

Glossary of Terms commonly used in Reproductive Technology
常用的生殖科技用語注釋

1. **Artificial Insemination (AI) (人工授精) :**
This refers to the placing of sperms inside a woman's vagina or uterus (iewomb) by means other than sexual intercourse. In artificial insemination by husband (AIH) the husband or partner's sperm is used. In artificial insemination by donor (AID or DI) sperms collected from a man who is not the woman's husband or partner is used.
這是不經性交過程，將精子以人工方法放置在女性陰道或子宮內的技術。在夫精人工授精 (artificial insemination by husband) 過程中使用的精子是來自接受者的丈夫或伴侶的；而在他精人工授孕 (artificial insemination by donor) 過程中使用的精子，則屬捐贈者的，而非屬於接受者的丈夫或伴侶。
2. **Cell (細胞) :**
The basic unit of all living organisms. Complex organisms such as humans are composed of somatic (body) cells and germ line (reproductive) cells.
所有活生物體的基本單位。複雜的生物，例如人類，是由軀體細胞和生殖細胞合成的。
3. **Chromosome (染色體) :**
A threadlike structure of DNA and associated proteins found coiled tightly together in the cell nucleus which carries genetic information in the form of genes. In humans each somatic cell contains 46 chromosomes (23 pairs) ; one of each chromosome in the pair is of maternal and one of paternal origin. Of these 22 are matching pairs and one pair determines sex (XX = female, XY = male) .
是由細胞核內，脫氧核糖核酸與聯系著的各種蛋白質牢固扭捲在一起的繩狀結構物質，染色體將遺傳資料以遺傳因子的形式貯存著。每個人類的軀體細胞含有四十六個染色體 (二十三對) ; 每對染色體的其中之一來自母系，另外一個來向父系。二十三對染色體中，有二十二對是以配對形式出現的，其餘一對則是決定性別的 (XX = 女性，XY = 男性) 。

4. Cloning (無性繁殖) :

The production of two or more genetically identical individuals by nucleus substitution ('fusion cloning') or by mechanical division of a cleaving zygote to yield identical cells each of which can form a new individual.

這是以製造兩個或更多遺傳性質上相同個體的方法；包括細胞核替代法（融合無性繁殖），或以機動方法分開一個正在卵裂的合子，藉以獲得超過一個相同的細胞，而其中每個都能形成新的個體。

5. Cryopreservation (冷藏) :

The freezing of gametes or embryos, usually in liquid nitrogen at -196°C , in order to store them for subsequent use.

將配子或胚胎冷藏在負一百九十六度攝氏的液體氮中，以備日後使用。

6. DNA (脫氧核糖核酸) :

Deoxyribonucleic acid, the major constituent of the chromosomes, and the hereditary material of most living organisms.

染色體的主要成分，亦是大部分生物體的遺傳物質。

7. Ectogenesis (體外培植胚胎) :

The complete development of an embryo outside the body.

在體外進行培植一個胚胎的全部過程。

8. Ectopic pregnancy (宮外孕) :

A pregnancy in which implantation has taken place outside the uterine cavity.

胚胎植入在子宮腔以外而造成的妊娠。

9. Egg donation (卵子捐贈) :

Process where a fertile woman donates an egg to be fertilised in vitro with the semen of the partner of a woman who no longer produces eggs.

在這個過程中，一個能生育的婦人捐出其卵子，用以與另一個不能再製造卵子的婦人之伴侶的精子進行體外受精。

10. Embryo (胚胎) :

The product of human conception, often understood to cover the period from fertilisation to the end of the eighth week of pregnancy, during which time all the main organs are formed. "Pre-embryo" is sometimes used to cover the first fourteen days' development after fertilisation. Around this point the 'primitive streak' develops.

人類受孕的產物。通常是指由開始受精至懷孕第八星期末的小生命，所有主要器官皆於這時期內形成。受精後小生命在頭十四天的生長期有時被稱為「胚前期物體」的；大概就是在這個時候，「原痕」開始生出。

11. Embryo (or ovum) transfer (胚胎移植) :

The process of transferring a fertilised egg in the course of IVF or GIFT procedures, where following development in vitro for two or three days, or after flushing from a woman's uterus by lavage (at 5 days) , an early embryo is placed in the uterus of an infertile woman in order to try and achieve implantation and pregnancy.

