

# **Assisted reproductive technology in Australia and New Zealand 2018**

## **Supplementary tables**

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# 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
PGD	preimplantation genetic diagnosis
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 2018 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:

<http://npesu.unsw.edu.au/surveillance/assisted-reproductive-technology-australia-new-zealand-2018>

# Treatment cycles undertaken in 2018 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 2018, 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, 2018**

Cause of infertility	Autologous			Thaw	Oocyte/embryo recipient	All
	Fresh IVF	Fresh ICSI	Fresh other <sup>(a)</sup>			
	n					
Male factor only	376	4,227	339	3,517	138	8,597
Female factor	7,266	7,790	2,637	10,954	1,583	30,230
<i>Tubal disease only</i>	814	494	116	1,186	48	2,658
<i>Endometriosis only</i>	886	1,031	314	1,321	84	3,636
<i>Other female factor only</i>	3,818	5,005	1,802	5,992	1,221	17,838
<i>Combined female factor</i>	1,748	1,260	405	2,455	230	6,098
Combined male/female factor	415	2,354	374	2,402	271	5,816
Unexplained	2,440	4,558	1,200	5,643	516	14,357
Not stated	4,158	7,127	2,787	8,508	990	23,570
<b>All causes</b>	<b>14,655</b>	<b>26,056</b>	<b>7,337</b>	<b>31,024</b>	<b>3,498</b>	<b>82,570</b>
	%					
Male factor only	2.6	16.2	4.6	11.3	3.9	10.4
Female factor	49.6	29.9	35.9	35.3	45.3	36.6
<i>Tubal disease only</i>	5.6	1.9	1.6	3.8	1.4	3.2
<i>Endometriosis only</i>	6.0	4.0	4.3	4.3	2.4	4.4
<i>Other female factor only</i>	26.1	19.2	24.6	19.3	34.9	21.6
<i>Combined female factor</i>	11.9	4.8	5.5	7.9	6.6	7.4
Combined male/female factor	2.8	9.0	5.1	7.7	7.7	7.0
Unexplained	16.6	17.5	16.4	18.2	14.8	17.4
Not stated	28.4	27.4	38.0	27.4	28.3	28.5
<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, 2018**

Cause of infertility	Source of sperm							
	Husband/partner		Donor		Not stated		Total	
	n	%	n	%	n	%	n	%
Male factor only	7,672	90.7	546	6.5	241	3.5	8,459	100.0
Female factor	23,670	82.6	2,801	9.8	2,176	7.6	28,647	100.0
<i>Tubal disease only</i>	2,447	93.8	70	2.7	93	3.6	2,610	100.0
<i>Endometriosis only</i>	3,040	85.6	236	6.6	276	7.8	3,552	100.0
<i>Other female factor only</i>	12,968	78.0	2,114	12.7	1,535	9.2	16,617	100.0
<i>Combined female factor</i>	5,215	88.9	381	6.5	272	4.6	5,868	100.0
Combined male/female factor	5,017	90.5	253	4.6	275	5.0	5,545	100.0
Unexplained	11,307	81.7	1,537	11.1	997	7.2	13,841	100.0
Not stated	17,407	77.1	2,561	11.3	2,612	11.6	22,580	100.0
<b>All causes</b>	<b>65,073</b>	<b>82.3</b>	<b>7,698</b>	<b>9.7</b>	<b>6,301</b>	<b>8.0</b>	<b>79,072</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 S3: Outcome of embryo transfer cycles by technique of sperm retrieval, Australia and New Zealand, 2018**

Stage/outcome of treatment	Site of sperm extraction				
	Ejaculate	Epididymis <sup>(a)</sup>	Testicular	Other	Not stated
Embryo transfers	53,259	480	1,718	12	932
Clinical pregnancies	18,248	166	610	3	382
Live births <sup>(b)</sup>	14,450	125	494	2	316
<i>Clinical pregnancies per transfer cycle (%)</i>	34.3	34.6	35.5	25.0	41.0
<i>Live births per transfer cycle (%)</i>	27.1	26.0	28.8	16.7	33.9

(a) Epididymal sperm is extracted by either open biopsy or percutaneous epididymal sperm aspiration (PESA).

(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.

