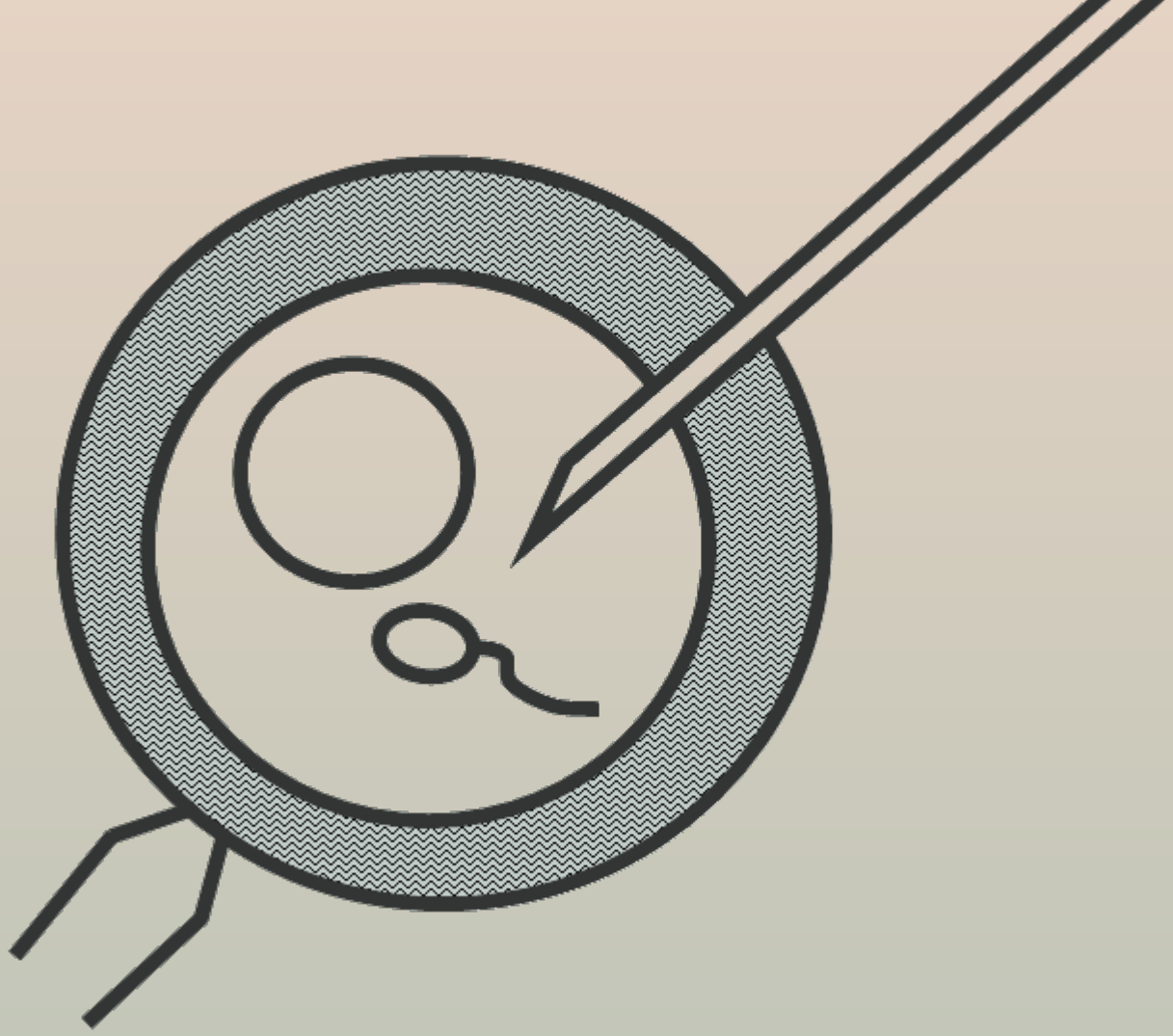

Council on Human Reproductive Technology

2024 Annual Statistics

published in October 2025*

* Statistics on live birth events in relation to reproductive procedures performed in 2024 will be covered in the final version of the Annual Statistics 2024 to be available in 2026.

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Introduction

The Council on Human Reproductive Technology was established under section 4 of the Human Reproductive Technology Ordinance (Cap. 561) ("the Ordinance") in April 2001 to regulate the provision of reproductive technology (RT) procedures, the conducting of embryo research, the handling, storing or disposing of gametes or embryos used or intended to be used in connection with a RT procedure or embryo research, and surrogacy arrangement.

According to section 5(1) of the Ordinance, the Council shall keep under review information about RT activities and publish statistics and summaries concerning relevant activities which have been carried on. To this end, the *Annual Statistics* has been published since 2009.

This *2024 Annual Statistics* lists out different RT activities carried out by the licensed centres in operation in the year. It provides graphs, charts and tables that summarize information about the RT activities and its outcomes in 2024. The figures in this publication are based only on RT cycles performed in 2024 and cannot be used to calculate cumulative success rates.

As at 31.12.2024, there were a total of 39 valid licences issued by the Council, including 18 Artificial Insemination by Husband (AIH) licences, 18 Treatment licences and 3 Research licences. This publication provides information on the reported outcomes of all RT cycles started in the licensed AIH and treatment centres.

RT cycles include any process in which (1) a RT procedure is performed or (2) frozen embryos have been thawed with the intent of transferring them to a woman. For example, an RT cycle could include an embryo transfer. Another cycle could include egg retrieval and storage of embryos.

Of the 7,533 non-donor in vitro fertilization (IVF) and frozen-thawed embryo transfer (FET) cycles reported in 2024, a total of 4,982 (66.1%) were started with the intent to transfer at least one embryo. The other 2,551 cycles (33.9%) were banking cycles, where eggs or embryos were cryopreserved (frozen) and stored for potential future use.

A patient's chances of having a pregnancy and live-birth delivery when using RT are influenced by many factors. Some of these factors are patient-related, such as the patient's age or the cause of infertility. This Annual Statistics includes the figures on infertility diagnosis of patients for the reference of readers.

This is the interim version of the *2024 Annual Statistics*. The statistics on live birth events in relation to RT procedures performed in 2024 will be covered in the final version of the *Annual Statistics 2024* to be available in 2026.

The figures in this report provide data on trends of the types of procedures performed. The figures also include RT cycles that used fresh or frozen oocytes (for non-donor IVF cycles only).

Key Terms used in the Annual Statistics

Terms	Description
Artificial insemination by husband (AIH)	The placing of sperm inside a woman's vagina or uterus (i.e. womb) by means other than sexual intercourse. In artificial insemination by husband (AIH), the husband's sperm is used.
Clinical pregnancy	A pregnancy documented by one or more gestational sacs on ultrasound or the histological confirmation of gestational products in miscarriages or ectopic pregnancies.
Clinical pregnancy rate	Clinical pregnancy rate is expressed as number of clinical pregnancies per 100 treatment cycles started/commenced or per 100 cycles reaching the stage of attempted oocyte recovery/retrieval or embryo transfer (ET).
Donor insemination (DI)	Also known as artificial insemination by donor (AID). DI is an artificial insemination whereby sperm collected from a man who is not the woman's husband is used.
Ectopic pregnancy	A pregnancy in which implantation has taken place outside the uterine cavity.
Heterotopic pregnancy	Simultaneous existence of intrauterine and ectopic pregnancy.
In vitro fertilisation (IVF)	In vitro fertilization (a) means the fertilization of an egg by sperm outside the human body, whether or not the egg was originally removed from the body of that or any other woman; (b) includes any procedure involving the induction or aspiration of an egg, or the culture of an egg for the purposes of any such fertilization. It includes IVF without ICSI and IVF with ICSI.
Intracytoplasmic sperm injection (ICSI)	A method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.
Live birth event	For the purposes of the Code of Practice on Reproductive Technology and Embryo Research issued by the Council, live birth event shall mean an event of the birth of one or more than one live child from one single pregnancy. The birth of live twins, triplets and so on will therefore be considered as a single "live birth event".
Live birth event rate	Unless otherwise specified, live birth event (single and multiple live births included) rate is expressed per 100 treatment cycles started, i.e. live birth event rate = Number of live birth events/Number of treatment cycles x 100%

