

## What is an adjuvant therapy?

Adjuvant therapy, also known as adjunct therapy, or 'add-ons', comprises a group of medical interventions that are given alone or in combination in addition to the standard IVF treatment. It is important to note that for many of these add-ons there is little or no evidence of their effectiveness to improve live birth rates. Nevertheless, your fertility specialist may decide to offer these treatments to individualise the care of your IVF treatment.

Monash IVF has made several fact sheets on add-ons to help you make a fully informed decision. Before you agree, you will need to weigh the evidence that this add-on may help you against the side effects it may cause, the known risks to mother and baby, as well as the extra costs.

## Who may recommend an adjuvant therapy to you?

Your Fertility Specialist will discuss and recommend any adjuvant therapies they feel may be appropriate for the treatment you are going to undertake. If recommended, these therapies will be individualised to compliment your fertility treatment cycle.

# Cabergoline

# What is Cabergoline normally used for?

Cabergoline is a medication that acts on dopamine hormone receptors in the brain and other tissues. Cabergoline is used to treat different types of medical problems that occur when too much of the hormone prolactin is produced by mimicking dopamine to suppress prolactin production. It can be used to treat certain menstrual problems, fertility problems in men and women, and pituitary prolactinomas (tumours of the pituitary gland).

## Why is Cabergoline used in IVF?

You will have been informed of the risk of Ovarian Hyperstimulation Syndrome (OHSS) when undergoing hormone injections to stimulate multiple oocytes for collection in IVF, especially in young women with high ovarian reserve or Polycystic Ovarian Syndrome (PCOS). OHSS is caused by a cascade of hormones leading to fluid accumulation in the abdominal cavity and lung spaces, as well as to intravascular depletion of fluids. These serious medical conditions are caused by increased leakiness of small blood vessels.

Cabergoline, and other dopamine agonists, play a role in reducing the leakiness or permeability of small blood vessels, thus reducing the risk or severity of OHSS.

### Will using Cabergoline increase my chance of success?

Cabergoline does not increase the chance of a healthy pregnancy but it may reduce the risk of OHSS in at risk women proceeding with egg collection. If your fertility specialist is concerned that you are at risk, they may recommend a course of Cabergoline over the days following your egg collection. There is high quality evidence from a meta-analysis small studies confirming that the incidence and severity of OHSS can be reduced with Cabergoline.

### Is the use of Cabergoline in IVF an off-label prescription?

Yes. This means its use specifically for IVF is not an authorised use of this medication.

### Are there any side effects and risks with using Cabergoline?

Common side effects can include:

- nausea
- vomiting





#### Common side effects continued:

- stomach upset or pain including indigestion and wind pain
- constipation
- dizziness and light headedness
- vertigo/spinning sensation
- drowsiness and fatique
- nervousness
- headache
- depressed mood
- hot flashes
- numbness or tingly feeling
- dry mouth

## Are there any risks to the safety of a baby by using Cabergoline during pregnancy?

When you are at high risk of severe OHSS, it is advisable to avoid falling pregnant and a fresh embryo transfer is not recommended. This is because OHSS symptoms can worsen if you become pregnant as the pregnancy hormone produced make small blood vessels leakier. OHSS can get more severe and last longer.

There have been studies, however, that indicate that implantation and ongoing pregnancy/live birth rates are not affected by Cabergoline use. We also know that Cabergoline is safe in pregnancy and is the treatment of choice in pregnant women requiring treatment for prolactin disorders and tumours. Cabergoline is a Category B1 drug. This means these drugs have been taken by only a limited number of pregnant women and women of childbearing age without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed.

#### What are the costs?

Your Fertility Specialist will provide you with a prescription to obtain any medications which have been prescribed to you. The cost of these medications may vary from pharmacy to pharmacy, however these costs are in addition to your treatment cycle.

### What do I do if I have more questions?

If you have any questions or require further information, please contact your Fertility Specialist.

Tang H, Hunter T, Hu Y, Zhai SD, Sheng X, Hart RJ. Cabergoline for preventing ovarian hyperstimulation syndrome. Cochrane Database Syst Rev. 2012 Feb 15; (2):CD008605. Epub 2012 Feb 15.