



# Progestogens To Prevent Preterm Birth

A Review of the Research About Progestogens for Women at Risk



## Is This Information Right for Me?

### Yes, if:

- At least once before you had a baby too early because labor started on its own before 37 weeks of pregnancy (for example, at 20 weeks). This is called “spontaneous (spon-TAY-nee-us) preterm birth.” An example is if your “water broke” before 37 weeks of pregnancy. You may be pregnant now or are thinking about becoming pregnant again.
- Your doctor\* has told you that you have a short cervix. (The cervix is the narrow tube-like opening in the lower part of your uterus. The uterus is where your baby grows while you are pregnant.)
- Your doctor has told you that you are at risk for preterm birth. If you are not sure if you are at risk for preterm birth, ask your doctor.
- You have heard about the use of hormones called “progestogens” (pronounced pro-JES-toe-jenz) to prevent preterm birth and want to know about the research on the benefits and possible side effects of this treatment.

### No, if:

- You are 37 weeks or more along in your pregnancy.
- You never had a baby born too early because of spontaneous preterm birth.
- You are pregnant with more than one baby, such as twins or triplets.

\* In this summary, the term “doctor” refers to any of the health care professionals who may take care of you, including your obstetrician or other physician, nurse practitioner, midwife, or physician assistant.

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## **What will this summary tell me?**

This summary will tell you about the risk of preterm birth. It also tells you what the research says about the benefits and harms of taking a progestogen to prevent preterm birth. You can use this information to talk with your doctor about whether taking a progestogen is the best treatment option for you.

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## **Where does the information come from?**

The information in this summary comes from a review of 63 research studies about progestogens. The review was funded by the Agency for Healthcare Research and Quality (AHRQ), a Federal Government research agency. You can read the full report at [www.effectivehealthcare.ahrq.gov/preterm.cfm](http://www.effectivehealthcare.ahrq.gov/preterm.cfm).



### **What is spontaneous preterm birth?**

A preterm birth is when birth happens before the 37th week of pregnancy (a full-term pregnancy lasts for 37 to 42 weeks). When preterm birth happens on its own, without being induced for a specific medical reason, it is called “spontaneous preterm birth.”

Some babies born before 37 weeks are at risk for needing special care. They may need care in an intensive care unit. Babies born very early have a higher risk of being disabled or possibly dying.

More than 475,000 babies or around 12 percent of all births in the United States each year are preterm. For the families of each of these babies, preterm birth can cause distress and heartache and can increase the cost of care for the mother and her baby.

### **What is the difference between preterm labor and preterm birth?**

Preterm labor means that you start to have contractions and your cervix starts to widen (dilate) before the 37th week of pregnancy. Preterm labor can lead to preterm birth. It is not always possible to stop preterm labor once it starts, and many babies are born too early.

Because of this, doctors have been looking for ways to help women not go into labor until they are pregnant for at least 37 weeks.



### **What makes me at risk for preterm birth?**

Doctors have found several things that may put a woman at risk for a preterm birth:

- Having had a preterm birth before
- Being pregnant with more than one baby, such as twins or triplets
- Having a short cervix (when the narrow tube-like opening to your uterus is less than an inch long)
- Having some symptoms of preterm labor, such as early contractions that start to open your cervix

Your doctor can tell you if you are at risk for preterm birth.

## Understanding Progestogens

### What is progestogen?

Progestogens (pronounced pro-JES-toe-jenz) have two forms:

- The natural progesterone (pronounced pro-JES-ter-own) hormone made in your body
- A similar hormone made in a laboratory (called a “synthetic hormone,” or progestin)

The progesterone hormone made in your body helps you become and stay pregnant. Taking extra natural or synthetic progesterone (progestogens) may help prevent preterm birth in some women.

Progestogen can be given in one of several ways:

- As a gel, cream, capsule, or suppository that you place in your vagina
- As a shot in your arm or other muscles
- As a pill that is swallowed (this is less common)



## **What does the research say about taking progestogens?**

- Some research found that progestogens help women who are pregnant with one baby **and** who had a preterm birth with a previous pregnancy.
  - For 1 of every 11 of these women who take a progestogen, the treatment will help her pregnancy last to at least 37 weeks.
  - Progestogens may also help these women lower the risk of having their baby die at birth, but there is not enough research to know this for certain.
  - Although all three forms of progestogens (pills, shots, and vaginal gels or suppositories) can lower the risk of having a spontaneous preterm birth, doctors cannot say if one form works better than another.
- Two research studies showed that women with a short cervix who were treated with progestogens were less likely to have a preterm birth. There is not enough research to know for certain how many women with a short cervix will benefit.
- Women who were pregnant with twins or triplets did not see any benefit from taking progestogens.
- There is not enough research to know if progestogens can help prevent preterm birth in women with other risk factors such as preterm labor (having early contractions that open the cervix).