Terms	Description
Microsurgical epididymal sperm aspiration/extraction (MESA/MESE)	A surgical procedure performed with the assistance of an operating microscope to retrieve sperm from the epididymis of men with obstructive azoospermia. In the absence of optical magnification, any surgical procedure to retrieve sperm from the epididymis should also be registered as MESE.
Miscarriage (Spontaneous abortion)	A loss of an intrauterine pregnancy detected clinically or by ultrasound, and less than 24 weeks' gestation (as estimated by the day of embryo transfer or day of ovulation).
Multiple live birth event rate	Unless otherwise specified, multiple live birth event rate is expressed per 100 live birth events (single and multiple live births included), i.e. Multiple live birth event rate = Number of multiple live birth events/ Number of live birth events x 100% *(Updated definition is adopted in the Annual Statistics since 2023)*
No. of no pregnancy	The number of treatment cycles started and reported by the licensed centre with an outcome of "no pregnancy", including those abandoned and those ending with elective cryopreservation of embryos.
Ongoing pregnancy	Ongoing pregnancy with foetal cardiac activity during the period of the year being reported on.
Ongoing pregnancy rate	Ongoing pregnancy rate is expressed as number of ongoing pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer.
Testicular sperm aspiration/extraction (TESA/TESE)	A surgical procedure involving one or more testicular biopsies or needle aspirations to obtain sperm for use in IVF and/or ICSI.
Treatment cycle	The process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period. This annual statistics only covered treatment cycles that led to (1) Gamete transfer/embryo replacement/insemination, or stopped because of (2) Elective cryopreservation of all embryos or (3) Cycle abandonment.

Key Statistics and Charts

Key Statistics for 2024

A (for non-donor IVF cycles only)

1 Type of RT procedures *(%)*		2 Patient diagnosis[3] *(%)*							
(Please refer to **Chart A1**)		(Please refer to **Chart A2**)							
		Single cause						**Multiple causes**	
IVF[1] (with ICSI[2])	*32.87*	*Endometriosis*	*2.7*	*Male factor*	*21.9*	*Tubal problem*	*2.0*	*Female & male factors*	*31.9*
IVF (without ICSI)	*10.34*	*Immunologic problem*	*0.1*	*Ovulatory problem*	*4.1*	*Other Causes*	*15.6*	*Female factors only:*	*5.8*
Frozen-thawed ET	*56.79*			*Tubo-peritoneal problem*	*3.6*	*Unexplained*	*12.3*		

Pregnancy & Live Birth Outcomes		Age Group[4] 25 or below	26-30	31-35	36-40	41-45	46-50	51 or above	All/ *Overall%*
3	**Fresh embryos** from patient couple's **own gametes**								
a	Number of patients	5	98	810	1382	382	32	3	**2712**
b	Number of treatment cycles[5]	6	102	891	1617	582	51	6	**3255**
c	Number of treatment cycles with embryo transferred	0	15	177	418	107	12	1	**730**
d	Average number of embryo transferred	NA	1.13	1.10	1.08	1.44	1.50	2.00	**1.15**
e	*Clinical pregnancy rate[6] (%)*	*NA*	*7.8*	*8.0*	*7.9*	*3.8*	*0.0*	*0.0*	***7.0***
4	**Frozen embryos** from patient couple's **own gametes**								
a	Number of patients	3	84	928	1557	515	39	1	**3127**
b	Number of treatment cycles[5]	4	113	1287	2140	681	50	3	**4278**
c	Number of treatment cycles with embryo transferred	4	112	1281	2129	674	49	3	**4252**
d	Average number of embryo transferred	1.00	1.08	1.11	1.11	1.31	1.47	1.67	**1.15**
e	*Clinical pregnancy rate[6] (%)*	*25.0*	*52.2*	*49.3*	*41.7*	*32.9*	*10.0*	*0.0*	***42.4***
5	**Trends of RT Procedures**								
a	Number of patients and treatment cycles							Please refer to **Chart A5(a)**	
b	*Proportion of ICSI cycles (%)*							*Please refer to **Chart A5(b)***	

B

1	Storage of Gametes and Embryos	
a	Number of gametes and embryos stored by licensed centres	Please refer to **Chart B1(a)**
b	Number of gametes or embryos stored or used for research	Please refer to **Chart B1(b)**

Remarks:

NA Not applicable

(1) **In vitro fertilization (IVF)** (a) means the fertilization of an egg by sperm outside the human body, whether or not the egg was originally removed from the body of that or any other woman; (b) includes any procedure involving the induction or aspiration of an egg, or the culture of an egg for the purposes of any such fertilization.
It includes Conventional IVF (IVF without ICSI) and IVF with ICSI.

(2) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(3) Total patient diagnosis percentages may be greater than 100% because more than one diagnosis can be reported for each treatment cycle.

(4) The age of wife has been used in calculating the age of patient.

(5) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

This annual statistics only covered treatment cycles that led to (1) Gamete transfer/embryo replacement/insemination, or stopped because of (2) Elective cryopreservation of all embryos or (3) Cycle abandonment.

(ii) In this Key Statistics, the treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded in the above table and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above table.

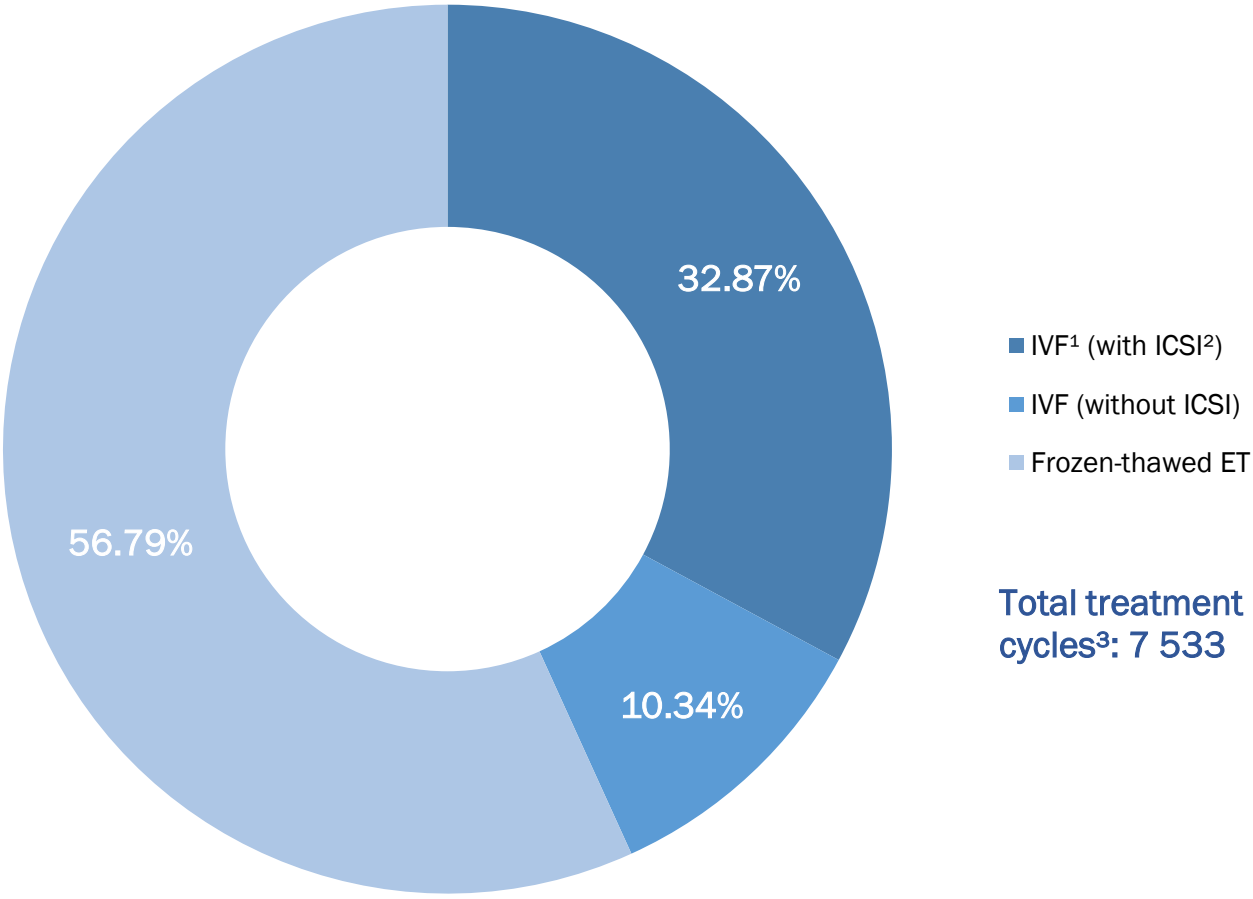
(6) (i) **Clinical pregnancy** means a pregnancy documented by one or more gestational sacs on ultrasound or the histological confirmation of gestational products in miscarriages or ectopic pregnancies.

