## METFORMIN FOR POLYCYSTIC OVARY SYNDROME

This information is to help if you have been advised that you take a treatment called *Metformin* for *Polycystic Ovary Syndrome* (PCOS). We would like to tell you a little bit about this treatment and why it works in PCOS.

Metformin is only effective in women with PCOS who have insulin intolerance. This means that you should have had a test confirming this such as a glucose tolerance test, or diabetes in a previous pregnancy before using it. It is only used when there is an established diagnosis of PCOS and decteased insulin sensitivity. If your the Body mass index is over 30km/m2 or BMI < 30 ayou may be asked to do a glucose tollerance test especially if the fat is predominantly central. Other than in the above situations it is less effective at inducing ovulation than clomiphene.

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Metformin has been used for many years as a treatment for Diabetes, where it helps the body's own sugar-lowering hormone Insulin to work more efficiently. Over the past few years, it has been found that the body's resistance to insulin is one of the reasons why some develop PCOS. Because Metformin helps Insulin to work more efficiently, it has been found to be a useful treatment for PCOS. In addition, together with a healthy diet, it may help you to lose weight (although it's not a magic potion, you will need to stick to a healthy diet to lose weight!).

Metformin is particularly useful in making your period normal, and helping your ovaries to release eggs (ovulate). This would mean that you could become pregnant quite quickly after starting the drug, although it often can take 2-3 months to become fertile. It may help reduce hair growth.

.Using Metformin for PCOS is unlicensed. So, although it has been used safely to treat older patients with diabetes for many decades we do not have studies giving us results about the safety of Metformin in long-term use in young women. In the short-term studies (2-3 years) it does appear to be safe and effective, but it is important for you to understand it is an unlicensed use.

## **Side-effects**

Metformin is a safe drug, and will NOT make your blood sugar levels fall below normal. However, about 1 in 10 people develop diarrhoea, tummy pains and wind on the drug.

There is limited data as to whether metformin is safe in pregnancy. Current guidelines, which are generally accepted nationally, *recommend you to stop the drug as soon as you discover you are pregnant.* 

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## Dose

slow route to avoid side effects

 week 1 250 mg once
 week 4 500 mg twice

 week 2 250 mg twice
 week 5 850 mg + 500 mg

 week 3 500 mg + 250 mg
 week 6 850 mg twice

Daily dose – fast route if stomach can take it week 1 500 mg twice week 3 850 mg twice

It appears that you may get fewer side-effects if the tablets are taken with the first mouthful of a meal, so when taking them twice a day, take with the first mouthful of breakfast and your evening meal, and when taking them three times a day, take with the first mouthful of your breakfast, lunch and evening meal.

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