

# **Assisted reproductive technology in Australia and New Zealand 2022**

## **Supplementary tables**

**September 2024**

# Contents

Abbreviations and symbols .....	ii
Introductory Notes .....	iii
Treatment cycles undertaken in 2022 and resulting pregnancy and birth outcomes .....	1

# Abbreviations and symbols

ART	assisted reproductive technology
DET	double embryo transfer
GIFT	gamete intrafallopian transfer
ICSI	intracytoplasmic sperm injection
IVF	in vitro fertilisation
OPU	oocyte pick-up
PESA	percutaneous epididymal sperm aspiration
PGT	preimplantation genetic testing
SET	single embryo transfer
..	not applicable
%	percentage
n	number

# Introductory Notes

This document contains the supplementary on-line tables for the Assisted Reproductive Technology in Australia and New Zealand 2022 report. These supplementary tables should be read in conjunction with the report. A copy of the report can be found at the National Perinatal Epidemiology and Statistics Unit website:

<https://www.unsw.edu.au/research/npesu/annual-reports>

# Treatment cycles undertaken in 2022 and resulting pregnancy and birth outcomes

This supplementary report presents information on assisted reproductive technology (ART) treatment cycles undertaken in fertility clinics in Australia and New Zealand in 2022, along with the resulting pregnancy and birth outcomes.

The data presented in these supplementary tables are for autologous cycles, oocyte donation cycles and oocyte/embryo recipient cycles, and does not include information on donor sperm insemination, gamete intrafallopian transfer or surrogacy arrangements. The data reflects treatment cycles and not patients. Therefore, it is possible for an individual woman or couple to undergo more than one treatment cycle in a year and to experience more than one pregnancy. This means that the information reported about patient characteristics, such as age, parity and cause of infertility, is based on calculations in which individuals may be counted more than once.

The rates of clinical pregnancy and live birth are measured per initiated cycle. However, where the number of initiated cycles is not available or not applicable, for example when reporting outcomes from blastocyst or cleavage stage embryos (e.g. Table S5), rates are reported per embryo transfer cycle. Where applicable, percentages in tables have been calculated including the 'Not stated' category in the denominator. Totals and subtotals may not round to 100.0 due to rounding.

**Table S1: Treatment cycles by cause of infertility, treatment type and procedure, Australia and New Zealand, 2022**

Cause of infertility	Autologous				Oocyte/embryo recipient	All
	Fresh IVF	Fresh ICSI	Fresh other <sup>(a)</sup>	Thaw		
	n					
Tubal disease only	875	391	200	1,212	11	2,689
Endometriosis only	1,269	1,076	350	1,960	57	4,712
Other female factors only	5,661	5,491	2,456	7,924	1,249	22,781
Combined female factors only	1,323	1,055	388	2,282	180	5,228
Combined female-male factors	1,033	5,156	1,069	5,233	462	12,953
Male factor infertility only	608	5,227	842	5,138	107	11,922
Unexplained infertility	6,452	5,125	1,698	10,379	334	23,988
Not stated	0	0	0	0	1	1
Non-medical infertility	421	1,236	580	1,220	59	3,516
<b>All causes</b>	<b>17,642</b>	<b>24,757</b>	<b>7,583</b>	<b>35,348</b>	<b>2,460</b>	<b>87,790</b>
	%					
Tubal disease only	5.0	1.6	2.6	3.4	0.4	3.1
Endometriosis only	7.2	4.3	4.6	5.5	2.3	5.4
Other female factors only	32.1	22.2	32.4	22.4	50.8	25.9
Combined female factors only	7.5	4.3	5.1	6.5	7.3	6.0
Combined female-male factors	5.9	20.8	14.1	14.8	18.8	14.8
Male factor infertility only	3.4	21.1	11.1	14.5	4.3	13.6
Unexplained infertility	36.6	20.7	22.4	29.4	13.6	27.3
Not stated	0.0	0.0	0.0	0.0	0.0	0.0
Non-medical infertility	2.4	5.0	7.6	3.5	2.4	4.0
<b>All causes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Fresh other includes cycles in which oocytes were not retrieved, cycles with oocyte retrieval but no fertilisation and cancelled oocyte pick-up (OPU).