(ii) **Clinical pregnancy rate** is expressed as number of clinical pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer. i.e. Clinical pregnancy rate = Number of clinical pregnancies/Number of treatment cycles x 100%

(7) Licensed centres are required to report the details concerning outcome of pregnancy within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2024 is not yet available.

Charts for selected Key Statistics

Chart A1 - Type of RT Procedures taken by Patients (%)
(for non-donor IVF cycles only)



Remarks:

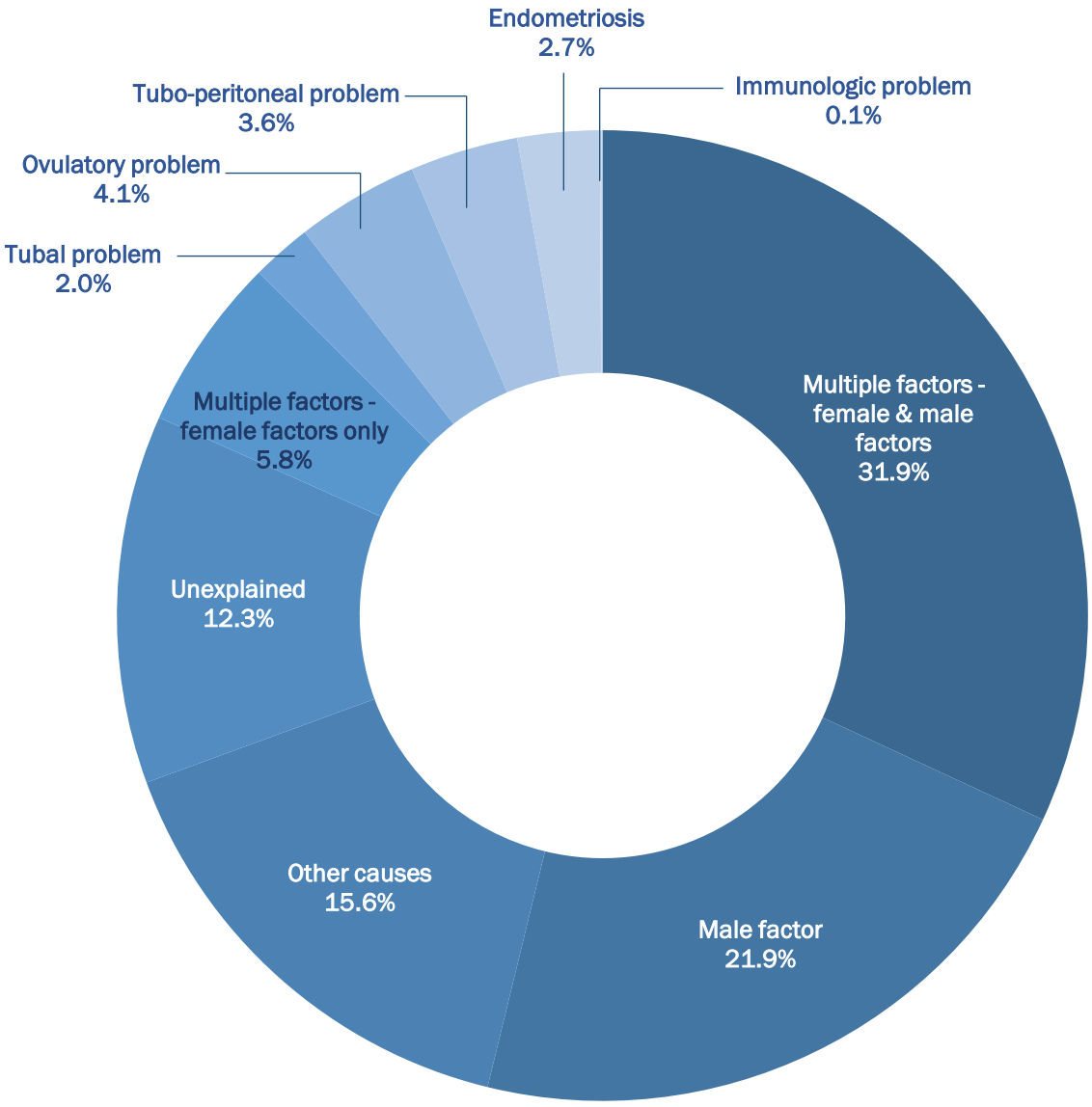
(1) **In vitro fertilization (IVF)** (a) means the fertilization of an egg by sperm outside the human body, whether or not the egg was originally removed from the body of that or any other woman; (b) includes any procedure involving the induction or aspiration of an egg, or the culture of an egg for the purposes of any such fertilization. It includes **IVF without ICSI** and **IVF with ICSI**.

(2) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(3) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

(ii) In this chart, the treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded in the above chart and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above chart.