這個過程的第一步，是透過體外受精或輸卵管內配子移植，獲得已受精的卵子。在體外受精的卵子會先被放在試管內培育兩至三天；而經輸卵管內配子移植而獲得的受精卵則在第五天由母體子宮內灌洗出來。然後，這個早期胚胎會被放置在一個不育婦人的子宮內，希望令胚胎成功植入在子宮內，並令該婦人懷孕。

12. Epididymal Sperm Aspiration (ESA) (從附睪抽取精子) :

A technique which aims to treat male infertility due to absence of sperm in the semen as a result of a blockage or absence of the duct system. Such patients can have an operation to collect their sperm directly from the collection ducts behind the testicle (known as the epididymus) .

這是一種治療男性不育的技術。一個男性假如由於管道閉塞或缺乏管道系統而造成精液內缺乏精子，而導致不育，可以施行手術直接由睪丸後面的收集管(稱為附睪) 內收集精子。

13. Fallopian tubes (輸卵管) :

The organs which carry an egg from the ovary to the womb.

將卵子由卵巢送到子宮的器官。

- 14. Fallopian replacement of eggs with delayed insemination (FREDI) (輸卵管內放置卵子，稍後進行授精) :**
Eggs of any maturity are placed in the fallopian tube without spermatozoa, which are supplied later by high intrauterine insemination (IUI) at a time when the eggs are judged to be fully mature.
在這個過程中，任何成熟程度的卵子均會被放置在沒有精子的輸卵管內，其後當卵子被鑑定為成熟後，才將精液注入子宮內，進行授精。
- 15. Fertilisation (受精) :**
The fusing together of the maternal and paternal genetic material from the sperm and the egg.
父親精子及母親卵子的遺傳物質融合一起。
- 16. Foetus (胎兒) :**
The product of conception from end of embryonic stage (eight weeks after fertilization) until birth.
由胚胎期末 (受精後第八星期) 至出生期間懷孕過程的產物。
- 17. Gametes (配子) :**
The reproductive cells, sperm and egg, which fuse to form a zygote. Each human gamete contains a basic set of 23 chromosomes—a haploid set ; on fusion of egg and sperm a full (diploid) set of 46 chromosomes results. All other (somatic) cells in the body contain 46 chromosomes in their nuclei.
配子是生殖細胞，男性配子是精子，女性配子是卵子。精子及卵子融合一起會形成合子。每個人類配子內有一含有二十三個染色體的基本組合 (一個單倍體的組合)。一個卵子與精子融合時，便製成一組含有完整四十六個染色體的組合 (雙倍體組合)。其他所有身體細胞的細胞核內均含有四十六個染色體。

18. Gamete Micromanipulation (顯微操作配子技術) :

These methods aim to enable those couples where the male partner has a low sperm count or poor quality sperm to use the partner's sperm rather than donated sperm. The objective of many of these techniques is to bypass the zona pellucida (protein shell) which surrounds the egg, as this layer often prevents sperm which have poor motility or morphology from penetrating and fertilising the egg.

Examples of these micromanipulation techniques include Zona Drilling (ZD), Partial Zona Dissection (PZD), Sub Zonal Insemination (SUZI), Intra Cytoplasmic Sperm Injection (ICSI), and Epididymal Sperm Aspiration (ESA).

假如一對夫婦中男方的精子數目稀少或質素差，便可應用這種技術使女方仍能用男方的精子促成懷孕，而不須使用捐贈者的精子。許多這類技術的使用目的，均是使精子能繞過包圍卵子的透明帶（蛋白質外殼）而進入卵子內進行受精，因為這層物質阻止了能動力弱或形狀差的精子進入卵子內。顯微操作技術的例子包括：帶狀區鑽孔（ZD），部分帶狀區剖割（PZD），帶狀區下授精（SUZI），細胞漿內精子注入法（ICSI），及從附睪抽取精子（ESA）的方法。

19. Gamete intra—fallopian transfer (GIFT) (輸卵管內配子移植) :

A process by which an egg or eggs are transferred with sperm into the woman's fallopian tubes so that fertilisation can occur *in vivo*.

在這過程中，一顆卵子或一些卵子連同精子被轉移到一婦人的兩邊輸卵管內，致令受精過程可在體內進行。

20. Implantation (胚胎植入在子宮內) :

The process whereby the embryo becomes burrowed in the lining of the uterus. 這是一個將胚胎藏在子宮壁膜上的過程。

21. Intra Cytoplasmic Sperm Injection (ICSI) (細胞漿內精子注入法) :

A method of gamete micromanipulation where a single sperm is injected into the inner cellular structure of the egg. This technique is used for couples in which the male partner has severely impaired or few sperm.