Note: Percentages in the table were calculated including the 'Not stated' category in the denominator. Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S2: Autologous treatment cycles by cause of infertility and source of sperm, Australia and New Zealand, 2022**

Cause of infertility	Source of sperm							
	Male intending parent		Donor		Not stated <sup>(a)</sup>		Total	
	n	%	n	%	n	%	n	%
Tubal disease only	2,483	3.2	4	0.3	191	2.7	2,678	3.1
Endometriosis only	4,303	5.6	22	1.7	330	4.7	4,655	5.5
Other female factors only	19,073	24.8	125	9.4	2,334	33.3	21,532	25.2
Combined female factors only	4,664	6.1	21	1.6	363	5.2	5,048	5.9
Combined female-male factors	11,076	14.4	407	30.6	1,008	14.4	12,491	14.6
Male factor infertility only	10,444	13.6	600	45.1	771	11.0	11,815	13.8
Unexplained infertility	22,096	28.7	113	8.5	1,445	20.6	23,654	27.7
Not stated	0	0.0	0	0.0	0	0.0	0	0.0
Non-medical infertility	2,849	3.7	37	2.8	571	8.1	3,457	4.1
<b>All causes</b>	<b>76,988</b>	<b>100.0</b>	<b>1,329</b>	<b>100.0</b>	<b>7,013</b>	<b>100.0</b>	<b>85,330</b>	<b>100.0</b>

(a) Includes cycles that did not progress to fertilisation (e.g., cancelled cycles, failed fertilisation, and freeze-all cycles)

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.





**Table S5: Outcome of embryo transfer cycles by stage of embryo development, Australia and New Zealand, 2022**

Stage/outcome of treatment	Fresh		Thaw		
	Cleavage-stage embryos	Blastocysts	Thawed and transferred cleavage-stage embryos	Thawed cleavage and transferred blastocysts	Thawed and transferred blastocysts
Embryo transfers	3,876	19,115	1,034	845	39,416
Clinical pregnancies	820	6,782	206	292	16,054
Live births <sup>(a)</sup>	600	5,365	147	231	12,840
<i>Clinical pregnancies per embryo transfer cycle (%)</i>	21.2	35.5	19.9	34.6	40.7
<i>Live births per embryo transfer cycle (%)</i>	15.5	28.1	14.2	27.3	32.6

(a) A live birth is the birth of one or more liveborn infants, with the birth of twins or higher order multiples counted as one live birth.

Note: Data should be interpreted with caution due to small numbers in certain cells.

**Table S6: Clinical pregnancies of less than 20 weeks gestation by cause of infertility and pregnancy outcome, Australia and New Zealand, 2022**

Cause of infertility	Pregnancy outcome							
	Miscarriage		Fetal reduction or termination		Ectopic/heterotopic pregnancy		Total	
	n	%	n	%	n	%	n	%
Tubal disease only	107	2.9	8	4.5	4	1.8	119	2.9
Endometriosis only	200	5.4	11	6.1	28	12.7	239	5.8
Other female factors only	962	25.9	50	27.9	49	22.2	1,061	25.8
Combined female factors only	230	6.2	10	5.6	20	9.0	260	6.3
Combined female-male factors	587	15.8	31	17.3	26	11.8	644	15.7
Male factor infertility only	475	12.8	14	7.8	22	10.0	511	12.4
Unexplained infertility	1,046	28.2	53	29.6	66	29.9	1,165	28.4
Not stated	0	0.0	0	0.0	0	0.0	0	0.0
Non-medical infertility	102	2.8	2	1.1	6	2.7	110	2.7
All causes	<b>3,709</b>	<b>100.0</b>	<b>179</b>	<b>100.0</b>	<b>221</b>	<b>100.0</b>	<b>4,109</b>	<b>100.0</b>