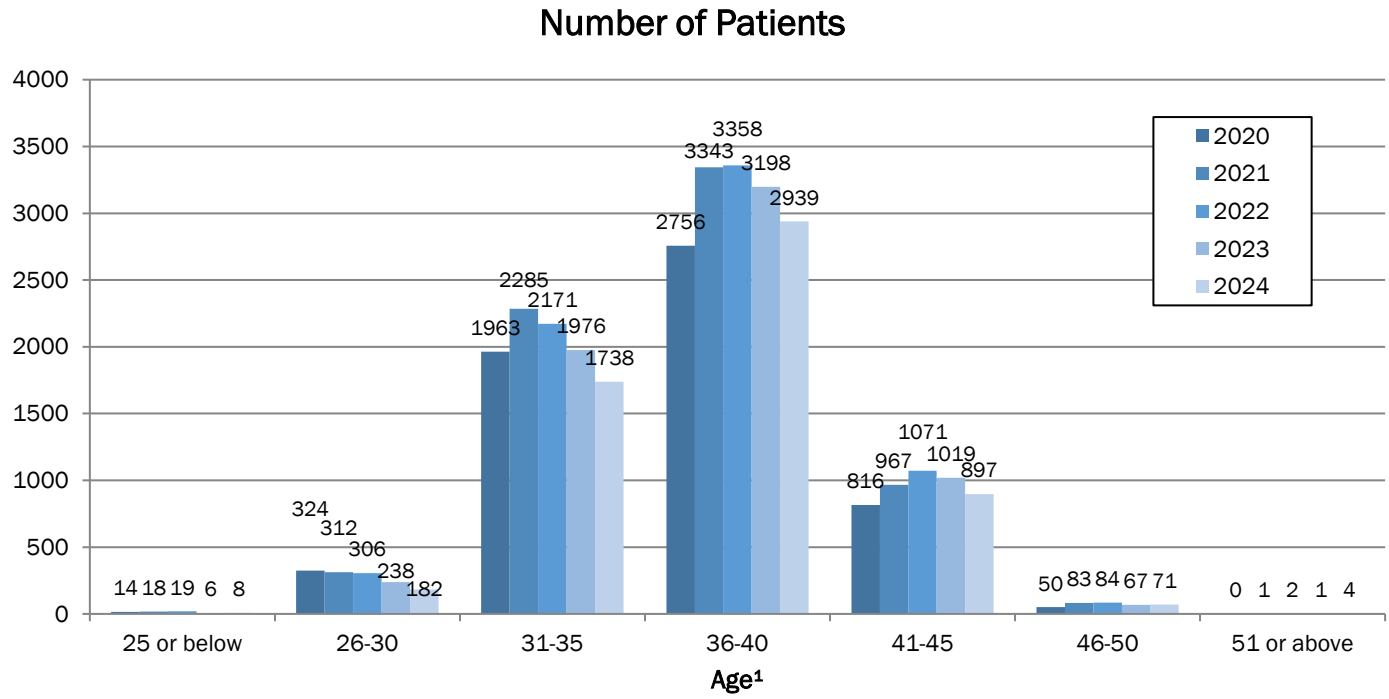
Chart A2 - Patients Diagnosis (%)
(for non-donor IVF cycles only)

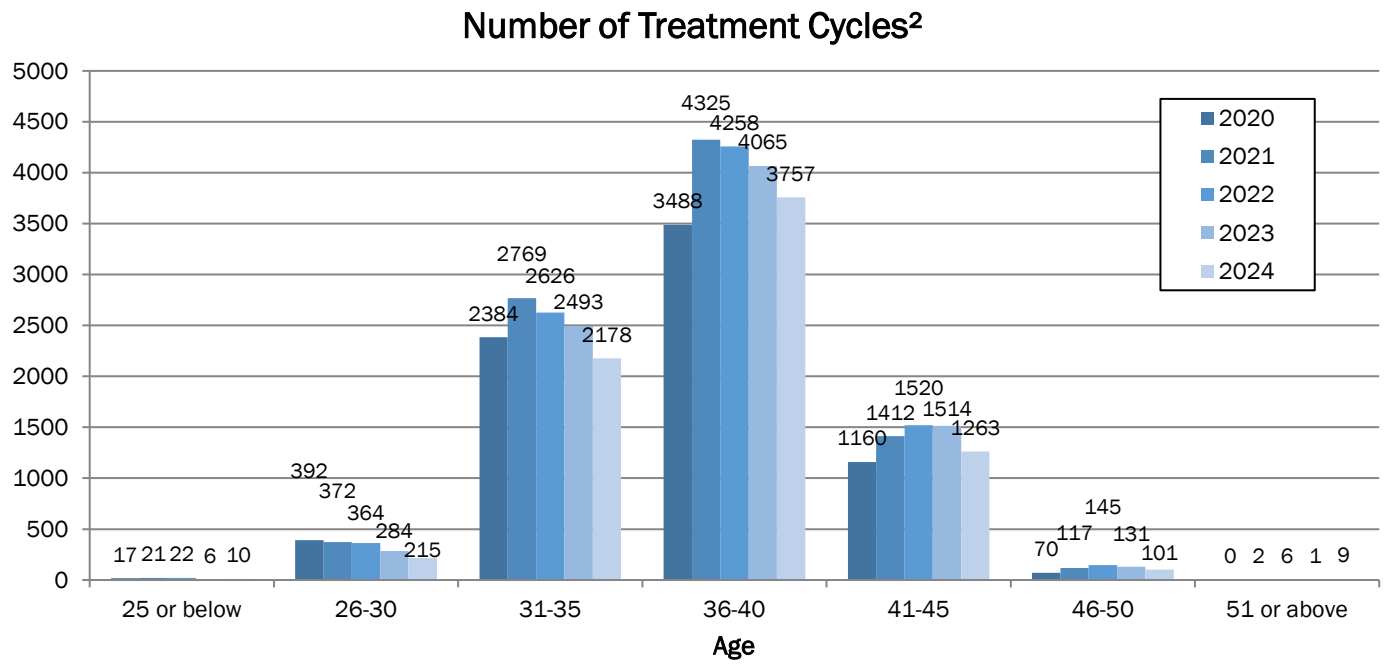


Remarks:

(1) "Other causes" of infertility diagnosis reported by licensed centres included advanced maternal age, reduced ovarian reserve, coital problem, polycystic ovary syndrome, etc.

Chart A5(a) - Number of Patients and Treatment Cycles
(for non-donor IVF cycles only)





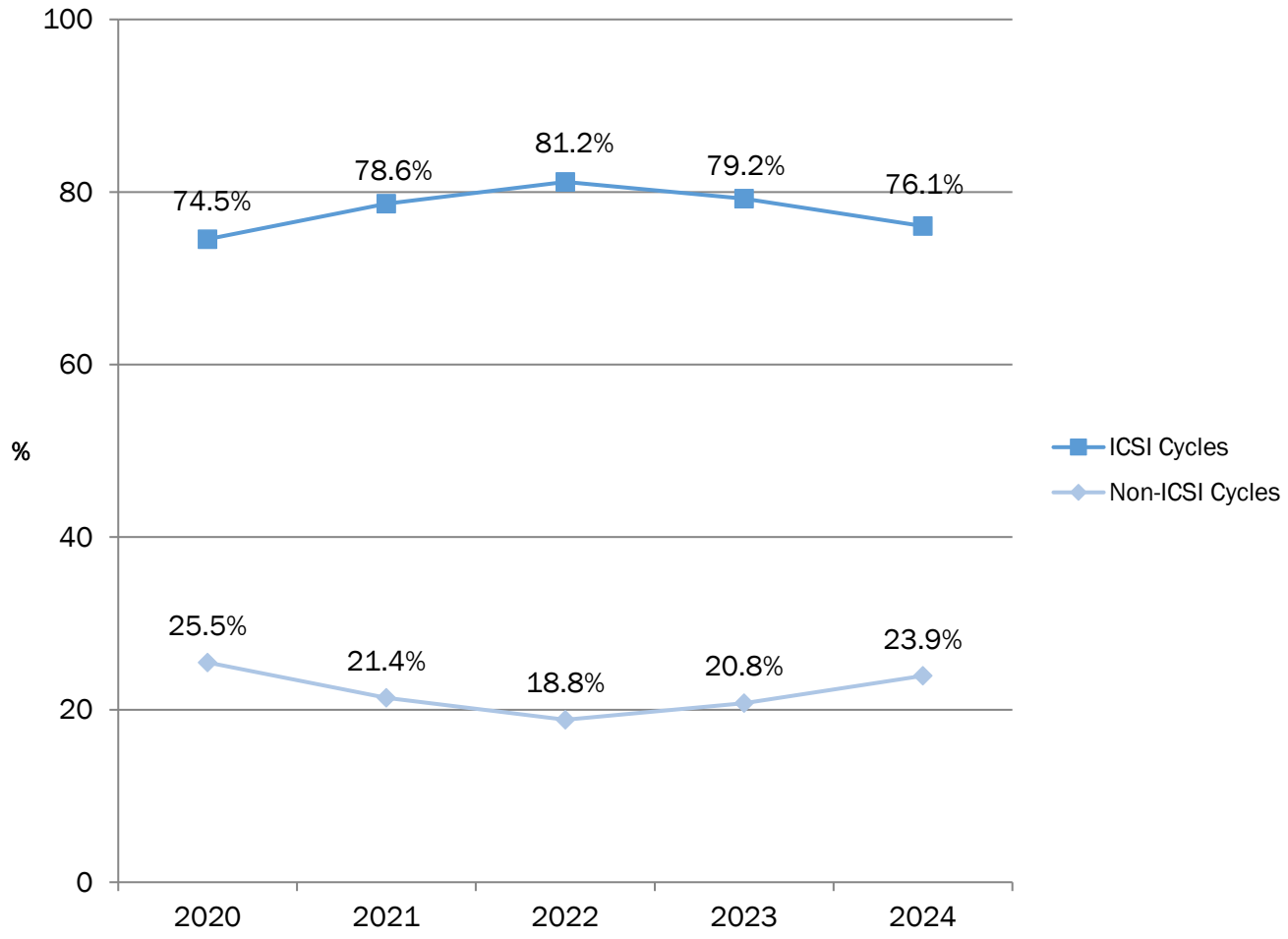
Remarks:

