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Current Status of
Assisted Reproductive Technology
in Korea, 1997

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Fig. 1. Location of certified ART clinics in Korea, 1999

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Table 1

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Name of IVF centre()

Contact person :

Name

()

Address

Tel

Fax

All data relate to treatment cycles that were started during the calendar year, 1997, and to any clinical pregnancies resulting from those treatment cycles. Please complete as many data items as possible (n = number). If data are not available for some items, write NA. Gestational age (duration of pregnancy) should be calculated by adding 14 days (2 weeks) to the number of completed weeks between the date of fertilization (conception) and the date of completion of the pregnancy

In the following tables :

- . IVF includes those treatment cycles and pregnancies in which fertilization occurred, or was intended to occur, in the laboratory and fresh embryos were transferred to the uterus or fallopian tubes. This heading excludes : (1) frozen/thawed embryo transfer cycles ; and (2) microinsemination techniques.
- . ICSI includes those treatment cycles and pregnancies that follow transfer of fresh embryos after intracytoplasmic sperm injection. Transfer cycles after both ICSI and embryo freezing are recorded separately.
- . GIFT includes only those cycles and pregnancies in which gametes (oocytes and sperm) were transferred to the fallopian tubes (excluding combined IVF and GIFT in the same cycle, which should be recorded in IVF category).
- . Any cycles in which frozen/thawed embryos were transferred should be excluded from Tables, 1, 2 and 3. Pregnancy outcomes after transfer of thawed embryos should be excluded from Tables 4, 5, 8 and 9.
- . Oocyte donation cycles and pregnancies should be included in Tables 3, 4, 5, 8 and 9, and in Table 10 if frozen/thawed embryos were transferred.
- . Maternal age refers to age at the start of the treatment cycle.

If you did not perform IVF practice in 1997, check here.

Not done

If you performed IVF practice in 1997, please fill out tables below.

Table 1. Treatment cycles and pregnancies, 1997

Treatment cycles/pregnancies*	IVF	ICSI	GIFT
	n	n	n
Cycles initiated (started)			
Cycles with attempted oocyte retrieval (aspiration)			
Cycles with embryo transfer			
Clinical pregnancies			
Pregnancies with one or more live births			

This table excludes cycles in which frozen/thawed embryos were transferred.

* The number of cycles started should include both stimulated and natural cycles.

Clinical pregnancies include those with clinical signs of pregnancy, sonographic visualization of a gestational sac, or products of conception from curettage. Biochemical pregnancies in which there are only elevated levels of β -hCG should not be counted.

Table 2. Number of oocyte retrieval cycles and clinical pregnancies by maternal age, cause of infertility, and type of ovulation induction, 1997

Characteristics	IVF		ICSI		GIFT	
	Oocyte retrieval cycles attempted	Clinical Pregnancies	Oocyte retrieval cycles attempted	Clinical pregnancies	Oocyte retrieval cycles attempted	Clinical pregnancies
	n	n	n	n	n	n
Maternal age at start of treatment						
. less than 25 years	_____	_____	_____	_____	_____	_____
. 25 - 29	_____	_____	_____	_____	_____	_____
. 30 - 34	_____	_____	_____	_____	_____	_____
. 35 - 39	_____	_____	_____	_____	_____	_____
. 40 and over	_____	_____	_____	_____	_____	_____
Cause(s) of infertility						
. tubal only	_____	_____	_____	_____	_____	_____
. other female only	_____	_____	_____	_____	_____	_____
. male factors only	_____	_____	_____	_____	_____	_____
. multiple causes	_____	_____	_____	_____	_____	_____
. unexplained	_____	_____	_____	_____	_____	_____
Ovulation induction						
. GnRH analogues+other	_____	_____	_____	_____	_____	_____
. No GnRH analogues						
. clomiphene + any other	_____	_____	_____	_____	_____	_____
. other drugs	_____	_____	_____	_____	_____	_____
. natural cycles	_____	_____	_____	_____	_____	_____

This table excludes cycles using frozen/thawed embryos or microinsemination.

* The groups in the sections on cause of infertility and ovulation induction are mutually exclusive so each treatment cycle or pregnancy should be included in only one group.

