

Assisted reproductive technology in Australia and New Zealand 2017

Supplementary tables

September 2019

Contents

| | |
|--|-----|
| Abbreviations and symbols..... | ii |
| Introductory Notes | iii |
| Treatment cycles undertaken in 2017 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 |
| 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 2017 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-2017>

Treatment cycles undertaken in 2017 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 2017, 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 delivery 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, 2017

| Cause of infertility | Autologous | | | Thaw | Oocyte/embryo recipient | All |
|---------------------------------|---------------|---------------|----------------------------|---------------|-------------------------|---------------|
| | Fresh IVF | Fresh ICSI | Fresh other ^(a) | | | |
| | n | | | | | |
| Male factor only | 354 | 4,323 | 601 | 3,566 | 106 | 8,950 |
| Female factor | 6,261 | 7,360 | 3,044 | 9,832 | 1,556 | 28,053 |
| <i>Tubal disease only</i> | 805 | 600 | 200 | 1,167 | 45 | 2,817 |
| <i>Endometriosis only</i> | 760 | 931 | 310 | 1,215 | 99 | 3,315 |
| <i>Other female factor only</i> | 3,065 | 4,632 | 2,001 | 5,299 | 1,154 | 16,151 |
| <i>Combined female factor</i> | 1,631 | 1,197 | 533 | 2,151 | 258 | 5,770 |
| Combined male/female factor | 593 | 3,592 | 684 | 3,288 | 398 | 8,555 |
| Unexplained | 2,796 | 5,499 | 1,605 | 6,415 | 608 | 16,923 |
| Not stated | 3,018 | 5,654 | 2,161 | 6,707 | 648 | 18,188 |
| All causes | 13,022 | 26,428 | 8,095 | 29,808 | 3,316 | 80,669 |
| | % | | | | | |
| Male factor only | 2.7 | 16.4 | 7.4 | 12.0 | 3.2 | 11.1 |
| Female factor | 48.1 | 27.8 | 37.6 | 33 | 46.9 | 34.8 |
| <i>Tubal disease only</i> | 6.2 | 2.3 | 2.5 | 3.9 | 1.4 | 3.5 |
| <i>Endometriosis only</i> | 5.8 | 3.5 | 3.8 | 4.1 | 3.0 | 4.1 |
| <i>Other female factor only</i> | 23.5 | 17.5 | 24.7 | 17.8 | 34.8 | 20.0 |
| <i>Combined female factor</i> | 12.5 | 4.5 | 6.6 | 7.2 | 7.8 | 7.2 |
| Combined male/female factor | 4.6 | 13.6 | 8.4 | 11.0 | 12.0 | 10.6 |
| Unexplained | 21.5 | 20.8 | 19.8 | 21.5 | 18.3 | 21.0 |
| Not stated | 23.2 | 21.4 | 26.7 | 22.5 | 19.5 | 22.5 |
| All causes | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(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, 2017

| Cause of infertility | Source of sperm | | | | | | | |
|---------------------------------|-----------------|-------------|--------------|------------|--------------|------------|---------------|--------------|
| | Husband/partner | | Donor | | Not stated | | Total | |
| | n | % | n | % | n | % | n | % |
| Male factor only | 7,880 | 89.1 | 506 | 5.7 | 458 | 5.2 | 8,844 | 100.0 |
| Female factor | 21,633 | 81.6 | 2,261 | 8.5 | 2,603 | 9.8 | 26,497 | 100.0 |
| <i>Tubal disease only</i> | 2,535 | 91.5 | 69 | 2.5 | 168 | 6.1 | 2,772 | 100.0 |
| <i>Endometriosis only</i> | 2,746 | 85.4 | 200 | 6.2 | 270 | 8.4 | 3,216 | 100.0 |
| <i>Other female factor only</i> | 11,604 | 77.4 | 1,708 | 11.4 | 1,685 | 11.2 | 14,997 | 100.0 |
| <i>Combined female factor</i> | 4,748 | 86.1 | 284 | 5.2 | 480 | 8.7 | 5,512 | 100.0 |
| Combined male/female factor | 7,329 | 89.8 | 338 | 4.1 | 490 | 6.0 | 8,157 | 100.0 |
| Unexplained | 13,419 | 82.2 | 1,678 | 10.3 | 1,218 | 7.5 | 16,315 | 100.0 |
| Not stated | 13,229 | 75.4 | 2,197 | 12.5 | 2,114 | 12.1 | 17,540 | 100.0 |
| All causes | 63,490 | 82.1 | 6,980 | 9.0 | 6,883 | 8.9 | 77,353 | 100.0 |