(1) The age of wife has been used in calculating the age of patient.

(2) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

(ii) In this chart, the treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded from the above chart and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above chart.

Chart A5(b) - Proportion of ICSI[1] Cycles (%)
(amongst all non-donor IVF cycles[2])



Remarks:

(1) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(2) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

(ii) In this chart, the treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded from the above chart and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above chart.

Chart B1(a) - Number of Gametes and Embryos Stored by Licensed Centres

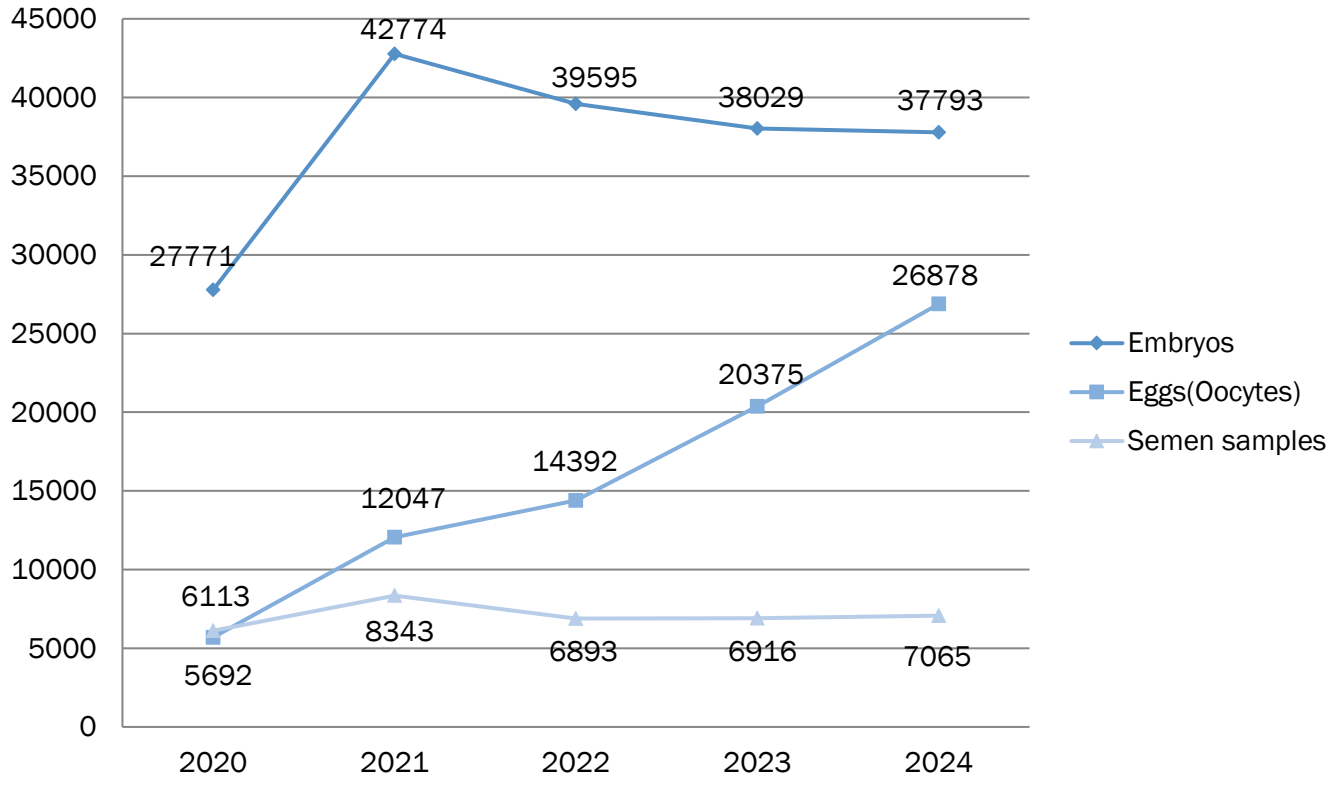
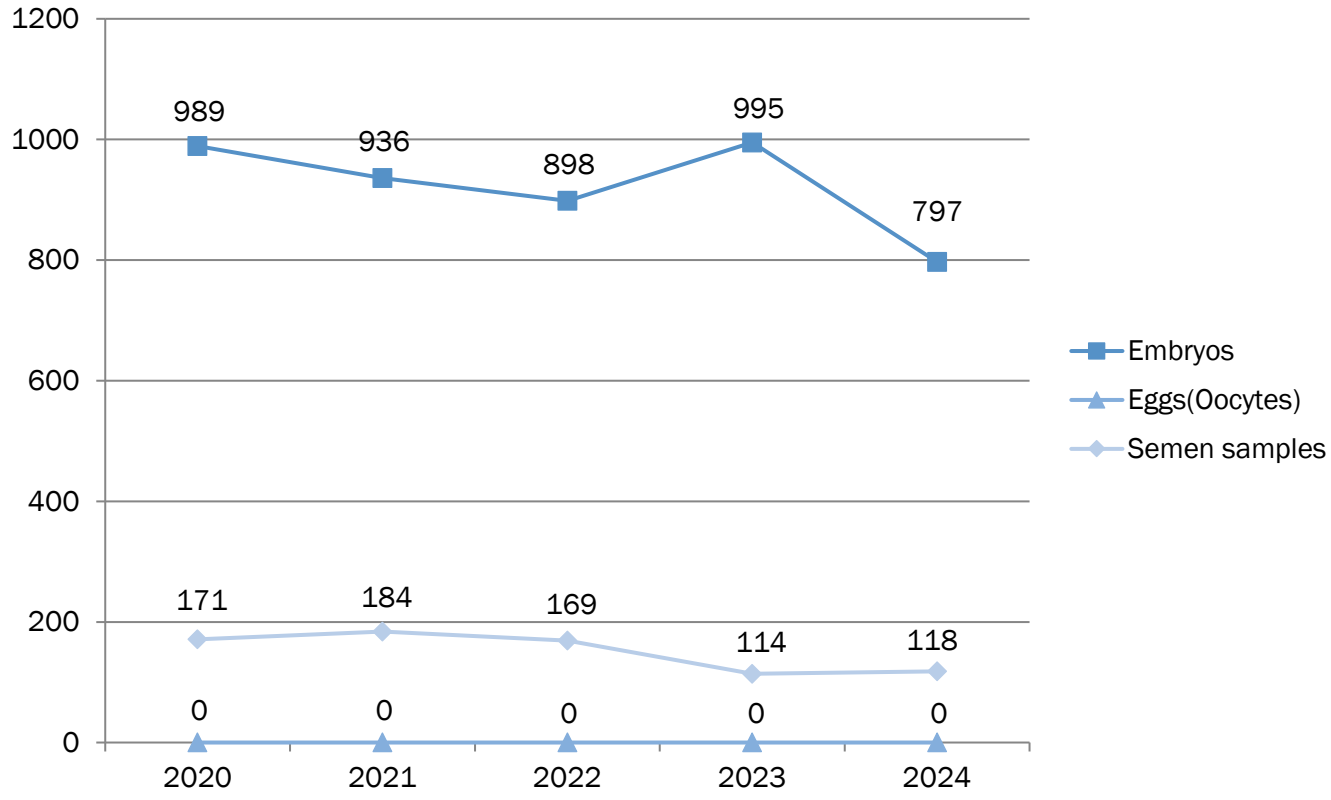


