

Should I take alendronate (Fosamax®) for osteoporosis?

A Cochrane decision aid to discuss options with your doctor

This decision aid is for you if **ALL** of these factors apply to you:

- You are a woman who has been through menopause
- You have broken a bone recently
- Your doctor has told you that you have osteoporosis, osteopenia or low bone density
- Your doctor has offered you alendronate (Fosamax®)

How is osteoporosis managed?

Osteoporosis is a disease that makes your bones weaker and more prone to breaking. Throughout your lifetime, new bone cells grow and old bone cells break down to make room for the new, stronger bone. When you have osteoporosis old bone breaks down faster than it can be replaced. As this happens, the bones lose minerals (such as calcium). This makes bones weaker and more likely to break even after a minor injury, like a little bump or fall. Women who have gone through menopause are more likely to get osteoporosis than other people. You may already be doing things on your own to manage your osteoporosis; such as walking regularly or taking other exercise, and taking Vitamin D and calcium supplements.

People with osteoporosis and recent broken bones are advised to take treatments such as alendronate. Alendronate slows down the loss of minerals in your bone. The goal of alendronate treatment is to help prevent you from breaking another bone. Although alendronate is commonly offered first there are other options such as other bisphosphate medications.

What are your treatment options?



Take alendronate: Once a day or once a week, you take a pill in the morning 30 minutes before eating. After you take it, you must remain standing or sitting up for 30 minutes.



Decline alendronate. You may wish to discuss other treatment options with your doctor.

What other factors may affect your choice?

Check any that apply and discuss your concerns with your doctor.

- I suffer from stomach or esophagus problems, such as ulcers.
- I am taking corticosteroid pills.
- I am taking chemotherapy for cancer.

Working through the 4 steps of this decision aid may help you consider the options.

Step 1: What are the benefits and harms of each option?

Blocks of 100 faces show a 'best estimate' of what happens to **100 women** over 1 to 4 years who either take or decline alendronate. Each face (☺) stands for one person. The shaded areas show the number of people affected. There is no way of knowing in advance if you will be one of those affected.

Benefits +++

5 fewer women **break a hip** if they take alendronate.



Take alendronate

96 avoid breaking a hip

4 break a hip



Take placebo

91 avoid breaking a hip

9 break a hip



Side Effects ++

There is no difference in the number of women who stop treatment due to side effects such as stomach problems or ulcers in the esophagus. **This may have happened by chance.**

91 avoid side effects

9 stop treatment



91 avoid side effects

9 stop treatment



Serious Harms +

Few women have serious harms. If **10,000** people take alendronate for an average of 2 years, one more person may have severe jaw damage from taking it.

9,999 avoid jaw damage

1 has jaw damage

10,000 avoid jaw damage

0 have jaw damage

Note: The options include 'estimates' of what happens to groups of people based on the available research. The quality of these estimates is summarized using the GRADE system as follows:

- ++++ **High** quality – further research is **very unlikely to change** the estimate.
- +++ **Moderate** quality – further research **may change** the estimate.
- ++ **Low** quality – further research is **likely to change** the estimate.
- + **Very low** quality – further research is **very likely to change** the estimate.

Step 2. What matters most to you?

Common reasons to choose each option are listed below.

Check how much each reason matters **to you** on a scale from 0 to 5.

'0' means it is **not** important to you. '5' means it is **very** important to you.



Reasons to **take** alendronate

Not Important
0 1 2 3 4 5
Very Important

How important is it to you to **avoid breaking a hip**?

How important is it to you to **slow down the loss of minerals in your bones**?

List other reasons to take alendronate:



Reasons to **decline** alendronate

Not Important
0 1 2 3 4 5
Very Important

How important is it to you to **avoid the inconvenience of taking medicine** before breakfast and remaining upright for 30 minutes?

How important is it to you to **avoid very rare but serious damage to your jaw**?

List other reasons to decline alendronate:

Now, thinking about the reasons that are most important to you...

Which option do you prefer?

Check one.

- I don't know
- Take alendronate
- Decline alendronate
- Discuss other treatment options

Step 3: What else do you need to prepare for decision making?



Knowledge

Find out how well this decision aid helped you learn the key facts.

Check the best answer.

	Take alendronate	Decline alendronate	I don't know
1. Which option <u>lowers</u> your chance of a broken hip?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Which option <u>requires</u> you to take pills before breakfast?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Which option <u>slows</u> the loss of minerals from bones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Which option has the <u>lowest</u> chance of jaw damage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check your answers at the bottom of the page.

Do you know enough about the benefits and harms of each option?

Yes No



Values

Are you clear about which benefits and harms **matter most** to you?

Yes No



Support

Do you have enough support and advice from others to make a choice?

Yes No



Uncertainty

Do you feel sure about the best choice for you?

Yes No

Step 4: What are the next steps?

Check what you want to do next...

- Try alendronate**
- Discuss other treatment options**
- Other, please specify:**

Step 3 answers: 1. Take alendronate 2. Takealendronate 3. Take alendronate 4. Decline alendronate

This decision aid was developed by Rader, T. Maxwell, L. Ghogomu, E. Tugwell, P. Welch, V. Conflict of interest available from trader@uottawa.ca. Funded in part by the Canadian Institutes of Health Research. Format based on the Ottawa Personal Decision Guide © 2000, A O'Connor, D Stacey, University of Ottawa, Canada. Last reviewed: February 2011.

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