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, 2017

| Stage/outcome of treatment | Site of sperm extraction | | | | |
|--|--------------------------|---------------------------|------------|-------|------------|
| | Ejaculate | Epididymis ^(a) | Testicular | Other | Not stated |
| Embryo transfers | 51,771 | 512 | 1,776 | 14 | 1,295 |
| Clinical pregnancies | 17,495 | 169 | 597 | 1 | 528 |
| Live deliveries ^(b) | 13,765 | 148 | 480 | 1 | 426 |
| <i>Clinical pregnancies per transfer cycle (%)</i> | 33.8 | 33.0 | 33.6 | 7.1 | 40.8 |
| <i>Live deliveries per transfer cycle (%)</i> | 26.6 | 28.9 | 27.0 | 7.1 | 32.9 |

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

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

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, 2017

| Number of embryos | Autologous | | | | Oocyte/embryo recipient | All |
|-------------------|--------------|---------------|---------------|--------------|-------------------------|-----|
| | Fresh IVF | Fresh ICSI | Thaw | | | |
| | | | | n | | |
| 1 | 7,493 | 13,040 | 26,674 | 2,261 | 49,468 | |
| 2 | 963 | 2,545 | 2,084 | 242 | 5,834 | |
| ≥ 3 | 4 | 50 | 12 | 0 | 66 | |
| Total | 8,460 | 15,635 | 28,770 | 2,503 | 55,368 | |
| | | | | % | | |
| 1 | 88.6 | 83.4 | 92.7 | 90.3 | 89.3 | |
| 2 | 11.4 | 16.3 | 7.2 | 9.7 | 10.5 | |
| ≥ 3 | 0.0 | 0.3 | 0.0 | 0.0 | 0.1 | |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |

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, 2017

| 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 | 7,574 | 16,995 | 2,390 | 953 | 27,456 |
| Clinical pregnancies | 1,668 | 6,020 | 464 | 337 | 10,301 |
| Live deliveries ^(a) | 1,242 | 4,682 | 353 | 273 | 8,270 |
| <i>Clinical pregnancies per transfer cycle (%)</i> | 22.0 | 35.4 | 19.4 | 35.4 | 37.5 |
| <i>Live deliveries per transfer cycle (%)</i> | 16.4 | 27.5 | 14.8 | 28.6 | 30.1 |

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

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, 2017

| Stage/outcome of treatment | Pregnancy outcome | | | | | | | |
|---------------------------------|-------------------|-------------|--------------------------------|------------|-------------------------------|------------|--------------|--------------|
| | Miscarriage | | Fetal reduction or termination | | Ectopic/heterotopic pregnancy | | Total | |
| | n | % | n | % | n | % | n | % |
| Male factor only | 381 | 91.4 | 21 | 5.0 | 15 | 3.6 | 417 | 100.0 |
| Female factor | 1,168 | 87.8 | 76 | 5.7 | 86 | 6.5 | 1,330 | 100.0 |
| <i>Tubal disease only</i> | 127 | 87.6 | 3 | 2.1 | 15 | 10.3 | 145 | 100.0 |
| <i>Endometriosis only</i> | 134 | 91.2 | 8 | 5.4 | 5 | 3.4 | 147 | 100.0 |
| <i>Other female factor only</i> | 644 | 88.7 | 37 | 5.1 | 45 | 6.2 | 726 | 100.0 |
| <i>Combined female factor</i> | 263 | 84.3 | 28 | 9.0 | 21 | 6.7 | 312 | 100.0 |
| Combined male/female factor | 354 | 86.6 | 32 | 7.8 | 23 | 5.6 | 409 | 100.0 |
| Unexplained | 695 | 89.3 | 33 | 4.2 | 50 | 6.4 | 778 | 100.0 |
| Not stated | 668 | 91.5 | 15 | 2.1 | 47 | 6.4 | 730 | 100.0 |
| All causes | 3,266 | 89.1 | 177 | 4.8 | 221 | 6.0 | 3,664 | 100.0 |