## **How safe is progestogen?**

There is not enough research about the side effects caused by progestogens to know about their overall safety. The most common short-term side effect women had in the research studies was a feeling of discomfort where they got the shot or irritation from the vaginal form (for example, the cream or gel). Doctors do not know about long-term side effects that might show up months or years after you give birth.

### What should I think about?

There are several things that you and your doctor or health care professional should talk about when deciding if a progestogen is a good choice for you.

Talk with your doctor about:

- The benefits of taking progestogens to prevent preterm birth
- The uncertainty about possible side effects of taking a progestogen
- Your preferences and lifestyle
- The cost of progestogen pills, shots, or suppositories

### How comfortable am I with what is known about progestogens?

Doctors know more about how progestogens may help, but less about the possible long-term side effects. It is important for you to talk with your doctor about how comfortable you are with what is known about the benefits and safety of taking progestogens to prevent preterm birth.

### How will taking a progestogen affect my lifestyle?

Preventing preterm birth may affect the amount of activity or work you are able to do. But the progestogen itself should not affect your lifestyle.

The pill and vaginal gel forms of progestogens can be taken at home. If you take the shot form, you will need to go to your doctor or health care professional once a week or have a home nurse give you the shot.

Your doctor or health care professional can make a plan with you.



### **What is the cost?**

The cost to you for progestogens in any form depends on:

- The amount (dose) that you need to take
- How often you need to take it
- The brand you use
- The length of time that you need to take it
- Your health insurance plan
- Whether you get the brand-name or a generic form

Progestogen pills, vaginal gels, and shots are all available in a generic form. The cost can be as low as \$3 to \$20 per dose. The average price for the most expensive form of progestogen shot is as high as \$700.

For a woman who is treated with the vaginal gel form of progestogen (starting at 16 weeks of her pregnancy and lasting until the 37th week), the total cost of 21 weeks of treatment can range from \$1,800 to \$2,500 depending on the brand of gel.



## Ask Your Doctor or Other Health Care Professional

Talk with your doctor or health care professional about taking progesterone to prevent preterm birth. Here are some questions you may want to ask:

- Could taking a progesterone help my baby and me?
- If so, which form of progesterone might be best for me?
- What do you think about the things that doctors still do not know about progesterones?
- What else can I do to help prevent a preterm birth?

### Other questions:

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### Write the answers here:

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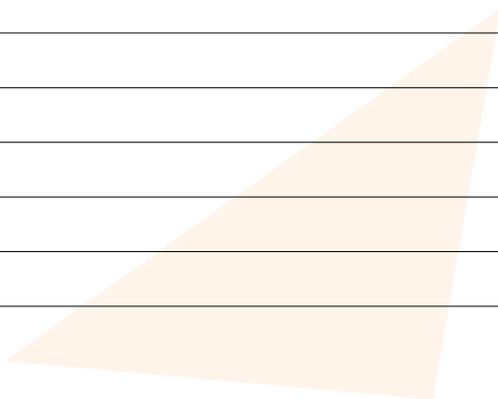
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## Source

The information in this summary comes from the report *Effectiveness of Progestogens for Prevention of Preterm Birth*, August 2012.

The report was produced by the Vanderbilt University Evidence-based Practice Center through funding by the Agency for Healthcare Research and Quality (AHRQ). For a copy of the report or for more information about AHRQ and the Effective Health Care Program, go to [www.effectivehealthcare.ahrq.gov/preterm.cfm](http://www.effectivehealthcare.ahrq.gov/preterm.cfm).

Additional information came from the MedlinePlus® Web site, a service of the National Library of Medicine and the National Institutes of Health. This site is available at [www.nlm.nih.gov/medlineplus](http://www.nlm.nih.gov/medlineplus). The drug costs included in this summary are taken from “A Guide to the Cost of Progesterone for Prevention of Preterm Labor”, an article published in the April 15, 2011, issue of *Proceedings in Obstetrics and Gynecology*. The article is available at <http://ir.uiowa.edu/pog/vol1/iss3/9>.

This summary was prepared by the John M. Eisenberg Center for Clinical Decisions and Communications Science at Baylor College of Medicine, Houston, TX. Pregnant women at risk of preterm birth helped review this summary.