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

**Table S4: Embryo transfer cycles by number of embryos transferred, treatment type and procedure, Australia and New Zealand, 2018**

Number of embryos	Autologous				Oocyte/embryo recipient	All
	Fresh IVF	Fresh ICSI	Thaw			
	<b>n</b>					
1	8,032	12,599	28,052		2,416	51,099
2	906	2,111	1,955		266	5,238
≥ 3	4	52	8		0	64
<b>Total</b>	<b>8,942</b>	<b>14,762</b>	<b>30,015</b>		<b>2,682</b>	<b>56,401</b>
	<b>%</b>					
1	89.8	85.3	93.5		90.1	90.6
2	10.1	14.3	6.5		9.9	9.3
≥ 3	0	0.4	0		0	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>

Note: 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, 2018**

Stage/outcome of treatment	Fresh		Thaw		
	Cleavage embryos	Blastocysts	Thawed and transferred cleavage embryos	Thawed cleavage and transferred blastocysts	Thawed and transferred blastocysts
Embryo transfers	5,667	18,565	1,882	744	29,543
Clinical pregnancies	1,234	6,369	385	291	11,130
Live births <sup>(a)</sup>	946	5,007	299	223	8,912
<i>Clinical pregnancies per transfer cycle (%)</i>	21.8	34.3	20.5	39.1	37.7
<i>Live deliveries per transfer cycle (%)</i>	16.7	27.0	15.9	30.0	30.2

(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, 2018**

Stage/outcome of treatment	Pregnancy outcome							
	Miscarriage		Fetal reduction or termination		Ectopic/heterotopic pregnancy		Total	
	n	%	n	%	n	%	n	%
Male factor only	363	92.8	17	4.3	11	2.8	391	100.0
Female factor	1,373	90.2	60	3.9	89	5.8	1,522	100.0
<i>Tubal disease only</i>	121	91.7	3	2.3	8	6.1	132	100.0
<i>Endometriosis only</i>	158	90.3	9	5.1	8	4.6	175	100.0
<i>Other female factor only</i>	796	90.8	35	4.0	46	5.2	877	100.0
<i>Combined female factor</i>	298	88.2	13	3.8	27	8.0	338	100.0
Combined male/female factor	284	89.9	15	4.7	17	5.4	316	100.0
Unexplained	586	92.3	23	3.6	26	4.1	635	100.0
Not stated	848	91.5	19	2.0	60	6.5	927	100.0
<b>All causes</b>	<b>3,454</b>	<b>91.1</b>	<b>134</b>	<b>3.5</b>	<b>203</b>	<b>5.4</b>	<b>3,791</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, 2018**

Cause of infertility	Birth outcome					
	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		Total <sup>(c)</sup>	
	n	%	n	%	n	%
Male factor only	1,889	99.2	6	0.3	1,905	100.0
Female factor	5,133	99.0	33	0.6	5,183	100.0
<i>Tubal disease only</i>	513	99.2	3	0.6	517	100.0
<i>Endometriosis only</i>	689	99.9	0	0	690	100.0
<i>Other female factor only</i>	2,760	98.7	24	0.9	2,796	100.0
<i>Combined female factor</i>	1,171	99.2	6	0.5	1,180	100.0
Combined male/female factor	1,341	99.3	6	0.4	1,350	100.0
Unexplained	2,792	99.3	12	0.4	2,813	100.0
Not stated	4,232	98.7	24	0.6	4,288	100.0
<b>All causes</b>	<b>15,387</b>	<b>99.0</b>	<b>81</b>	<b>0.5</b>	<b>15,539</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 71 births where birth outcome was unknown

*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 S8: Births by gestational age and cause of infertility, Australia and New Zealand, 2018**