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S7: Births by cause of infertility and birth outcome, Australia and New Zealand, 2022**

Cause of infertility	Birth outcome					
	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		Total <sup>(c)</sup>	
	n	%	n	%	n	%
Tubal disease only	585	3.4	3	2.2	589	3.4
Endometriosis only	965	5.7	10	7.4	977	5.7
Other female factors only	3,626	21.3	29	21.5	3,660	21.3
Combined female factors only	1,013	6.0	13	9.6	1,029	6.0
Combined female-male factors	2,614	15.4	15	11.1	2,642	15.4
Male factor infertility only	2,674	15.7	21	15.6	2,702	15.7
Unexplained infertility	4,994	29.3	37	27.4	5,047	29.3
Not stated	0	0.0	0	0.0	0	0.0
Non-medical infertility	554	3.3	7	5.2	563	3.3
All causes	<b>17,025</b>	<b>100.0</b>	<b>135</b>	<b>100.0</b>	<b>17,209</b>	<b>100.0</b>

(a) A live birth is the birth of one or more liveborn infants, with the birth of twins or higher order multiples counted as one live birth.

(b) A stillbirth is birth of an infant after 20 or more weeks gestation or 400 grams or more birthweight that shows no signs of life. Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

(c) Total includes 49 births where birth outcome was unknown.

*Note:* Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S8: Births by gestational age and cause of infertility, Australia and New Zealand, 2022**

Gestational age (weeks)	Female factor				Combined female-male factors	Male factor infertility only	Unexplained infertility	Not stated	Non-medical infertility	All causes
	Tubal disease only	Endometriosis only	Other female factors only	Combined female factors only						
<i>Mean (weeks)</i>	37.9	38.0	37.9	37.9	38.2	38.2	38.1	..	38.2	38.1
	<b>n</b>									
≤ 27	9	14	54	14	27	24	53	0	5	200
28-31	8	13	46	15	21	34	48	0	3	188
32-36	69	97	335	106	234	221	462	0	42	1,566
< 37 <sup>(a)</sup>	86	124	435	135	282	279	563	0	50	1,954
≥ 37	503	853	3,225	894	2,360	2,423	4,484	0	513	15,255
Not stated	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>589</b>	<b>977</b>	<b>3,660</b>	<b>1,029</b>	<b>2,642</b>	<b>2,702</b>	<b>5,047</b>	<b>0</b>	<b>563</b>	<b>17,209</b>
	<b>%</b>									
≤ 27	1.5	1.4	1.5	1.4	1.0	0.9	1.1	0	0.9	1.2
28-31	1.4	1.3	1.3	1.5	0.8	1.3	1.0	0	0.5	1.1
32-36	11.7	9.9	9.2	10.3	8.9	8.2	9.2	0	7.5	9.1
< 37 <sup>(a)</sup>	14.6	12.7	11.9	13.1	10.7	10.3	11.2	..	8.9	11.4
≥ 37	85.4	87.3	88.1	86.9	89.3	89.7	88.8	0.0	91.1	88.6
Not stated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) A gestation of less than 37 weeks is defined as a preterm birth.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S9: Births by gestational age and maternal age, Australia and New Zealand, 2022**

Gestational age (weeks)	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
Mean (weeks)	38.1	38.1	38.2	38.1	37.9	37.3	38.1
	n						
≤ 27	1	29	68	75	38	11	222
28-31	0	15	69	88	35	8	215
32-36	11	138	554	697	311	72	1,783
< 37 <sup>(b)</sup>	12	182	691	860	384	91	2,220
≥ 37	91	1,353	5,549	7,003	2,783	386	17,165
Not stated	0	0	0	0	0	0	0
<b>Total</b>	<b>103</b>	<b>1,535</b>	<b>6,240</b>	<b>7,863</b>	<b>3,167</b>	<b>477</b>	<b>19,385</b>
	%						
≤ 27	1.0	1.9	1.1	1.0	1.2	2.3	1.1
28-31	0.0	1.0	1.1	1.1	1.1	1.7	1.1
32-36	10.7	9.0	8.9	8.9	9.8	15.1	9.2
< 37 <sup>(b)</sup>	11.7	11.9	11.1	10.9	12.1	19.1	11.5
≥ 37	88.3	88.1	88.9	89.1	87.9	80.9	88.5
Not stated	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Age at time of birth.

