



Clinic for Human Reproduction



What is the Clinic for Human Reproduction?

The Clinic for Human Reproduction (CHR) was established to address fertility issues in couples. Since its inception, it has served patients locally and internationally. An average of 700 fresh cycles of In-Vitro Fertilisation (IVF) is performed annually.

The clinic is staffed by specialised medical staff, as well as embryologists, who can provide the necessary support and assistance in a private and personalised manner.

With the same team of staff serving our patients in a comfortable and private setting, we aim to help them feel at ease and thus, better facilitate consultation and treatment throughout the duration of the fertility programme.



What is ART?

The Assisted Reproductive Technology (ART) programme at NUH is one of the leading programmes of its type with many breakthroughs in the field of assisted reproduction. Headed by Prof PC Wong (Head and Emeritus Consultant, Division of Reproductive Endocrinology & Infertility, Department of Obstetrics and Gynaecology) and supported by a team of specialists, the programme is committed to improving fertility through ART.

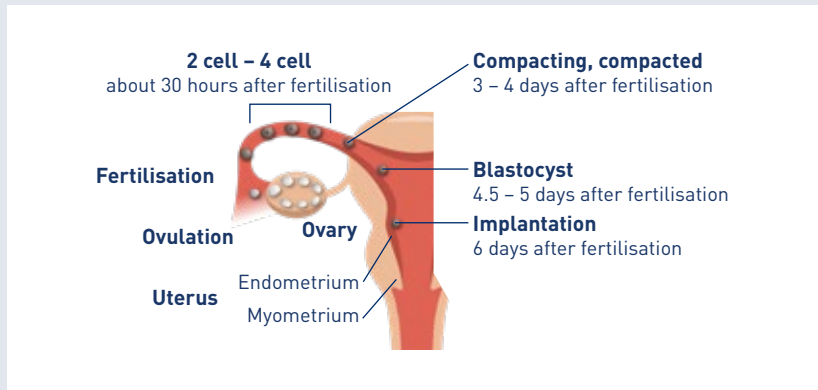
ART involves the use of one or several techniques to bring the egg and sperm together, eliminating the chance element to conception and reducing or removing the need for the sperm to swim through the cervix and the fallopian tubes to meet the egg. ART techniques have revolutionised the management of infertility. In most instances, ART involves recovering the eggs from the ovaries and fertilising them with sperm outside the body in the laboratory. The developing embryos are then replaced artificially into the uterus.

It has been able to achieve consistently high pregnancy rates through its IVF programme. With the latest emphasis on extended embryo culture, the IVF programme has maintained a high clinical pregnancy rate per embryo transfer.

What Are the Services Offered in CHR?

- In-vitro fertilisation (IVF)/Intracytoplasmic sperm injection (ICSI)
- Intrauterine insemination (IUI)
- Blastocyst culture
- Embryo replacement
- Embryo cryopreservation
- Assisted hatching
- Sperm extraction from testicular biopsy specimens
- Sperm preparation for MESA (Microscopic Epididymal Sperm Aspiration), PESA (Percutaneous Epididymal Sperm Aspiration) and testicular biopsy





Pre-implantation development occurs in the fallopian tube and uterus during which the embryo cleaves to form a blastocyst¹.

What is IVF/ICSI?

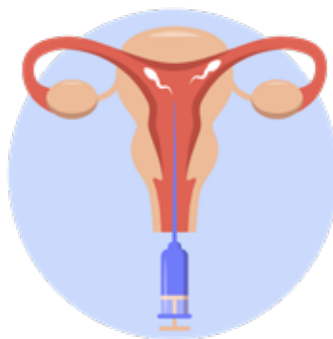
IVF or In-Vitro Fertilisation is a process where fertilisation takes place in a petri dish (outside the human body). This procedure mimics the pre-implantation development of a fertilised egg that occurs in the woman's reproductive tract as shown in the figure above.

It involves ovarian stimulation and egg retrieval. Shortly before egg retrieval, the husband's semen sample is collected and processed by a method called sperm washing. Intracytoplasmic Sperm Injection (ICSI) is used for fertilisation. This is when following oocyte retrieval, a single sperm is injected into each oocyte. The fertilised eggs are then cultured in a special culture medium for three to five days before they are replaced into the uterus of the patient.

¹ Reference from fig. 2 is taken from Principles of Anatomy and Physiology by Tortora and Grabowski 8th edition HarperCollins Publishing Inc.

What is IUI?

Intrauterine insemination (IUI) is a timed insemination whereby treated sperm is introduced directly into the uterus. It is for patients who may demonstrate ovulatory dysfunction, poorer quality sperm, or for unknown causes of failed conception after repeated attempts.



Frequently Asked Questions

A) Who requires IVF?

Generally, IVF may be used in the following situations:

- + When there is damage to the fallopian tubes such that sperm is unable to meet the egg.
- + Significantly reduced sperm count or abnormal sperm.
- + Women with irregular menses or severe endometriosis.
- + After failed intrauterine insemination (IUI).
- + Advanced maternal age and/or low ovarian reserve.