Table 3. Embryos or oocytes transferred, 1997

Number of embryos/ oocytes transferred	IVF		ICSI		GIFT	
	Transfer cycles	Clinical Pregnancies	Transfer cycles	Clinical pregnancies	Transfer cycles	Clinical pregnancies
	n	n	n	n	n	n
. One	_____	_____	_____	_____	_____	_____
. Two	_____	_____	_____	_____	_____	_____
. Three	_____	_____	_____	_____	_____	_____
. Four	_____	_____	_____	_____	_____	_____
. Five	_____	_____	_____	_____	_____	_____
. Six or more	_____	_____	_____	_____	_____	_____

This table excludes cycles in which frozen/thawed embryos were transferred and also those cycles for other types of microinsemination (eg SUZI)

Table 4. Outcome of clinical pregnancies, 1997

Outcome of clinical pregnancies*	IVF	ICSI	GIFT
	n	n	n
Spontaneous abortion (less than 20 completed weeks' gestation)	_____	_____	_____
Ectopic pregnancy	_____	_____	_____
Induced abortion (less than 20 completed weeks' gestation)	_____	_____	_____
Stillbirth : 20-27 weeks	_____	_____	_____
Stillbirth : 28 or more weeks	_____	_____	_____
Live birth	_____	_____	_____
Total	_____	_____	_____

* Include each multiple pregnancy of 20 or more weeks' gestation only once in the table. If both live births and stillbirths occur in the same pregnancy, include it in the figures for live birth. For combined intrauterine and extrauterine pregnancies, count as ectopic pregnancy if intrauterine pregnancy terminates at less than 20 weeks and as stillbirth or live birth if pregnancy is completed at 20 or more weeks. The total number of pregnancies should be the same as in Table 1.

This table excludes pregnancies resulting from transfer of thawed embryos or other microinsemination techniques.

Table 5. Live births, stillbirths, and early neonatal deaths* by plurality, 1997

Plurality/Births	IVF	ICSIGIFT
	n	n
Singletons		
· live births	_____	_____
· stillbirths: 20-27 weeks` gestation	_____	_____
· stillbirths: 28 weeks` or more	_____	_____
· early neonatal deaths	_____	_____
Twins		
· live births	_____	_____
· stillbirths: 20-27 weeks` gestation	_____	_____
· stillbirths: 28 weeks` or more	_____	_____
· early neonatal deaths	_____	_____
Triplets		
· live births	_____	_____
· stillbirths: 20-27 weeks` gestation	_____	_____
· stillbirths: 28 weeks` or more	_____	_____
· early neonatal deaths	_____	_____
Quadruplets and higher order multiple births		
· live births	_____	_____
· stillbirths: 20-27 weeks` gestation	_____	_____
· stillbirths: 28 weeks` or more	_____	_____
· early neonatal deaths	_____	_____

This table excludes pregnancies resulting from transfer of thawed embryos or from other microinsemination techniques.

In this table, n=number of babies, not the number of pregnancies.

* Early neonatal deaths are liveborn infants dying in the first 7 days. They should be included in the numbers both of live births and of early neonatal deaths.

Table 6. Oocyte retrieval cycles, transfer cycles and pregnancies using special techniques of sperm collection and/or assisted hatching, 1997

Selected techniques	Oocyte retrieval cycles attempted	Transfer cycles	Clinical pregnancies	Pregnancies with live births
	n	n	n	n
. Microepididymal sperm aspiration (MESA)	_____	_____	_____	_____
. Testicular sperm extraction (TESE)	_____	_____	_____	_____
. Other and unspecified techniques	_____	_____	_____	_____
. Assisted hatching	_____	_____	_____	_____

Table 7. Transfer cycles and pregnancies after oocyte donation, 1997

Outcome of clinical pregnancies*	IVF	ICSI	GIFT
	n	n	n
Oocyte donation: IVF (without embryo freezing)	_____	_____	_____
Oocyte donation and frozen/thawed embryos: IVF	_____	_____	_____
Oocyte donation: GIFT	_____	_____	_____
Donor embryos	_____	_____	_____

This table excludes pregnancies resulting from transfer of thawed embryos or other microinsemination techniques.