Gestational age (weeks)	Female factor						Un-explained	Not stated	All causes
	Male factor only	Tubal disease only	Endometriosis only	Other female factor only	Combined female factor	Combined male/female factor			
<i>Mean (weeks)</i>	38.2	38.1	38.1	38.3	38.1	38.0	37.9	38.1	38.1
	<b>n</b>								
≤ 27	12	3	13	9	46	32	5	19	139
28-31	18	6	12	19	49	47	8	31	190
32-36	117	73	133	156	392	273	55	264	1,463
< 37 <sup>(a)</sup>	147	82	158	184	487	352	68	314	1792
≥ 37	1,032	608	1,192	1,722	3,799	2,443	449	2,498	13,743
<b>Total</b>	<b>1,180</b>	<b>690</b>	<b>1,350</b>	<b>1,906</b>	<b>4,287</b>	<b>2,796</b>	<b>517</b>	<b>2,813</b>	<b>15,539</b>
	<b>%</b>								
≤ 27	1	0.4	1	0.5	1.1	1.1	1	0.7	0.9
28-31	1.5	0.9	0.9	1	1.1	1.7	1.5	1.1	1.2
32-36	9.9	10.6	9.9	8.2	9.1	9.8	10.6	9.4	9.4
< 37 <sup>(a)</sup>	12.4	11.9	11.8	9.7	11.3	12.6	13.1	11.2	11.5
≥ 37	87.5	88.1	88.3	90.3	88.6	87.4	86.8	88.8	88.4
<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>	<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, 2018**

Gestational age (weeks)	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
Mean (weeks)	38.3	38.1	38.2	38.2	37.9	37.6	38.1
	n						
≤ 27	2	16	55	49	16	1	139
28-31	0	18	60	79	28	5	190
32-36	8	144	477	571	220	43	1,463
< 37 <sup>(b)</sup>	10	178	592	699	264	49	1792
≥ 37	99	1,269	4,601	5,436	2,094	244	13,743
<b>Total<sup>(c)</sup></b>	<b>109</b>	<b>1,449</b>	<b>5,194</b>	<b>6,136</b>	<b>2,358</b>	<b>293</b>	<b>15,539</b>
	%						
≤ 27	1.8	1.1	1.1	0.8	0.7	0.3	0.9
28-31	0	1.2	1.2	1.3	1.2	1.7	1.2
32-36	7.3	9.9	9.2	9.3	9.3	14.7	9.4
< 37 <sup>(b)</sup>	9.1	12.2	11.5	11.4	11.2	16.7	11.5
≥ 37	90.8	87.6	88.6	88.6	88.8	83.3	88.4
<b>Total<sup>(c)</sup></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.

(c) Includes 2 cycles where the gestational age was not reported.

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, 2018**

Pregnancy outcome	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
	n						
Miscarriage	22	240	957	1,339	799	97	3,454
Termination or fetal reduction	0	14	40	49	30	1	134
Ectopic or heterotopic pregnancy	2	27	68	75	28	3	203
<b>Total</b>	<b>24</b>	<b>281</b>	<b>1,065</b>	<b>1,463</b>	<b>857</b>	<b>101</b>	<b>3,791</b>
	%						
Miscarriage	91.7	85.4	89.9	91.5	93.2	96	91.1
Termination or fetal reduction	0	5.0	3.8	3.3	3.5	1.0	3.5
Ectopic or heterotopic pregnancy	8.3	9.6	6.4	5.1	3.3	3.0	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, 2018**

Gestation	Age group (years) <sup>(a)</sup>						All
	≤ 24	25-29	30-34	35-39	40-44	≥ 45	
	n						
Singleton	107	1,397	5,019	5,935	2,290	287	15,035
Twin	2	52	173	198	65	6	496
Higher order multiple	0	0	2	3	3	0	8
<b>Total</b>	<b>109</b>	<b>1,449</b>	<b>5,194</b>	<b>6,136</b>	<b>2,358</b>	<b>293</b>	<b>15,539</b>
	%						
Singleton	98.2	96.4	96.6	96.7	97.1	98	96.8
Twin	1.8	3.6	3.3	3.2	2.8	2.0	3.2
Higher order multiple	0	0	0	0	0.1	0	0.1
<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, 2018**

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>	109	1,434	5,148	6,069	2,337	290	15,387
Stillbirth <sup>(c)</sup>	0	8	26	36	10	1	81
Not stated	0	8	19	31	11	2	71
<b>Total</b>	<b>109</b>	<b>1,450</b>	<b>5,193</b>	<b>6,136</b>	<b>2,358</b>	<b>293</b>	<b>15,539</b>
	%						
Live birth <sup>(b)</sup>	100	99.0	99.1	98.9	99.1	99.0	99.0
Stillbirth <sup>(c)</sup>	0	0.6	0.5	0.6	0.4	0.3	0.5
Not stated	0	0.5	0.4	0.5	0.5	0.7	0.5
<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, 2018**