(b) A gestation of less than 37 weeks is defined as a preterm birth.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S10: Early pregnancy loss by maternal age, Australia and New Zealand, 2022**

Pregnancy outcome	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
	n						
Miscarriage	17	323	1,073	1,688	999	126	4,226
Termination or fetal reduction	0	11	52	80	66	7	216
Ecotopic or heterotopic pregnancy	0	27	75	98	48	5	253
<b>Total</b>	<b>17</b>	<b>361</b>	<b>1,200</b>	<b>1,866</b>	<b>1,113</b>	<b>138</b>	<b>4,695</b>
	%						
Miscarriage	100.0	89.5	89.4	90.5	89.8	91.3	90.0
Termination or fetal reduction	0.0	3.0	4.3	4.3	5.9	5.1	4.6
Ecotopic or heterotopic pregnancy	0.0	7.5	6.3	5.3	4.3	3.6	5.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Age at end of pregnancy.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S11: Births by plurality and maternal age, Australia and New Zealand, 2022**

Gestation	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
	n						
Singleton	100	1,485	6,073	7,639	3,089	467	18,853
Twin	3	49	163	221	78	10	524
Higher order multiple	0	1	4	3	0	0	8
<b>Total</b>	<b>103</b>	<b>1,535</b>	<b>6,240</b>	<b>7,863</b>	<b>3,167</b>	<b>477</b>	<b>19,385</b>
	%						
Singleton	97.1	96.7	97.3	97.2	97.5	97.9	97.3
Twin	2.9	3.2	2.6	2.8	2.5	2.1	2.7
Higher order multiple	0.0	0.1	0.1	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Age at time of birth.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S12: Birth outcomes by maternal age, Australia and New Zealand, 2022**

Birth outcome	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
	n						
Live birth <sup>(b)</sup>	101	1,520	6,174	7,788	3,131	469	19,183
Stillbirth <sup>(c)</sup>	1	15	48	52	27	8	151
Not stated	1	0	18	23	9	0	51
<b>Total</b>	<b>103</b>	<b>1,535</b>	<b>6,240</b>	<b>7,863</b>	<b>3,167</b>	<b>477</b>	<b>19,385</b>
	%						
Live birth <sup>(b)</sup>	98.1	99.0	98.9	99.0	98.9	98.3	99.0
Stillbirth <sup>(c)</sup>	1.0	1.0	0.8	0.7	0.9	1.7	0.8
Not stated	1.0	0.0	0.3	0.3	0.3	0.0	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Age at time of birth.

(b) A live birth is the birth of one or more liveborn infants, with the birth of twins or higher order multiples counted as one live birth.

(c) A stillbirth is the birth of an infant after 20 or more weeks gestation or 400 grams or more birthweight that shows no signs of life. Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

Note: Percentages in the table were calculated including the 'Not stated' category in the denominator. Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S13: Early pregnancy loss by number of embryos transferred, Australia and New Zealand, 2022**

Pregnancy outcome	Number of embryos transferred			All
	One	Two	Three or more	
	n			
Miscarriage	3,947	275	4	4,226
Termination or fetal reduction	204	12	0	216
Ecotopic or heterotopic pregnancy	237	16	0	253
<b>Total</b>	<b>4,388</b>	<b>303</b>	<b>4</b>	<b>4,695</b>
	%			
Miscarriage	89.9	90.8	100.0	90.0
Termination or fetal reduction	4.6	4.0	0.0	4.6
Ecotopic or heterotopic pregnancy	5.4	5.3	0.0	5.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Percentages in the table were calculated including the 'Not stated' category in the denominator. Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S14: Births by birth outcome and number of embryos transferred, Australia and New Zealand, 2022**