Chart B1(b) - Number of Donated Gametes or Embryos Stored or Used for Research



	Number of Donated Embryos Used for Research				
	2020	**2021**	**2022**	**2023**	**2024**
Embryos	75	0	3	0	0

Detailed Statistics Tables

Table 1 - Gamete and Embryo Donations Made in 2024

(Based on the information on Annual Statistics Forms received in the calendar year)

a) Gamete and Embryo Donors by Age Group and Sex

	Gamete		Embryo		Total
Age Group	Female Donors	Male Donors	Female Donors	Male Donors	
25 or below	3	6	0	0	9
26-30	3	6	0	0	9
31-35	1	4	0	0	5
36-40	0	2	0	0	2
41-45	0	0	0	0	0
46-50	0	0	0	0	0
51 or above	0	0	0	0	0
Total	**7**	**18**	**0**	**0**	**25**

b) Donors and Donated Materials

Donated Materials	Number of Donors	Number of Donations Made
Semen	18	39
Eggs (oocytes)	7	7
Embryos[1]	0	0

Remark:

(1) Both the female and male donors of the couple will be counted for an embryo donation.

Source (for licensed centres)
AS Form 8

Table 2 - Pregnancy and Birth Outcomes for Main Types of RT Procedures in 2024

(Based on the information on Data Collection Forms received in the calendar year)

Item			RT procedures involving patients' own gametes/embryos				RT procedures involving donated gametes/embryos	
			IVF[1]		Frozen-thawed ET	AIH[3]	DI[3]	RT procedures other than DI
			with ICSI[2]	without ICSI				
1		Number of patients	1985	727	3127	1489	2	46
2		Number of treatment cycles[4]	2476	779	4278	2607	5	65
3		Number of treatment cycles with embryo transferred	459	271	4252	NA	NA	55
4		Number of cycles of insemination	NA	NA	NA	2547	5	NA
Treatment Outcome[5]								
5a		Number of clinical pregnancy[6(i)]	137	92	1816	288	1	24
	i	Number of ongoing pregnancy[7(i)]	105	80	1510	255	1	23
	ii	Number of miscarriage[8]	31	11	296	29	0	1
	iii	Number of hydatidiform mole	0	0	1	0	0	0
	iv	Number of ectopic pregnancy[9]	1	1	7	4	0	0
	v	Number of heterotopic pregnancy[10]	0	0	0	0	0	0
	vi	Number of termination of pregnancy	0	0	2	0	0	0
5b		Number of no pregnancy[11]	2339	687	2461	2297	4	41
5c		Number of lost to follow up[12]	0	0	1	22	0	0
5d	i	*Clinical pregnancy rate[6(ii)] (per treatment cycle) (%)*	*5.5*	*11.8*	*42.4*	*11.0*	*20.0*	*36.9*
	ii	*Clinical pregnancy rate (per treatment cycle with embryo transferred) (%)*	*29.8*	*33.9*	*42.7*	*NA*	*NA*	*43.6*
	iii	*Clinical pregnancy rate (per cycle of insemination) (%)*	*NA*	*NA*	*NA*	*11.3*	*20.0*	*NA*
5e	i	*Ongoing pregnancy rate[7(ii)] (per treatment cycle) (%)*	*4.2*	*10.3*	*35.3*	*9.8*	*20.0*	*35.4*
	ii	*Ongoing pregnancy rate (per treatment cycle with embryo transferred) (%)*	*22.9*	*29.5*	*35.5*	*NA*	*NA*	*41.8*
	iii	*Ongoing pregnancy rate (per cycle of insemination) (%)*	*NA*	*NA*	*NA*	*10.0*	*20.0*	*NA*

Remarks:

NA Not applicable

(1) **In vitro fertilization (IVF)** (a) means the fertilization of an egg by sperm outside the human body, whether or not the egg was originally removed from the body of that or any other woman; (b) includes any procedure involving the induction or aspiration of an egg, or the culture of an egg for the purposes of any such fertilization. It includes **IVF without ICSI** and **IVF with ICSI**.

(2) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(3) **Artificial insemination** refers to the placing of sperm inside a woman's vagina or uterus (i.e. womb) by means other than sexual intercourse. In **artificial insemination by husband (AIH)**, the husband's sperm is used. In **artificial insemination by donor** (AID or **DI**), sperm collected from a man who is not the woman's husband is used.

(4) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

This annual statistics only covered treatment cycles that led to (1) Gamete transfer/embryo replacement/insemination, or stopped because of (2) Elective cryopreservation of all embryos or (3) Cycle abandonment.

(ii) In this table, the treatment cycles for RT procedures involving donated gametes/embryos and those involving artificial insemination (i.e. AIH and DI) are shown. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above table.

(5) Figures on **treatment outcome** reported in the interim statistics will be replaced when outcome of pregnancy is available in the final statistics. Licensed centres are required to report the details concerning **pregnancy outcome** within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2024 is not yet available.

(6) (i) **Clinical pregnancy** means pregnancy documented by one or more gestational sacs on ultrasound or the histological confirmation of gestational products in miscarriages or ectopic pregnancies.

(ii) **Clinical pregnancy rate** is expressed as number of clinical pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer.

- **Clinical pregnancy rate per treatment cycles** [Item 5d(i)] = Number of clinical pregnancies [Item 5a]/Number of treatment cycles[Item 2] x 100%
- **Clinical pregnancy rate per treatment cycles with embryo transferred** [Item 5d(ii)] = Number of clinical pregnancies [Item 5a]/Number of treatment cycles with embryo transferred [Item 3] x 100%
- **Clinical pregnancy rate per cycles of insemination** [Item 5d(iii)] = Number of clinical pregnancies [Item 5a]/ Number of cycles of insemination [Item 4] x 100%

(7) (i) Ongoing pregnancy means ongoing pregnancy with foetal cardiac activity during the period of the year being reported on.

(ii) **Ongoing pregnancy rate** is expressed as number of ongoing pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer.

- **Ongoing pregnancy rate per treatment cycles** [Item 5e(i)] = Number of ongoing pregnancies [Item 5a(i)]/ Number of treatment cycles [Item 2] x 100%
- **Ongoing pregnancy rate per treatment cycles with embryo transferred** [Item 5e(ii)] = Number of ongoing pregnancies [Item 5a(i)]/Number of treatment cycles with embryo transferred [Item 3] x 100%
- **Ongoing pregnancy rate per cycles of insemination** [Item 5e(iii)] = Number of ongoing pregnancies [Item 5a(i)]/Number of cycles of insemination [Item 4] x 100%

(8) Miscarriage (Spontaneous abortion) refers to loss of an intrauterine pregnancy detected clinically or by ultrasound, and less than 24 weeks' gestation (as estimated by the day of embryo transfer or day of ovulation).

(9) Ectopic pregnancy refers to a pregnancy in which implantation has taken place outside the uterine cavity.

(10) Heterotopic pregnancy refers to simultaneous existence of intrauterine and ectopic pregnancy.