Table 8. Gestational age of pregnancies* of 20 or more weeks by plurality, 1997

Gestational age (Completed weeks)	Singletons	Twins	Triplets	Quadruplets or more
	n	n	n	n
IVF : 20 - 27	_____	_____	_____	_____
28 - 31	_____	_____	_____	_____
32 - 36	_____	_____	_____	_____
37 - 41	_____	_____	_____	_____
42 or more	_____	_____	_____	_____
Not known	_____	_____	_____	_____
Total	_____	_____	_____	_____
ICSI : 20 - 27	_____	_____	_____	_____
28 - 31	_____	_____	_____	_____
32 - 36	_____	_____	_____	_____
37 - 41	_____	_____	_____	_____
42 or more	_____	_____	_____	_____
Not known	_____	_____	_____	_____
Total	_____	_____	_____	_____
GIFT : 20 - 27	_____	_____	_____	_____
28 - 31	_____	_____	_____	_____
32 - 36	_____	_____	_____	_____
37 - 41	_____	_____	_____	_____
42 or more	_____	_____	_____	_____
Not known	_____	_____	_____	_____
Total	_____	_____	_____	_____

This table excludes pregnancies resulting from transfer of thawed embryos or from other microinsemination techniques(eg SUZI).

* Count each pregnancy only once for multiple births : include those pregnancies resulting both in live births and stillbirths. If the births in a multiple pregnancy occur in different gestational age groups, include that pregnancy in the shortest gestational age group.

Table 9. Birth weight of liveborn and stillborn infants of 20 or more weeks' gestation, 1997

Birth weight*	Singletons	Twins	Triplets	Quadruplets or more
	n	n	n	n
IVF				
Less than 2500g				
2500g or more				
Birth weight not stated				
Total				
ICSI				
Less than 2500g				
2500g or more				
Birth weight not stated				
Total				
GIFT				
Less than 2500g				
2500g or more				
Birth weight not stated				

This table excludes pregnancies resulting from transfer of thawed embryos or from other microinsemination techniques (eg. SUZI).

* Include both live births and stillbirths of 20 or more weeks' gestation. In this table, n = number of babies, not the number of pregnancies.

Table 10. Pregnancy outcome after transfer of frozen/thawed embryos (including all techniques of oocyte retrieval but excluding ICSI), 1997

Cycles and outcome of clinical pregnancies*				Number
Transfer cycles				
Clinical pregnancies				
Spontaneous abortion (less than 20 completed weeks' gestation)				
Ectopic pregnancy				
Induced abortion (less than 20 completed weeks' gestation)				
Pregnancies of 20 weeks' gestation or more	Singletons	Twins	Triplets	Quadruplets or more
	n	n	n	n
Gestational age (pregnancies)				
. 20 - 27 weeks (p)				
. 28 - 31 weeks (p)				
. 32 - 36 weeks (p)				
. 37 - 41 weeks (p)				
. 42 weeks or more (p)				
. Not known (p)				
Live births (n)				
Stillbirth: 20-27 weeks (n)				
Stillbirth: 28 or more weeks (n)				
Early neonatal deaths (n)				
Birth weight (babies)				
. Less than 2500g (n)				
. 2500g or more (n)				
. Not known (n)				

* For live births, stillbirths, early neonatal deaths and birth weight, the numbers of births (n), not pregnancies should be given. For gestational age, the number of pregnancies (p), not births, should be given. For combined intrauterine and extrauterine pregnancies, count as ectopic pregnancy if intrauterine pregnancy terminates at less than 20 weeks and as stillbirth or live birth if pregnancy is completed at 20 or more weeks.

Table 11. Pregnancy outcome after combined ICSI and transfer of frozen/thawed embryos, 1997

Cycles and outcome of clinical pregnancies*	Number			
Transfer cycles				
Clinical pregnancies				
Spontaneous abortion (less than 20 completed weeks' gestation)				
Ectopic pregnancy				
Induced abortion (less than 20 completed weeks' gestation)				
Pregnancies of 20 weeks' gestation or more	Singletons	Twins	Triplets	Quadruplets or more
	n	n	n	n
Live births				
Stillbirth: 20-27 weeks				
Stillbirth: 28 or more weeks				
Early neonatal deaths				
Gestational age (pregnancies)				
. 20 - 27 weeks				
. 28 - 31 weeks				
. 32 - 36 weeks				
. 37 - 41 weeks				
. 42 weeks or more				
. Not known				
birth weight (babies)				
. Less than 2500g				
. 2500g or more				
. Not known				

* For live births, stillbirths, early neonatal deaths and birth weight, the numbers of births (n), not pregnancies should be given. For gestational age, the number of pregnancies (p), not births, should be given. For combined intrauterine and extrauterine pregnancies, count as ectopic pregnancy if intrauterine pregnancy terminates at less than 20 weeks and as stillbirth or live birth if pregnancy is completed at 20 or more weeks.