Birth outcome	Number of embryos transferred			All
	One	Two	Three or more	
	n			
Live birth <sup>(a)</sup>	18,350	833	0	19,183
Stillbirth <sup>(b)</sup>	144	7	0	151
Not stated	48	3	0	51
<b>Total</b>	<b>18,542</b>	<b>843</b>	<b>0</b>	<b>19,385</b>
	%			
Live birth <sup>(a)</sup>	99.0	98.8	..	99.0
Stillbirth <sup>(b)</sup>	0.8	0.8	..	0.8
Not stated	0.3	0.4	..	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>

(a) A live birth is the birth of one or more liveborn infants, with the birth of twins or higher order multiples counted as one live birth.

(b) A stillbirth is the birth of an infant after 20 or more weeks gestation or 400 grams or more birthweight that shows no signs of life. Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S15: Births by gestational age and number of embryos transferred, Australia and New Zealand, 2022**

Gestational age (weeks)	Number of embryos transferred			All
	One	Two	Three or more	
Mean (weeks)	38.1	37.2	..	38.1
	<b>n</b>			
≤ 27	203	19	0	222
28-31	190	25	0	215
32-36	1,619	164	0	1,783
< 37 <sup>(a)</sup>	2,012	208	0	2,220
≥ 37	16,530	635	0	17,165
Not stated	0	0	0	0
<b>Total</b>	<b>18,542</b>	<b>843</b>	<b>0</b>	<b>19,385</b>
	<b>%</b>			
≤ 27	1.1	2.3	..	1.1
28-31	1.0	3.0	..	1.1
32-36	8.7	19.5	..	9.2
< 37 <sup>(a)</sup>	10.9	24.7	..	11.5
≥ 37	89.1	75.3	..	88.5
Not stated	0.0	0.0	..	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>

(a) A gestation of less than 37 weeks is defined as preterm.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S16: Births by plurality, treatment type and procedure, Australia and New Zealand, 2022**

Gestation	Autologous			Oocyte/embryo recipient	All
	Fresh IVF	Fresh ICSI	Thaw		
	<b>n</b>				
Singleton	2,288	3,294	12,268	1,003	18,853
Twin	74	105	321	24	524
Higher order multiple	2	0	6	0	8
<b>Total</b>	<b>2,364</b>	<b>3,399</b>	<b>12,595</b>	<b>1,027</b>	<b>19,385</b>
	<b>%</b>				
Singleton	96.8	96.9	97.4	97.7	97.3
Twin	3.1	3.1	2.5	2.3	2.7
Higher order multiple	0.1	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S17: Gestational age of babies by birth outcomes, Australia and New Zealand, 2022**

Gestational age (weeks)	Birth outcome					
	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		Total <sup>(c)</sup>	
	n	%	n	%	n	%
<i>Mean (weeks)</i>	38.1		26.2		38.0	
≤ 27	126	0.6	122	70.1	249	1.2
28-31	253	1.3	8	4.6	261	1.3
32-36	2,092	10.6	19	10.9	2,112	10.6
< 37 <sup>(d)</sup>	2,471	12.5	149	85.6	2,622	13.2
≥ 37	17,229	87.5	25	14.4	17,303	86.8
Not stated	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>19,700</b>	<b>100.0</b>	<b>174</b>	<b>100.0</b>	<b>19,925</b>	<b>100.0</b>

(a) A live birth is the birth of an infant at 20 or more weeks gestation or 400 grams or more birthweight showing signs of life.

(b) A stillbirth is the birth of an infant after 20 or more weeks gestation or 400 grams or more birthweight that shows no signs of life. Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

(c) Includes 51 babies where the birth status was not adequately reported.