B) How is IVF performed?

There are several stages in the procedure. The aims of the IVF treatment are:

- i. To stimulate the wife's ovaries to produce an optimum number of eggs.
- ii. To allow egg maturation and retrieval of eggs at a specific time.
- iii. To fertilise the eggs with the husband's sperm in the laboratory.
- iv. To replace the embryo in the uterus at a specified time.
- v. To support the implantation of the embryo.

C) How long does it takes to complete one cycle?

It takes about 4 - 6 weeks.

D) What side effect and complication will I expect?

The most common complication from this programme is overstimulation of the ovaries as a result of hormone injections. This causes lower abdominal swelling, water retention, difficulty in breathing and discomfort. In CHR, this problem is minimised by careful selection of drug dosages and close monitoring of the follicular development. The incidence of this complication is less than 2%.

In addition, there is a chance of multiple births with IVF. This is minimised by transferring one embryo at a time.

E) How much does it cost to complete one cycle?

It costs about \$13,000 – \$17,000 (inclusive of GST) to complete one cycle of IVF.

*Price subjected to final diagnosis and treatment received.

F) How much can I claim from Medisave?

Each couple can claim up to \$6,000 and \$5,000 respectively for the first and second cycle. For the third and subsequent cycles, each couple will be able to claim up to \$4,000.

The total amount of claimable Medisave for eligible patients is cap at \$15,000 per couple per lifetime, regardless of the number of cycles.

G) How much can I claim from ART Co-Funding?

IVF	SC – SC Couple*	SC – PR Couple*	SC – Foreigner Couple*
Fresh Cycle	75% of total amount, cap at \$7,700	55% of total amount, cap at \$5,700	35% of total amount, cap at \$3,600
Thaw Cycle	75% of total amount, cap at \$2,200	55% of total amount, cap at \$1,600	35% of total amount, cap at \$1,000

IUI	SC – SC Couple	SC – PR Couple	SC – Foreigner Couple
	75% of total amount, cap at \$1,000	55% of total amount, cap at \$700	35% of total amount, cap at \$500

*At least one member of the couple must be a Singapore Citizen (SC)

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About the National University Centre for Women and Children

National University Centre for Women and Children (NUWoC) is a national university specialist centre that aims to empower women, children and their families to lead healthier lives. We provide comprehensive medical and surgical services ranging from pre-conception to child and maternal health.

NUWoC comprises the Department of Obstetrics & Gynaecology (O&G) and Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI) of National University Hospital. It focuses on the right-siting of appropriate services in the community and builds complementary services in National University Health System's (NUHS) centres of excellence – Ng Teng Fong General Hospital and Alexandra Hospital.

Through a generous gift from the Estate of Khoo Teck Puat, KTP-NUCMI established an integrated outpatient facility with medical, diagnostic and rehabilitation services for children. We are also the only public specialist centre in Singapore that offers paediatric kidney and liver transplant programmes.

For more information about us, visit www.nuh.com.sg/NUWoC

Children's Emergency (24-hr)

Location NUH Main Building, Zone F, Level 1
Contact +65 6772 5000

Women's Clinic – Emerald/Ruby

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-06
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri), 8.30am – 12.30pm (Sat)
Email appointment@nuhs.edu.sg

Women's Clinic – Sapphire

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-03
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri), 8.30am – 12.30pm (Sat)
Email appointment@nuhs.edu.sg

Women's Clinic – Jade [Former Clinic G]

Location NUH Kent Ridge Wing, Zone C, Level 3, C03-02
Operating Hours 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri)
Email appointment@nuhs.edu.sg

Fetal Care Centre

Location NUH Kent Ridge Wing, Zone D, Level 3, D03-04
Operating Hours 8am – 5.30pm (Mon to Thu), 8am – 5pm (Fri)
Email appointment@nuhs.edu.sg

Clinic for Human Reproduction

Location NUH Kent Ridge Wing, Zone D, Level 4, D04-02
Operating Hours 8am – 5pm (Mon to Fri), 8.30am – 12.30pm (Sat)

Women's Clinic @ JMC

Location Jurong Medical Centre, Level 2
Operating Hours 8.50am – 11.30pm (Tue & Thu), 2pm – 5pm (Mon & Fri)

Jurong Clinic for Women

Location 130 Jurong Gateway, #01-231
Operating Hours 9am – 12pm, 2pm – 5pm (Mon to Sat), 6pm – 9pm (Mon to Thu)
General Enquiry +65 6665 4277
Appointment Line +65 6908 2222
Email appointment@nuhs.edu.sg

GS @ NTFGH

Location Ng Teng Fong General Hospital, Tower A – Specialist Outpatient Clinics, Level 7
Operating Hours 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat)
Appointment Line +65 6908 2222
Email appointment@nuhs.edu.sg

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