Table 12. Embryo freezing, 1997

Have you ever performed embryo freezing in 1997	Yes	No
Number of oocyte pick-up(OPU) cycles that resulted in embryo freezing in 1997		_____
Number of embryos that were frozen in 1997		_____
Total number of embryos in frozen storage at 31 December 1997		_____

Table 13. Major congenital malformations and chromosomal abnormalities, 1997

Technique of assisted conception	Total number of births and induced abortions	Number of malformed fetuses and infants*
IVF: fresh embryos	_____	_____
IVF: frozen embryos	_____	_____
ICSI: fresh embryos	_____	_____
ICSI: frozen embryos	_____	_____
Other microinsemination techniques	_____	_____
Assisted hatching	_____	_____
Oocyte donation	_____	_____

* Do not include minor birthmarks of the skin, postural talipes, or clicky hips.

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(in hCG

vitro fertilization and embryo transfer: IVF-ET) . 14 (2) completed weeks

(intracytoplasmic sperm injection: ICSI) 가

IVF-ET ICSI Microsoft Excel

(zygote

intrafallopian transfer: ZIFT) 3

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1997 48

1997 16,622 (Table

1997 1,2). 1996 35 8,694

가 35 48 가

가

Table 1. Number of IVF centers according to size (total number of treatment cycles in the year)

Number of treatment cycles started in year*	Number of IVF centers
Less than 50	21
50-99	13
100-199	4
200-499	4
500-999	3
1,000 or more	3
Total number of IVF centers	92
Number of IVF centers providing data for this report	48

* The total number of treatment cycles is based on all IVF, GIFT, and microinsemination cycles started and those cycles in which there was transfer of frozen/thawed embryos

Table 2. Treatment cycles and pregnancies according to type of ART procedures

Treatment cycles / pregnancies	IVF	ICSI	GIFT
Cycles initiated(started)	10416	4158	181
Cycles with oocyte retrieval	9928	4073	176
Cycles with embryo transfer	9493	3910	174
Clinical pregnancies	2898	1116	79
(CP per transfer, %)	(27.8)	(26.8)	(43.7)
Pregnancies with one or more live births	2125	794	49
(LB per transfer, %)	(20.6)	(19.1)	(27.1)

This table excludes cycles in which frozen/thawed embryos were transferred

ART : assisted reproductive technology

CP : clinical pregnancies

LB : live births

IVF-ET(ICSI 16,622 (62.7%), ICSI 4,158 (25.0%) IVF-ET ICSI 14,574 (87.7%)

IVF-ET (gamete

intrafallopian transfer: GIFT) 181 (1.1%)

(cryopreserved embryo transfer: cryopreserved ET) 1,531 (9.2%)가

(Fig. 2).

(microsurgical epididymal sperm aspiration: MESA) (testicular sperm extraction: TESE)

가 94 , 471

(assisted hatching) 2,379

(oocyte donation) 336 가

IVF 27.8%, ICSI 26.8%, GIFT

Fig. 2. Types of ART procedures

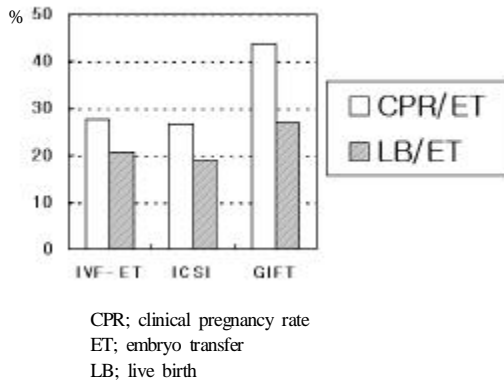


Fig. 3. Success rates for different types of ART

Table 3. Major congenital malformations and chromosomal abnormalities

Technique of assisted conception	Total number of births and induced abortions	Number of malformed fetuses and infants*(%)
IVF : fresh embryos	374	8(2.1)
IVF : frozen embryos	58	3(5.2)
ICSI : fresh embryos	154	0
ICSI : frozen embryos	96	1(1.0)
Other microinsemination techniques	22	0
Assisted hatching	228	3(1.3)
Oocyte donation	20	0

* Do not include minor birthmarks of the skin, postural talipes, or clefty hips

43.7% IVF 20.6%
%, ICSI 19.1%, GIFT 27.1% (Table 2, Fig. 3).