Pregnancy outcome	Number of embryos transferred			All
	One	Two	Three or more	
	<b>n</b>			
Miscarriage	3,082	370	2	3,454
Fetal reduction or termination	122	12	0	134
Ectopic or heterotopic pregnancy	182	21	0	203
<b>Total</b>	<b>3,386</b>	<b>403</b>	<b>2</b>	<b>3,791</b>
	<b>%</b>			
Miscarriage	91.0	91.8	100.0	91.1
Fetal reduction or termination	3.6	3.0	0	3.5
Ectopic or heterotopic pregnancy	5.4	5.2	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, 2018**

Birth outcome	Number of embryos transferred			All
	One	Two	Three or more	
	<b>n</b>			
Live birth <sup>(a)</sup>	14,252	1,129	6	15,387
Stillbirth <sup>(b)</sup>	73	8	0	81
Not stated	60	11	0	71
<b>Total</b>	<b>14,385</b>	<b>1,148</b>	<b>6</b>	<b>15,539</b>
	<b>%</b>			
Live birth <sup>(a)</sup>	99.1	98.4	100.0	99.0
Stillbirth <sup>(b)</sup>	0.5	0.7	0	0.5
Not stated	0.4	0.9	0	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</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:* 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 S15: Births by gestational age and number of embryos transferred, Australia and New Zealand, 2018**

Gestational age (weeks)	Number of embryos transferred			All
	One	Two	Three or more	
<i>Mean (weeks)</i>	38.2	37.3	38.0	38.1
	<b>n</b>			
≤ 27	126	13	0	139
28-31	153	37	0	190
32-36	1,257	206	0	1,463
< 37 <sup>(a)</sup>	1,536	256	0	1,792
≥ 37	12,846	891	6	13,743
<b>Total</b>	<b>14,386</b>	<b>1,147</b>	<b>6</b>	<b>15,539</b>
	<b>%</b>			
≤ 27	0.9	1.1	0	0.9
28-31	1.1	3.2	0	1.2
32-36	8.7	18.0	0	9.4
< 37 <sup>(a)</sup>	10.7	22.3	0	11.5
≥ 37	89.3	77.7	100.0	88.4
<b>Total</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 preterm.

(b) Includes 2 cycles where the gestation age was not reported

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, 2018**

Gestation	Autologous				All
	Fresh IVF	Fresh ICSI	Thaw	Oocyte/embryo recipient	
	<b>n</b>				
Singleton	3,439	2,223	8,632	741	15,035
Twin	125	68	276	27	496
Higher order multiple	2	0	6	0	8
<b>Total</b>	<b>3,566</b>	<b>2,291</b>	<b>8,914</b>	<b>768</b>	<b>15,539</b>
	<b>%</b>				
Singleton	96.4	97.0	96.8	96.5	96.8
Twin	3.5	3.0	3.1	3.5	3.2
Higher order multiple	0.1	0	0.1	0	0.1
<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, 2018**

Gestational age (weeks)	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		All <sup>(c)</sup>	
	n	%	n	%	n	%
<i>Mean (weeks)</i>	38.1		27.7		38.0	
≤ 27	107	67.7	50	31.6	158	100.0
28-31	220	94	12	5.1	234	100.0
32-36	1,752	99.2	15	0.8	1,767	100.0
< 37 <sup>(d)</sup>	2,079	96.3	77	3.6	2,159	100.0
≥ 37	13,809	99.4	12	0.1	13,888	100.0
Not Stated	3	100	0	0	4	100.0
<b>Total<sup>(e)</sup></b>	<b>15,891</b>	<b>99.0</b>	<b>89</b>	<b>0.6</b>	<b>16,051</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 71 babies where the birth status was not adequately reported