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: Deliveries by cause of infertility and delivery outcome, Australia and New Zealand, 2017

| Cause of infertility | Delivery outcome | | | | | |
|---------------------------------|------------------------------|-------------|---------------------------|------------|----------------------|--------------|
| | Live delivery ^(a) | | Stillbirth ^(b) | | Total ^(c) | |
| | n | % | n | % | n | % |
| Male factor only | 2,028 | 99.0 | 7 | 0.3 | 2,049 | 100.0 |
| Female factor | 4,903 | 98.4 | 50 | 1.0 | 4,983 | 100.0 |
| <i>Tubal disease only</i> | 529 | 97.4 | 11 | 2.0 | 543 | 100.0 |
| <i>Endometriosis only</i> | 685 | 99.1 | 5 | 0.7 | 691 | 100.0 |
| <i>Other female factor only</i> | 2,615 | 98.3 | 28 | 1.1 | 2,660 | 100.0 |
| <i>Combined female factor</i> | 1,074 | 98.6 | 6 | 0.6 | 1,089 | 100.0 |
| Combined male/female factor | 1,753 | 99.2 | 6 | 0.3 | 1,767 | 100.0 |
| Unexplained | 3,076 | 99.0 | 18 | 0.6 | 3,106 | 100.0 |
| Not stated | 3,060 | 99.1 | 13 | 0.4 | 3,089 | 100.0 |
| All causes | 14,820 | 98.8 | 94 | 0.6 | 14,994 | 100.0 |

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

(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 80 deliveries 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: Deliveries by gestational age and cause of infertility, Australia and New Zealand, 2017

| Gestational age (weeks) | Female factor | | | | | | Unexplained | 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> | 37.9 | 37.8 | 38.2 | 38.1 | 38.1 | 37.8 | 37.5 | 38.1 | 38.0 |
| | n | | | | | | | | |
| ≤ 27 | 11 | 8 | 14 | 17 | 30 | 48 | 12 | 35 | 175 |
| 28-31 | 12 | 11 | 18 | 20 | 37 | 32 | 7 | 26 | 163 |
| 32-36 | 116 | 83 | 161 | 193 | 307 | 302 | 62 | 317 | 1,541 |
| < 37 ^(a) | 139 | 102 | 193 | 230 | 374 | 382 | 81 | 378 | 1879 |
| ≥ 37 | 945 | 587 | 1,573 | 1,810 | 2,714 | 2,271 | 459 | 2,723 | 13,082 |
| Total | 1,089 | 691 | 1,767 | 2,049 | 3,089 | 2,660 | 543 | 3,106 | 14,994 |
| | % | | | | | | | | |
| ≤ 27 | 1.0 | 1.2 | 0.8 | 0.8 | 1.0 | 1.8 | 2.2 | 1.1 | 1.2 |
| 28-31 | 1.1 | 1.6 | 1.0 | 1.0 | 1.2 | 1.2 | 1.3 | 0.8 | 1.1 |
| 32-36 | 10.7 | 12 | 9.1 | 9.4 | 9.9 | 11.4 | 11.4 | 10.2 | 10.3 |
| < 37 ^(a) | 12.8 | 14.8 | 10.9 | 11.2 | 12.1 | 14.4 | 14.9 | 12.1 | 12.6 |
| ≥ 37 | 86.8 | 84.9 | 89.0 | 88.3 | 87.9 | 85.4 | 84.5 | 87.7 | 87.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