IVF-ET 2.1%
(8/374), IVF-ET 5.2%(3/58)

3-5% ,
1.0%(1/96), 1.3%(3/228)

(Table 3), 가 가

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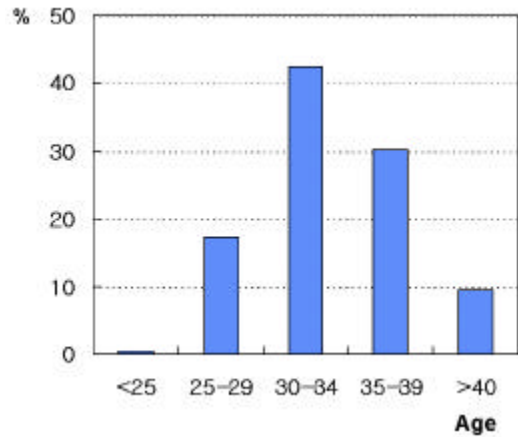


Fig. 4. Percentage of ART users, by ages

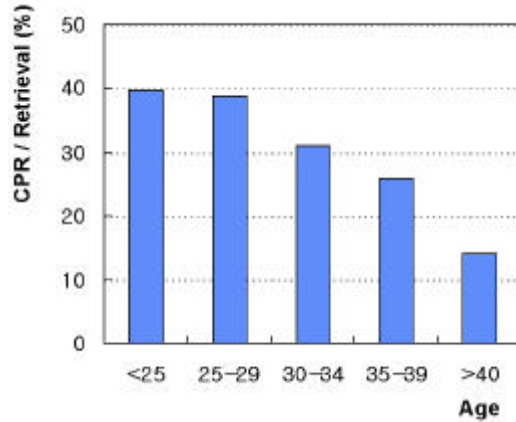


Fig. 5. Clinical pregnancy rates per oocyte retrieval by age of woman

25 0.5%, 25-29 가 17.3%, 30-34 42.4%, 35-39 30.3%, 40 9.5% 30-39 가 72.7% (Table 4, Fig. 4). 25 39.7%, 25-29 가 38.7%, 30-34 31.0%, 35-39 25.9%, 40 14.1% 가 (Fig. 5).

2)

(tubal factor only)
36.9% (other female only) 가 19.1% (male factors only)
15.1% (multiple causes) 11.4%

Table 4. Number of oocyte retrieval cycles and clinical pregnancies by maternal age

Maternal age at start of treatment	IVF		ICSI		GIFT	
	OR cycles	CP	OR cycles	CP	OR cycles	CP
Less than 25 years	41	15	27	12	0	0
25 - 29	1556	601	798	304	66	33
30 - 34	4232	1358	1610	440	104	45
35 - 39	2981	802	1235	287	39	14
40 and over	933	124	397	62	7	2

This table excludes cycles in which frozen/thawed embryos were transferred
 OR : oocyte retrieval CP : clinical pregnancies

Table 5. Number of oocyte retrieval cycles and clinical pregnancies by cause of infertility

Cause of infertility	IVF		ICSI		GIFT	
	OR cycles	CP	OR cycles	CP	OR cycles	CP
Tubal only	4805	1456	314	60	8	3
Other female only	1688	487	910	305	57	25
Male factor only	480	111	1602	471	12	5
Multiple causes	898	194	632	116	57	24
Unexplained	1814	583	551	146	79	37

This table excludes cycles in which frozen/thawed embryos were transferred
 OR : oocyte retrieval CP : clinical pregnancies

Table 6. Number of oocyte retrieval cycles and clinical pregnancies by type of ovulation induction