顯微操作配子技術的一種。在這過程中，一個精子被注射進卵子的內層細胞結構裏。這種技術通常被用於一對夫婦中男方的精子嚴重受損或數目極之稀少的情況裏。

- 22. In vitro (在試管內，在活體外) :**
Literally, in glass. More commonly to describe a biological event that occurs in a laboratory or in an artificial environment.
此原為拉丁文，其實是指在玻璃容器內。這個詞語較常用來描述在實驗室內或人工環境中發生的生物現象。
- 23. In vivo (在活體內) :**
Describing a biological event that occurs in an intact animal or in the natural environment.
這個詞語用於描述發生在一完整動物身上或自然環境中的生物現象。
- 24. In—vitro fertilisation (IVF) (體外受精) :**
This technique is used mainly where a woman has no fallopian tubes or they are blocked. It has also been used in dealing with some types of male infertility and where the cause of infertility is unknown. Eggs are taken from the woman's ovaries when judged to be ripe and before they are released naturally. It is then mixed with sperms in a dish (in—vitro) so that fertilisation can occur. Once the fertilised egg has started to develop it is transferred back to the woman's womb. The embryo must implant in the womb for a pregnancy to be established.
這種技術主要用以解決一個婦人沒有輸卵管或輸卵管閉塞的問題。它亦被用於一些男性不育的情況、或不育原因不明的情況上。這過程中，一個婦人卵巢內的卵子在已鑑別為成熟，但未被自然排放前被取出，然後放在一個碟形盛器上（在體外）與精子混在一起，令受精過程得以進行。受精卵一旦開始發育，即被放回婦人子宮內；胚胎必須植入在子宮內，方可使妊娠成功。
- 25. Laparoscopy (腹腔鏡檢查) :**
Examination of the pelvic or other abdominal organs with a fiberoptic telescope inserted surgically below the navel. During laparoscopy, suction applied to the needle can be used in the recovery of eggs from follicles in the ovary.
將一纖維窺鏡式的望鏡以外科手術由肚臍以下插入體內，檢查盆腔部位或腹部的器官。在腹腔鏡檢查過程中，可使用刺針上的吸力裝置，從卵巢的小囊取得卵子。
- 26. Ovary (卵巢) :**
The female reproductive organ in which oocytes are produced from pre—existing germ cells.
女性生殖器官。這器官能用已存在的生殖細胞製造出卵母細胞。

- 27. Ovulation (排卵) :**
The release of an egg from a follicle in the ovary.
由卵巢的一個小囊排放出卵子。
- 28. Ovum (卵子) :**
Egg ; female gamete.
卵—女性配子。
- 29. Primitive Streak (原痕) :**
A groove which develops in the embryo about 14—15 days after fertilisation. This is the rudimentary nervous tissue of the embryo.
受精過程後十四至十五天，在胚胎身上形成的一道溝。這是胚胎的原基神經組織。
- 30. Pronuclear stage tubal transfer (PROST) (輸卵管內原核階段移植) :**
A variant of ZIFT.
這是輸卵管內合子移植技術的一種變化。
- 31. Sperm (精子) :**
A mature male germ cell, produced in the testicles.
成熟的男性生殖細胞，在睪丸內製造成的。
- 32. Superovulation (超量排卵) :**
The medical stimulation of the ovary with hormones so that a woman produces more eggs than usual in a monthly cycle.
用藥物刺激作用，以賀爾蒙影響一婦人製造出比平常每月週期排卵數量更多的卵子。
- 33. Uterus (子宮) :**
The womb ; the female organ in which the foetus grows during pregnancy.
女性器官—妊娠期間胎兒在子宮裏面生長。
- 34. Zygote (合子) :**
The cell formed by the union of sperm and egg.
由精子與卵子結合形成的細胞。

35. Zygote intra—fallopian transfer (ZIFT) (輸卵管內合子移植) :

Where eggs fertilised in vitro are transferred to the fallopian tubes at the zygote (pronuclear) stage (1 days) .

經體外受精後的卵子，在合子（原核）階段（一天）被移植到輸卵管內。