(11) Number of no pregnancy refers to the number of treatment cycles started and reported by the licensed centre with an outcome of "no pregnancy", including those abandoned and those ending with elective cryopreservation of embryos.

(12) Figures on number of lost to follow up cases will be reported in the interim statistics and it will be updated when pregnancy outcome is available in the final statistics.

Source (for licensed centres)
DC Form 1, 2, 3 & 7

Table 3 - Pregnancy and Birth Outcomes by Age Group and Main Type of RT Procedures in 2024

(for non-donor treatment cycles only)

(Based on the information on Data Collection Forms received in the calendar year)

IVF[1] (with ICSI[2])

Age Group[4]	Number of Patients	Number of Treatment Cycles[5]	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy[6]	
				n[6(i)]	*(%)*[6(ii)]
25 or below	4	5	0	0	*(0.0)*
26-30	77	81	10	4	*(4.9)*
31-35	572	641	96	34	*(5.3)*
36-40	946	1148	245	57	*(5.0)*
41-45	352	545	96	10	*(1.8)*
46-50	31	50	11	0	*(0.0)*
51 or above	3	6	1	0	*(0.0)*
Total	**1985**	**2476**	**459**	**105**	***(4.2)***

IVF (without ICSI)

Age Group	Number of Patients	Number of Treatment Cycles	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy	
				n	*(%)*
25 or below	1	1	0	0	*(0.0)*
26-30	21	21	5	2	*(9.5)*
31-35	238	250	81	26	*(10.4)*
36-40	436	469	173	51	*(10.9)*
41-45	30	37	11	1	*(2.7)*
46-50	1	1	1	0	*(0.0)*
51 or above	0	NA	NA	NA	
Total	**727**	**779**	**271**	**80**	***(10.3)***

All IVF (Fresh cycles)

Age Group	Number of Patients	Number of Treatment Cycles	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy	
				n	(%)
25 or below	5	6	0	0	*(0.0)*
26-30	98	102	15	6	*(5.9)*
31-35	810	891	177	60	*(6.7)*
36-40	1382	1617	418	108	*(6.7)*
41-45	382	582	107	11	*(1.9)*
46-50	32	51	12	0	*(0.0)*
51 or above	3	6	1	0	*(0.0)*
Total	**2712**	**3255**	**730**	**185**	***(5.7)***

Frozen-thawed ET					
Age Group	Number of Patients	Number of Treatment Cycles	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy	
				n	*(%)*
25 or below	3	4	4	1	*(25.0)*
26-30	84	113	112	54	*(47.8)*
31-35	928	1287	1281	546	*(42.4)*
36-40	1557	2140	2129	738	*(34.5)*
41-45	515	681	674	167	*(24.5)*
46-50	39	50	49	4	*(8.0)*
51 or above	1	3	3	0	*(0.0)*
Total	**3127**	**4278**	**4252**	**1510**	***(35.3)***
AIH[3]					
Age Group	Number of Patients	Number of Treatment Cycles	Number of cycles of insemination	Ongoing Pregnancy	
				n	*(%)*
25 or below	4	7	7	1	*(14.3)*
26-30	96	153	152	19	*(12.4)*
31-35	687	1265	1237	125	*(9.9)*
36-40	569	960	932	102	*(10.6)*
41-45	119	202	199	8	*(4.0)*
46-50	13	19	19	0	*(0.0)*
51 or above	1	1	1	0	*(0.0)*
Total	**1489**	**2607**	**2547**	**255**	***(9.8)***

Remarks:

NA Not applicable

(1) **In vitro fertilization (IVF)** (a) means the fertilization of an egg by sperm outside the human body, whether or not the egg was originally removed from the body of that or any other woman; (b) includes any procedure involving the induction or aspiration of an egg, or the culture of an egg for the purposes of any such fertilization. It includes **IVF without ICSI** and **IVF with ICSI**.

(2) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(3) **Artificial insemination** refers to the placing of sperm inside a woman's vagina or uterus (i.e. womb) by means other than sexual intercourse. In **artificial insemination by husband (AIH)**, the husband's sperm is used. In **artificial insemination by donor** (AID or **DI**), sperm collected from a man who is not the woman's husband is used.

(4) The age of wife has been used in calculating the age of patient.

(5) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

This annual statistics only covered treatment cycles that led to (1) gamete transfer/embryo replacement/insemination, or stopped because of (2) elective cryopreservation of all embryos or (3) cycle abandonment.

(ii) In this table, the treatment cycles for RT procedures involving donated gametes/embryos are excluded from the above table and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above table.

(6) **Ongoing pregnancy** means ongoing pregnancy with foetal cardiac activity during the period of the year being reported on.

(i) n = Number of ongoing pregnancies

(ii) **Ongoing pregnancy rate** is expressed as number of ongoing pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer. i.e. Ongoing pregnancy rate = number of ongoing pregnancies [n]/Number of treatment cycles x 100%

(7) Licensed centres are required to report the details concerning outcome of pregnancy within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2024 is not yet available.

Source (for licensed centres)
DC Form 1 & 7

Table 4 - Effect of One/Two/Three Embryo(s) Transferred (Fresh/Frozen Cycle with or without ICSI[1]) on Pregnancy and Birth Outcomes[2] in 2024
(For non-donor IVF cycles only)

(Based on the information on Data Collection Forms received in the calendar year)

One Embryo Transferred				
Age Group[3]	Number of Patients	Number of Treatment Cycles[4] with Embryo Transferred	Ongoing Pregnancy[5]	
			n[5(i)]	*(%)*[5(ii)]
25 or below	3	4	1	*(25.0)*
26-30	93	116	56	*(48.3)*
31-35	1006	1304	534	*(41.0)*
36-40	1781	2288	746	*(32.6)*
41-45	456	552	140	*(25.4)*
46-50	30	35	2	*(5.7)*
51 or above	1	1	0	*(0.0)*
Total	**3370**	**4300**	**1479**	***(34.4)***

Two Embryos Transferred				
Age Group[3]	Number of Patients	Number of Treatment Cycles[4] with Embryo Transferred	Ongoing Pregnancy[5]	
			n[5(i)]	*(%)*[5(ii)]
25 or below	0	NA	NA	
26-30	9	11	4	*(36.4)*
31-35	139	148	69	*(46.6)*
36-40	226	253	97	*(38.3)*
41-45	176	202	33	*(16.3)*
46-50	19	23	2	*(8.7)*
51 or above	2	3	0	*(0.0)*
Total	**571**	**640**	**205**	***(32.0)***

Three Embryos Transferred				
Age Group[3]	Number of Patients	Number of Treatment Cycles[4] with Embryo Transferred	Ongoing Pregnancy[5]	
			n[5(i)]	*(%)*[5(ii)]
25 or below	0	NA	NA	
26-30	0	NA	NA	
31-35	4	6	3	*(50.0)*
36-40	6	6	3	*(50.0)*
41-45	22	27	5	*(18.5)*
46-50	2	3	0	*(0.0)*
51 or above	0	NA	NA	
Total	**34**	**42**	**11**	***(26.2)***

Remarks:

NA Not applicable

(1) **Intracytoplasmic sperm injection (ICSI)** means a method of gamete micromanipulation by which a single sperm is injected into the inner cellular structure of the egg.

(2) Figures on **treatment outcome** reported in the interim statistics will be replaced when pregnancy outcome is available in the final statistics. Licensed centres are required to report the details concerning **pregnancy outcome** within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2024 is not yet available.

(3) The age of wife has been used in calculating the age of patient.

(4) (i) **Treatment cycles** refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

This annual statistics only covered treatment cycles that led to (1) gamete transfer/embryo replacement/insemination, or stopped because of (2) elective cryopreservation of all embryos or (3) cycle abandonment.

(ii) In this table, treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded from the above table and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above table.