(d) A gestation of less than 37 weeks is defined as preterm.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S18: Birthweight of babies by birth outcomes, Australia and New Zealand, 2022**

Birthweight (grams)	Birth outcome					
	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		Total <sup>(c)</sup>	
	n	%	n	%	n	%
<i>Mean (grams)</i>	3,233		1,191		3,224	
< 1500	333	1.7	59	33.9	392	2.0
1500-2499	1,582	8.0	6	3.4	1,589	8.0
2500-3499	10,785	54.7	13	7.5	10,798	54.2
3500-4500	6,469	32.8	5	2.9	6,475	32.5
> 4500	199	1.0	0	0.0	199	1.0
Not stated	332	1.7	91	52.3	472	2.4
<b>Total</b>	<b>19,700</b>	<b>100.0</b>	<b>174</b>	<b>100.0</b>	<b>19,925</b>	<b>100.0</b>

(a) A live birth is the birth of an infant at 20 or more weeks gestation or 400 grams or more birthweight showing signs of life.

(b) A stillbirth is the birth of an infant after 20 or more weeks gestation or 400 grams or more birthweight that shows no signs of life. Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

(c) Includes 51 babies where the birth status was not adequately reported.

(d) A birthweight of less than 2,500 grams is defined as low birthweight.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.



**Table S19: Birthweight of babies by treatment type and procedure, Australia and New Zealand, 2022**

Birthweight (grams)	Autologous			Oocyte/embryo recipient	All
	Fresh IVF	Fresh ICSI	Thaw		
<i>Mean (grams)</i>	3,122	3,166	3,268	3,116	3,224
	<b>n</b>				
< 1500	65	69	219	39	392
1500-2499	244	330	904	111	1,589
2500-3499	1,401	1,985	6,843	569	10,798
3500-4500	650	1,007	4,515	303	6,475
> 4500	14	21	158	6	199
Not stated	68	92	289	23	472
<b>Total</b>	<b>2,442</b>	<b>3,504</b>	<b>12,928</b>	<b>1,051</b>	<b>19,925</b>
	<b>%</b>				
< 1500	2.7	2.0	1.7	3.7	2.0
1500-2499	10.0	9.4	7.0	10.6	8.0
2500-3499	57.4	56.6	52.9	54.1	54.2
3500-4500	26.6	28.7	34.9	28.8	32.5
> 4500	0.6	0.6	1.2	0.6	1.0
Not stated	2.8	2.6	2.2	2.2	2.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) A birthweight of less than 2,500 grams is defined as low birthweight.

Note: Totals and subtotals may not equal 100.0 due to rounding. Data should be interpreted with caution due to small numbers in certain cells.

**Table S20: Perinatal mortality of babies by type of death and treatment type and procedure, Australia and New Zealand, 2022**

Treatment type	All births	Live births	Still births <sup>(a)</sup>		Neonatal deaths <sup>(b)</sup>		Perinatal deaths <sup>(a,b)</sup>	
			n	Rate <sup>(c)(e)</sup>	n	Rate <sup>(d)(f)</sup>	n	Rate <sup>(c,g)</sup>
Fresh IVF	2,442	2,411	25	10.2	4	1.7	29	11.9
Fresh ICSI	3,504	3,466	27	7.7	3	0.9	30	8.6
Thaw	12,928	12,787	109	8.4	31	2.4	140	10.8
Oocyte/embryo recipient	1,051	1,036	13	12.4	5	4.8	18	17.1
<b>All</b>	<b>19,925</b>	<b>19,700</b>	<b>174</b>	<b>8.7</b>	<b>43</b>	<b>2.2</b>	<b>217</b>	<b>10.9</b>

(a) Stillbirth is reported by patients to fertility centre staff. These data are not official vital statistics.

(b) Neonatal deaths are reported by patients to fertility centre staff. These data are not official vital statistics.

(c) Stillbirth and perinatal mortality rates were calculated using all births (live births and stillbirths) as the denominator.