Ovulation induction	IVF		ICSI		GIFT	
	OR cycles	CP	OR cycles	CP	OR cycles	CP
GnRH analogues + other	9173	2696	2688	728	215	95
No GnRH analogues						
Clomiphene+any other	156	23	77	10	1	0
Other drugs	543	145	243	60	0	0
Natural cycles	96	5	64	5	0	0

This table excludes cycles in which frozen/thawed embryos were transferred
 OR : oocyte retrieval CP : clinical pregnancies

Table 7. Number of transfer cycles and clinical pregnancies by number of embryos/oocyte transferred

Number of embryos/oocytes transferred	IVF		ICSI		GIFT	
	transfer cycles	CP	transfer cycles	CP	transfer cycles	CP
One	717	61	387	29	4	1
Two	1468	488	526	72	9	2
Three	2188	808	653	188	22	11
Four	2748	709	1136	384	29	12
Five	1449	481	665	239	34	17
Six or more	998	366	546	193	115	52

This table excludes cycles in which frozen/thawed embryos were transferred
 CP : clinical pregnancies

Fig. 6. Primary diagnoses for ART procedures

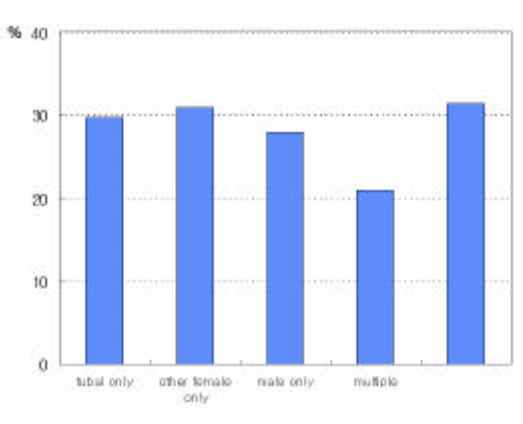


Fig. 7. Clinical pregnancy rates per oocyte retrieval by cause of infertility

(unexplained) 17.6% (Table 5, Fig. 6).
 가 29.6%,
 가 30.8%, 가
 28.0%, 가 21.0%, 31.3%
 가
 가
 (Fig. 7).
 가
 .
 3)
 (製劑) GnRH agonist(GnRHa) 가
 91.1% GnRHa가
 , clomiphene 가
 가 1.8%, 가
 1.2% 5.9%가
 (Table 6).
 GnRHa 가

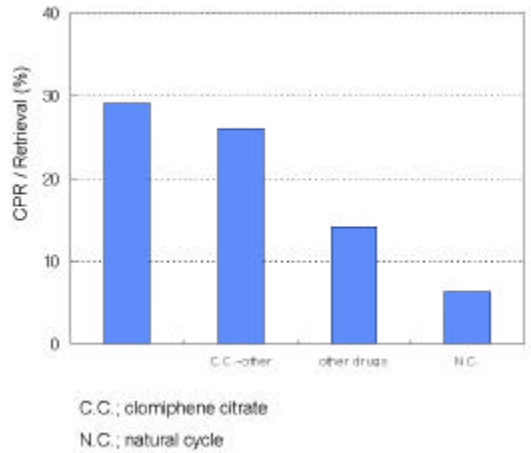


Fig. 8. Clinical pregnancy rates per oocyte retrieval by type of ovulation induction

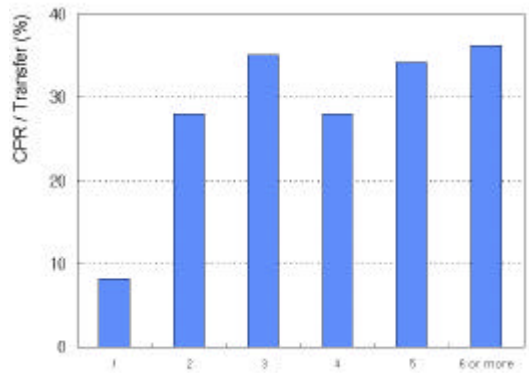


Fig. 9. Clinical pregnancy rates per transfer by number of embryos/oocytes transferred

29.1%, 가
 14.1%, clomiphene 가 26.1%,
 6.3% (Fig. 8).
 4)
 IVF-ET ICSI
 4 가 28.8% 가 3 가 21.1%, 5
 15.7%, 2 가 14.8%, 6
 11.5% (Table 7).
 1 8.2%
 2 가 28.1%, 3 35.1% 가
 가가 가 6
 36.2%
 (Fig 9).

