

IMSI Patient Information Sheet

What is IMSI?

IMSI stands for Intracytoplasmic Morphology Selected Sperm Injection, and is a modification of the standard ICSI procedure. It is suggested that it may improve pregnancy rates in *some* patients. The major difference between IMSI and ICSI is that a higher magnification is used to assess sperm morphology. At a higher power the embryologist can identify tiny defects in the sperm head that would not otherwise be visible with standard ICSI. The selection of those sperm may improve results for couples with embryo implantation failures, severe teratozoospermia (abnormal sperm shape) or high levels of DNA fragmentation.

The procedure is complex and time consuming. Additionally, until IMSI is clinically proven to improve patient outcome (early data is promising), and that the additional time constraints are not having a negative impact, there is a strict criteria for who we can offer this technique to.

IMSI is a selection tool, to aid embryologists in selecting the best sperm for ICSI. If the sperm count or motility already limits the number of sperm available for ICSI, IMSI will not be a suitable technique for you.

Who is Eligible?

Lister Fertility clinic have invested in an IMSI system and are currently able to offer IMSI for one patient per day, due to the time consuming nature of the procedure. To be eligible for IMSI you must have discussed it first with your clinician. The doctor will decide if you meet one of the below IMSI criteria:

- ✓ 2 failed ICSI Cycles
(Failed cycles constitutes no pregnancy or first trimester Miscarriage)
- ✓ 3 failed IVF cycles
- ✓ Over 90% abnormal forms in sperm (LFC SA not TDL)
- ✓ SSR – only if patient has sufficient motile sperm for selection

Please note that even if you meet one of these criteria, you may be excluded if there are insufficient numbers of motile sperm in the sample on the day of egg collection. If this occurs on the day of egg collection, a doctor or embryologist will discuss the implications with you.

What else do you need to know?

This is a new procedure and although early reports are promising, it is yet to be conclusively verified. Risks for the procedure are the same as those for ICSI (see ICSI information sheet) but may also include additional deleterious affects resulting from a delay in injecting eggs due to how much longer it takes to find suitable sperm for the injection. This should be discussed with your doctor, especially prior to converting from IVF treatment to IMSI.