(5) **Ongoing pregnancy** means ongoing pregnancy with foetal cardiac activity during the period of the year being reported on.

(i) n = Number of ongoing pregnancies with single foetus and multiple foetuses.

(ii) **Ongoing pregnancy rate** is expressed as number of ongoing pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer. i.e. Ongoing pregnancy rate = number of ongoing pregnancies [n]/Number of treatment cycles with embryo transferred x 100%

Source (for licensed centres)
DC Form 1

Table 5 - Pregnancy and Birth Outcomes by Age Group using Fresh/Frozen Oocytes (Fresh Cycles) in 2024
(For non-donor IVF cycles only)

(Based on the information on Data Collection Forms received in the calendar year)

Fresh Cycles using Fresh Oocytes					
Age Group[1]	Number of Patients	Number of Treatment Cycles[2]	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy[3]	
				n[3(i)]	*(%)*[3(ii)]
25 or below	3	3	0	0	*(0.0)*
26-30	90	94	14	6	*(6.4)*
31-35	756	824	172	59	*(7.2)*
36-40	1275	1475	408	104	*(7.1)*
41-45	341	512	100	10	*(2.0)*
46-50	27	39	12	0	*(0.0)*
51 or above	2	3	1	0	*(0.0)*
Total	**2494**	**2950**	**707**	**179**	***(6.1)***

Fresh Cycles using Frozen Oocytes					
Age Group[1]	Number of Patients	Number of Treatment Cycles[2]	Number of Treatment Cycles with Embryo Transferred	Ongoing Pregnancy[3]	
				n[3(i)]	*(%)*[3(ii)]
25 or below	0	NA	NA	NA	
26-30	3	3	1	0	*(0.0)*
31-35	10	11	5	1	*(9.1)*
36-40	16	16	11	5	*(31.3)*
41-45	16	17	7	1	*(5.9)*
46-50	2	2	1	0	*(0.0)*
51 or above	0	NA	NA	NA	
Total	**47**	**49**	**25**	**7**	***(14.3)***

Remarks:

NA Not applicable

(1) The age of wife has been used in calculating the age of patient.

(2) (i) Treatment cycles refers to the process in which a reproductive technology (RT) procedure is carried out, where a woman has undergone ovarian stimulation or monitoring with the intent of having RT procedure, or frozen embryos have been thawed with the intent of transferring them to a woman. A treatment cycle starts (a) on the day when superovulatory drugs are commenced or (b) from the date of the last menstrual period.

(ii) In this table, treatment cycles for (a) RT procedures involving donated gametes/embryos and (b) involving artificial insemination (i.e. AIH and DI) are excluded from the above table and separately shown in Table 2. To avoid double counting, treatment cycles in which one patient engages in more than one type of RT procedure in one cycle (e.g. IVF and FET) are also excluded in the above table.

(3) **Ongoing pregnancy** means ongoing pregnancy with foetal cardiac activity during the period of the year being reported on.

(i) n = Number of ongoing pregnancies

(ii) **Ongoing pregnancy rate** is expressed as number of ongoing pregnancies per 100 treatment cycles started /commenced or per 100 cycles reaching the stage of attempted oocyte retrieval or embryo transfer.

i.e. Ongoing pregnancy rate = number of ongoing pregnancies [n]/Number of treatment cycles x 100%

(4) Licensed centres are required to report the details concerning outcome of pregnancy within 12 months after treatment. Information on live birth for treatment cycles carried out in the later part of 2024 is not yet available.

Source (for licensed centres)
DC Form 1

Table 6 - Infertility Diagnosis of Patients in 2024

(Based on the information on Data Collection Forms received in the calendar year)

A) Infertility Diagnosis by Age of Wives Receiving RT Procedures (other than DI and AIH)

	Age Group (Number of Patients)							
Diagnosis	25 or below	26-30	31-35	36-40	41-45	46-50	51 or above	All
Male factor	3	33	359	537	89	6	0	**1027**
Tubal problem	0	7	29	50	8	0	0	**94**
Endometriosis	0	2	42	79	5	0	0	**128**
Immunologic problem	0	0	1	2	1	0	0	**4**
Tubo-peritoneal problem	0	8	64	88	12	0	0	**172**
Ovulatory problem	0	9	66	107	10	0	0	**192**
Unexplained	0	15	147	348	61	5	0	**576**
Other causes[3]	3	29	181	299	190	27	3	**732**
Multiple causes - female & male factors	1	41	409	688	325	30	1	**1495**
Multiple causes - female factors only	0	6	71	139	54	2	0	**272**
Total	**7**	**150**	**1369**	**2337**	**755**	**70**	**4**	**4692**

Remark:

(1) All treatment cycles for RT procedures involving donated gametes/embryos are excluded.

B) Infertility Diagnosis by Age of Wives Receiving AIH

	Age Group (Number of Patients)							
Diagnosis	25 or below	26-30	31-35	36-40	41-45	46-50	51 or above	All
Male factor	1	37	260	152	17	0	0	**467**
Endometriosis	0	1	3	13	1	0	0	**18**
Ovulatory problem	1	7	47	23	2	0	0	**80**
Unexplained	2	19	158	91	20	3	0	**293**
Other causes[3]	0	10	62	96	39	7	1	**215**
Multiple causes - female & male factors	0	14	133	153	36	3	0	**339**
Multiple causes - female factors only	0	8	24	41	4	0	0	**77**
Total	**4**	**96**	**687**	**569**	**119**	**13**	**1**	**1489**

C) Reasons for Treatment by Age of Husbands - DI

	Age Group (Number of Patients)							
Reasons	25 or below	26-30	31-35	36-40	41-45	46-50	51 or above	All
Obstructive azoospermia	0	0	0	0	0	0	0	**0**
Non-obstructive azoospermia	0	0	0	1	1	0	0	**2**
Severe deficits in semen quality in couples who do not wish to undergo intracytoplasmic sperm injection	0	0	0	0	0	0	0	**0**
Genetic	0	0	0	0	0	0	0	**0**
Infectious disease in the male partner (such as HIV)	0	0	0	0	0	0	0	**0**
Severe rhesus isoimmunisation	0	0	0	0	0	0	0	**0**
Others	0	0	0	0	0	0	0	**0**
Multiple causes	0	0	0	0	0	0	0	**0**
Total	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**

Remarks:

(1) Age of wife is used in calculating the age of patient in Infertility Diagnosis by Age of Patients Receiving RT Procedures (other than DI and AIH) and receiving AIH procedures while the age of husband is used in calculating the age of patient in Reasons for Treatment by Age of Patients - DI.

(2) One patient may undergo more than one type of RT procedure during the calendar year (e.g. both IVF and AIH).

(3) "Other causes" of infertility diagnosis reported by licensed centres included advanced maternal age, reduced ovarian reserve, coital problem, polycystic ovary syndrome, etc.

Source (for licensed centres)
DC Form 1, 7 and 3 respectively

Table 7 - Current Research Projects ending December 2024

Name of Licensed Centre	Name of Project	Project Duration (in months)
Assisted Reproductive Technology Unit (IVFHK), Prince of Wales Hospital / The Chinese University of Hong Kong	A case-series study to establish preimplantation genetic testing (PGT) and its clinical application	36
Department of Obstetrics & Gynaecology, HKU	Derivation of pre-Good Manufacturing Practice (pre-GMP) - quality Human Expanded Potential Stem Cells (EPSCs) from Human Preimplantation Embryos	36
Department of Obstetrics & Gynaecology, HKU	The use of in vitro cultured pre-implantation and post-implantation human embryo for studying the developmental potential of human blastoids	36

Remark:

(1) The full list of all research projects approved by the Council on Human Reproductive Technology ("the Council") could be accessed at the Council's website https://www.chrt.org.hk/english/embryo/embryo_app.html