Table 8. Outcome of clinical pregnancies

Outcome of clinical pregnancies	IVF	ICSI	GIFT
Spontaneous abortion	451	179	11
Ectopic pregnancy	93	16	3
Induced abortion	10	0	2
Stillbirth:20-27wks	73	23	1
Stillbirth:28wks or more	11	4	0
Live birth	2 158	804	63

This table excludes cycles in which frozen/thawed embryos were transferred

Table 9. Live births, stillbirths, and early neonatal deaths* by plurality

	Singletons	Twins	Triples	Quadruplets or more
IVF				
Live births	1487	759	88	4
Stillbirths:20-27wks	42	29	5	0
Stillbirths:28wks or more	13	7	0	0
Early neonatal deaths	25	1	1	0
ICSI				
Live births	535	378	35	7
Stillbirths:20-27wks	7	20	0	0
Stillbirths:28wks or more	3	2	0	0
Early neonatal deaths	5	0	0	0
GIFT				
Live births	47	34	0	0
Stillbirths:20-27wks	0	1	0	0
Stillbirths:28wks or more	0	0	0	0
Early neonatal deaths	1	0	0	0

* Early neonatal deaths are liveborn infants dying in the first 7 days. They should be included in the numbers both of live births and of early neonatal deaths.

Table 10. Gestational age of pregnancies of 20 or more weeks by plurality

Gestational age (completed weeks)	Singletons	Twins	Triples	Quadruplets or more
IVF				
20-27	17	13	4	0
28-31	24	22	5	1
32-36	66	75	10	1
37-41	404	139	18	2
42 or more	9	5	2	0
Not known	83	37	2	0
Total	603	291	41	4
ICSI				
20-27	4	10	1	1
28-31	2	1	1	0
32-36	31	47	5	3
37-41	286	74	8	1
42 or more	2	3	0	0
Not known	62	34	3	0
Total	387	169	18	5
GIFT				
20-27	0	1	0	0
28-31	1	0	0	0
32-36	4	7	0	0
37-41	26	6	0	0
42 or more	0	0	0	0
Not known	12	4	0	0
Total	43	18	0	0

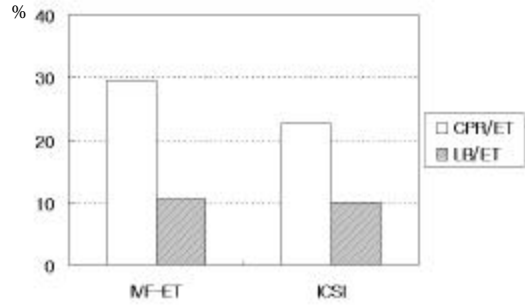
Fig. 10. Outcomes of clinical pregnancies resulting from ART

5) 가 , 2.9%가 , 2.9%가 , 16.4%가 20 , 0.3%가 , 77.5% (Table 8, Fig. 10).

6) (live birth) 34.7%, 3.6%, 61.3%가 0.3% 38.6% 가 0.4-5.4% (Fig. 11). , , 20 20 95.1%, 95.3%가 95.6%, (Table 9).

70.4%, 37 47.5% 47.4% . 37 14.4%, 36.8%, 44.1% 가 (Table 10).

2,500gm



CPR; clinical pregnancy rate
ET; embryo transfer
LB; live birth

Fig. 12. Success rates of ART with frozen embryos and fresh embryos

가 10.6%
32.7%, 2,500gm 78.7%,
58.4% (Table 11).

가 .

7) / (special techniques of sperm collection and/or assisted hatching)

(MESA) 가 94 , (TESE) 가 471
MESA 47.0%, TESE 36.6%
MESA 17.1%, TESE 23.9% .
2,378
26.6%, 21.8% (Table 12).

2. (oocyte donation)

336
가 219
116 .
39.3%, 36.2% ,
32.0%, 31.0% (Table 13).

3. (transfer of cryopreserved embryo)

1997 1,601
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6,744 .