(d) Neonatal death rate was calculated using live births as the denominator.

(e) Stillbirths per 1,000 births.

(f) Neonatal deaths per 1,000 live births.

(g) Perinatal deaths per 1,000 births.

Note: The birth status was not adequately reported for 51 births.

**Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2022**

Age group (years) <sup>(a)</sup>	All births	Live births	Still births <sup>(b)</sup>		Neonatal deaths <sup>(c)</sup>		Perinatal deaths <sup>(b,c)</sup>	
			n	Rate <sup>(d,f)</sup>	n	Rate <sup>(e,g)</sup>	n	Rate <sup>(d,h)</sup>
≤ 24	106	104	1	9.4	0	0.0	1	9.4
25-29	1,586	1,569	17	10.7	4	2.5	21	13.2
30-34	6,411	6,337	56	8.7	12	1.9	68	10.6
35-39	8,090	8,006	61	7.5	16	2.0	77	9.5
40-44	3,245	3,205	31	9.6	10	3.1	41	12.6
≥ 45	487	479	8	16.4	1	2.1	9	18.5
<b>Total</b>	<b>19,925</b>	<b>19,700</b>	<b>174</b>	<b>8.7</b>	<b>43</b>	<b>2.2</b>	<b>217</b>	<b>10.9</b>

(a) Age at time of birth.

(b) Stillbirths are reported by patients to fertility centre staff. These data are not official vital statistics.

(c) Neonatal deaths are reported by patients to fertility centre staff. These data are not official vital statistics.

(d) Stillbirth and perinatal mortality rates were calculated using all births (live births and stillbirths) as the denominator.

(e) Neonatal death rate was calculated using live births as the denominator.

(f) Stillbirths per 1,000 births.

(g) Neonatal deaths per 1,000 live births.

(h) Perinatal deaths per 1,000 births.

Note: The birth status was not reported 51 births.

# List of Tables

Table S1: Treatment cycles by cause of infertility, treatment type and procedure, Australia and New Zealand, 2022	2
Table S2: Autologous treatment cycles by cause of infertility and source of sperm, Australia and New Zealand, 2022	3
Table S3: Outcome of embryo transfer cycles by technique of sperm retrieval, Australia and New Zealand, 2022	4
Table S4: Embryo transfer cycles by number of embryos transferred, treatment type and procedure, Australia and New Zealand, 2022	4
Table S5: Outcome of embryo transfer cycles by stage of embryo development, Australia and New Zealand, 2022	5
Table S6: Clinical pregnancies of less than 20 weeks gestation by cause of infertility and pregnancy outcome, Australia and New Zealand, 2022	5
Table S7: Births by cause of infertility and birth outcome, Australia and New Zealand, 2022	6
Table S8: Births by gestational age and cause of infertility, Australia and New Zealand, 2022	7
Table S9: Births by gestational age and maternal age, Australia and New Zealand, 2022	8
Table S10: Early pregnancy loss by maternal age, Australia and New Zealand, 2022	8
Table S11: Births by plurality and maternal age, Australia and New Zealand, 2022	9
Table S12: Birth outcomes by maternal age, Australia and New Zealand, 2022	9
Table S13: Early pregnancy loss by number of embryos transferred, Australia and New Zealand, 2022	10
Table S14: Births by birth outcome and number of embryos transferred, Australia and New Zealand, 2022	10
Table S15: Births by gestational age and number of embryos transferred, Australia and New Zealand, 2022	11
Table S16: Births by plurality, treatment type and procedure, Australia and New Zealand, 2022	11
Table S17: Gestational age of babies by birth outcomes, Australia and New Zealand, 2022	12
Table S18: Birthweight of babies by birth outcomes, Australia and New Zealand, 2022	12
Table S19: Birthweight of babies by treatment type and procedure, Australia and New Zealand, 2022	13
Table S20: Perinatal mortality of babies by type of death and treatment type and procedure, Australia and New Zealand, 2022	14
Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2022	14