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

(e) Includes 2 babies where the gestation age was not reported

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, 2018**

Birthweight (grams)	Live birth <sup>(a)</sup>		Stillbirth <sup>(b)</sup>		All <sup>(c)</sup>	
	n	%	n	%	n	%
<i>Mean (grams)</i>	3,224		1,287		3,218	
< 1,000	95	0.6	32	36	127	0.8
1,000-1,499	163	1	4	4.5	167	1
1,500-1,999	346	2.2	2	2.2	348	2.2
2,000-2,499	965	6.1	6	6.7	971	6
< 2,500 <sup>(d)</sup>	1,569	9.9	44	49.4	1,613	10
2500-2,999	2,969	18.7	5	5.6	2,974	18.5
3,000-3,499	5,819	36.6	4	4.5	5,824	36.3
3,500-3,999	4,112	25.9	2	2.2	4,114	25.6
≥ 4,000	1,230	7.7	0	0	1,230	7.7
Not stated	192	1.2	34	38.2	296	1.8
<b>Total</b>	<b>15,891</b>	<b>100.0</b>	<b>89</b>	<b>100.0</b>	<b>16,051</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 71 babies where the birth status was not 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, 2018**

Birthweight (grams)	Autologous				All
	Fresh IVF	Fresh ICSI	Thaw	Oocyte/embryo recipient	
<i>Mean (grams)</i>	3,135	3,143	3,274	3,173	3,218
	n				
< 1,000	34	25	63	5	127
1,000-1,499	52	32	70	13	167
1,500-1,999	95	68	165	20	348
2,000-2,499	268	161	479	63	971
< 2,500 <sup>(a)</sup>	449	286	777	101	1613
2,500-2,999	769	467	1,590	148	2,974
3,000-3,499	1,344	905	3,294	281	5,824
3,500-3,999	858	517	2,553	186	4,114
≥ 4,000	209	135	826	60	1,230
Not stated	66	49	162	19	296
<b>Total</b>	<b>3,695</b>	<b>2,359</b>	<b>9,202</b>	<b>795</b>	<b>16,051</b>
	%				
< 1,000	0.9	1.1	0.7	0.6	0.8
1,000-1,499	1.4	1.4	0.8	1.6	1.0
1,500-1,999	2.6	2.9	1.8	2.5	2.2
2,000-2,499	7.3	6.8	5.2	7.9	6.0
< 2,500 <sup>(a)</sup>	12.2	12.2	8.5	12.6	10.0
2,500-2,999	20.8	19.8	17.3	18.6	18.5
3,000-3,499	36.4	38.4	35.8	35.3	36.3
3,500-3,999	23.2	21.9	27.7	23.4	25.6
≥ 4,000	5.7	5.7	9.0	7.5	7.7
Not stated	1.8	2.1	1.8	2.4	1.8
<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: 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 S20: Perinatal mortality of babies by type of death and treatment type and procedure, Australia and New Zealand, 2018**

Treatment type	All births	Live births	Stillbirths <sup>(a)</sup>		Neonatal deaths		Perinatal deaths <sup>(b)</sup>	
			n	Rate <sup>(c,e)</sup>	n	Rate <sup>(d,f)</sup>	n	Rate <sup>(c,g)</sup>
Fresh IVF	2,359	2,338	13	5.5	5	2.1	18	7.6
Fresh ICSI	3,695	3,656	22	6	9	2.5	31	8.4
Thaw	9,202	9,109	49	5.3	27	3	76	8.3
Oocyte/embryo recipient	795	788	5	6.3	1	1.3	6	7.5
<b>All</b>	<b>16,051</b>	<b>15,891</b>	<b>89</b>	<b>5.5</b>	<b>42</b>	<b>2.6</b>	<b>131</b>	<b>8.2</b>

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

(b) Perinatal 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 71 babies.

**Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2018**

Age group (years) <sup>(a)</sup>	All births	Live births	Stillbirths <sup>(b)</sup>		Neonatal deaths		Perinatal deaths <sup>(c)</sup>	
			n	Rate <sup>(d,f)</sup>	n	Rate <sup>(e,g)</sup>	n	Rate <sup>(d,h)</sup>
≤ 25	111	111	0	0	1	9	1	9
25-30	1,501	1,485	8	5.3	3	2	11	7.3
30-34	5,371	5,323	28	5.2	16	3	44	8.2
35-39	6,340	6,269	41	6.5	17	2.7	58	9.1
40-44	2,429	2,407	11	4.5	5	2.1	16	6.6
≥ 45	299	296	1	3.3	0	0	1	3.3
<b>Total</b>	<b>16,051</b>	<b>15,891</b>	<b>89</b>	<b>5.5</b>	<b>42</b>	<b>2.6</b>	<b>131</b>	<b>8.2</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) Perinatal 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 for 71 babies.

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