Table 11. Birthweight of liveborn and stillborn infants of 20 or more weeks' gestation

Birthweight	Singletons	Twins	Triples	Quadruplets or more
IVF				
Less than 2500g	35	148	17	9
2500g or more	488	283	32	104
Birthweight not stated	50	36	4	14
Total	573	467	53	127
ICSI				
Less than 2500g	66	66	9	4
2500g or more	249	108	15	4
Birthweight not stated	56	27	6	1
Total	371	201	30	9
GIFT				
Less than 2500g	4	15	0	0
2500g or more	43	19	0	0
Birthweight not stated	0	0	0	0
Total	47	34	0	0

Table 12. Outcomes of special techniques of sperm collection and assisted hatching

	MESA	TESE	Assisted hatching	Other and unspecified techniques
Cycles with oocyte retrieval	94	471	2379	211
Cycles with embryo transfer	181	539	2339	232
Clinical pregnancies	85	197	622	80
(CPR per transfer, %)	(47.0)	(36.6)	(26.6)	(34.5)
Pregnancies with live births	31	129	509	62
(LB per transfer, %)	(17.1)	(23.9)	(21.8)	(26.7)

MESA : microsurgical epididymal sperm aspiration

TESE : testicular sperm extraction

Table 13. Transfer cycles and pregnancies after oocyte donation

	OD : IVF without freezing	OD : IVF with frozen/thawed embryos	OD : GIFT	Donor embryos
Transfer cycles	219	116	1	0
Clinical pregnancies	86	42	1	0
(CPR per transfer, %)	(39.3)	(36.2)	(100.0)	
Pregnancies with live births	70	36	1	0
(LB per transfer, %)	(32.0)	(31.0)	(100.0)	

OD : oocyte donation

Table 14. Outcomes of transfer of frozen/thawed embryos

	Combined ICSI	All techniques of OR excluding ICSI
Transfer cycles	297	1304
Clinical pregnancies	67	384
(CPR per transfer, %)	(22.6)	(29.5)
Outcome of clinical pregnancies		
Spontaneous abortion	10	49
Ectopic pregnancy	0	11
Induced abortion	1	2
Stillbirth:20-27weeks	0	3
Stillbirth:28 or more weeks	0	0
Early neonatal deaths	0	0
Live birth(LB per transfer, %)	28(10.1)	138(10.6)

Table 15. Live births, stillbirths, and early neonatal deaths by plurality after transfer of frozen/thawed embryos

	Singletons	Twins	Triplets	Quadruplets or more
Combined ICSI				
Live births	20	8	0	0
Stillbirths:20-27wks	0	0	0	0
Stillbirths:28wks or more	0	0	0	0
Early neonatal deaths	0	0	0	0
All techniques of oocyte retrieval excluding ICSI				
Live births	83	39	14	2
Stillbirths:20-27wks	1	1	1	0
Stillbirths:28wks or more	0	0	0	0
Early neonatal deaths	0	0	0	0

LB : live births

Table 16. Gestational age of pregnancies of 20 or more weeks by plurality after transfer of frozen/thawed embryos

Gestational age(completed weeks)	Singletons	Twins	Triplets	Quadruplets or more
Combined ICSI				
20-27	0	0	0	0
28-31	0	0	0	0
32-36	1	2	0	0
37-41	16	2	0	0
42 or more	0	0	0	0
Not known	3	0	0	0
Total	20	4	0	0
All techniques of oocyte retrieval excluding ICSI				
20-27	1	1	7	0
28-31	1	1	0	0
32-36	7	8	3	0
37-41	59	15	6	1
42 or more	1	0	0	0
Not known	5	2	0	0
Total	74	27	16	1

Table 17. Birthweight of liveborn & stillborn infants of 20 or more weeks' gestation after transfer of frozen/thawed embryos

Birthweight	Singletons	Twins	Triplets	Quadruplets or more
Combined ICSI				
less than 2500g	1	4	0	0
2500g or more	4	8	0	0
birthweight not stated	5	0	0	0
total	20	12	0	0
All techniques of oocyte retrieval excluding ICSI				
less than 2500g	10	13	7	0
2500g or more	60	16	7	2
birthweight not stated	11	10	0	0
total	81	39	14	2

1,601 ICSI 10.6% (Fig. 12).
 297 ICSI
 1,304
 22.6% 29.5% 10.1%

Table 14, 15, 16, 17

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