pills, creams, injections or patches.

##### When does this decision have to be made? Check one

- within days     within weeks     within months

##### How far along are you with this decision? Check one

- I have not thought about it yet
- I am considering the choices
- I am close to making a choice
- I have already made a choice

## Step 2: Consider the pros and cons of different choices

### What does the research show?

Hormone replacement therapy (HRT) is classified as: **Trade-off between benefits and harms**

There is “Gold” level evidence from 1 large study and 2 reviews with over 25 000 women after menopause that tested hormone replacement therapy (HRT) and lasted up to 4 years. The women had osteoporosis (low bone density) or normal to near normal bone density. These studies found pros and cons that are listed in the chart below.

### What do I think of the pros and cons of hormone replacement therapy (HRT)?

1. Review the common pros and cons that are shown below.
2. Add any other pros and cons that are important to you.
3. Show how important each pro and con is to you by circling from one (\*) star if it is a little important to you, to up to five (\*\*\*\*\*) stars if it is very important to you.

PROS AND CONS OF HORMONE REPLACEMENT THERAPY (HRT)	
PROS (number of people affected)	How important is it to you?
<b>Fewer broken bones in the spine</b> 3 less women out of 100 have a break in the spine over their lifetime by taking HRT compared to no treatment	* * * * *
<b>Fewer broken bones in the hip or wrist</b> 9 less women out of 100 have a break in the hip or wrist over their lifetime when taking HRT compared to no treatment	* * * * *
<b>Increases bone density</b>	* * * * *
<b>May decrease the changes of bowel cancer (colorectal cancer)</b> 3 out of 1000 less women with HRT compared to placebo	* * * * *
<b>Other pros:</b>	* * * * *
CONS (number of people affected)	How important is it to you?
<b>Side effects: depression, headaches, breast tenderness, premenstrual syndrome, skin irritation, and weight gain</b>	* * * * *
<b>Long term harms with hormone replacement therapy:</b> <b>Breast cancer</b> (in 5 out of 1000 more women) <b>Heart disease</b> (in 4 out of 1000 more women) <b>Stroke</b> (in 5 out of 1000 more women) <b>Blood clots</b> (in 10 out of 1000 more women)	* * * * *
<b>Personal cost of medicine</b>	* * * * *
<b>Regular menstrual periods</b>	* * * * *
<b>Other cons:</b>	* * * * *

### What do you think of hormone replacement therapy (HRT)? Check one




Willing to consider this treatment  
Pros are more important to me than the Cons

Unsure

Not willing to consider this treatment  
Cons are more important to me than the Pros

### Step 3: Choose the role you want to have in choosing your treatment. Check one

- I prefer to decide on my own after listening to the opinions of others
- I prefer to share the decision with: \_\_\_\_\_
- I prefer someone else to decide for me, namely: \_\_\_\_\_

### Step 4: Identify what you need to help you make the decision

<b>What I know</b>	Do you know enough about your condition to make a choice?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Do you know which options are available to you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Do you know the good points (pros) of each option?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Do you know the bad points (cons) of each option?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
<b>What's important</b>	Are you clear about which <b>pros</b> are most <i>important to you</i> ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Are you clear about which <b>cons</b> are most <i>important to you</i> ?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
<b>How others help</b>	Do you have enough support from others to make a choice?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Are you choosing without pressure from others?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Do you have enough advice to make a choice?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
<b>How sure I feel</b>	Are you clear about the best choice for you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure
	Do you feel sure about what to choose?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unsure

*If you answered No or Unsure to many of these questions, you should talk to your doctor.*

### Step 5: Plan the next steps

#### What do you need to do before you make this decision?

For example: talk to your doctor, read more about this treatment or other treatments for osteoporosis.

### Step 6: Share the information on this form with your doctor

It will help your doctor understand what you think about this treatment.

*Decisional Conflict Scale* © A. O'Connor 1993, Revised 1999.

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