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

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: Deliveries by gestational age and maternal age, Australia and New Zealand, 2017

| Gestational age (weeks) | Age group (years) ^(a) | | | | | | All |
|----------------------------|----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | ≤ 24 | 25-29 | 30-34 | 35-39 | 40-44 | ≥ 45 | |
| Mean (weeks) | 37.4 | 37.8 | 38.1 | 38.1 | 37.9 | 37.3 | 38.0 |
| | n | | | | | | |
| ≤ 27 | 3 | 24 | 62 | 61 | 23 | 2 | 175 |
| 28-31 | 3 | 23 | 55 | 54 | 26 | 2 | 163 |
| 32-36 | 7 | 145 | 497 | 611 | 234 | 47 | 1,541 |
| < 37 ^(b) | 13 | 192 | 614 | 726 | 283 | 51 | 1879 |
| ≥ 37 | 102 | 1,260 | 4,526 | 5,111 | 1,854 | 229 | 13,082 |
| Total | 116 | 1,457 | 5,149 | 5,849 | 2,142 | 281 | 14,994 |
| | % | | | | | | |
| ≤ 27 | 2.6 | 1.6 | 1.2 | 1.0 | 1.1 | 0.7 | 1.2 |
| 28-31 | 2.6 | 1.6 | 1.1 | 0.9 | 1.2 | 0.7 | 1.1 |
| 32-36 | 6.0 | 10.0 | 9.7 | 10.4 | 10.9 | 16.7 | 10.3 |
| < 37 ^(b) | 11.2 | 13.2 | 12.0 | 12.3 | 13.2 | 18.1 | 12.6 |
| ≥ 37 | 87.9 | 86.5 | 87.9 | 87.4 | 86.6 | 81.5 | 87.2 |
| Total^(c) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(a) Age at time of delivery

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

(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, 2017

| Pregnancy outcome | Age group (years) ^(a) | | | | | | All |
|----------------------------------|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | ≤ 24 | 25-29 | 30-34 | 35-39 | 40-44 | ≥ 45 | |
| | n | | | | | | |
| Miscarriage | 18 | 266 | 869 | 1,243 | 798 | 72 | 3,266 |
| Termination or fetal reduction | 0 | 19 | 33 | 84 | 39 | 2 | 177 |
| Ectopic or heterotopic pregnancy | 2 | 24 | 76 | 84 | 32 | 3 | 221 |
| Total | 20 | 309 | 978 | 1,411 | 869 | 77 | 3,664 |
| | % | | | | | | |
| Miscarriage | 90 | 86.1 | 88.9 | 88.1 | 91.8 | 93.5 | 89.1 |
| Termination or fetal reduction | 0.0 | 6.1 | 3.4 | 6.0 | 4.5 | 2.6 | 4.8 |
| Ectopic or heterotopic pregnancy | 10.0 | 7.8 | 7.8 | 6.0 | 3.7 | 3.9 | 6.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(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: Deliveries by plurality and maternal age, Australia and New Zealand, 2017

| Gestation | Age group (years) ^(a) | | | | | | All |
|-----------------------|----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | ≤ 24 | 25-29 | 30-34 | 35-39 | 40-44 | ≥ 45 | |
| | n | | | | | | |
| Singleton | 113 | 1,405 | 4,971 | 5,619 | 2,076 | 272 | 14,456 |
| Twin | 3 | 51 | 174 | 228 | 66 | 9 | 531 |
| Higher order multiple | 0 | 1 | 4 | 2 | 0 | 0 | 7 |
| Total | 116 | 1,457 | 5,149 | 5,849 | 2,142 | 281 | 14,994 |
| | % | | | | | | |
| Singleton | 97.4 | 96.4 | 96.5 | 96.1 | 96.9 | 96.8 | 96.4 |
| Twin | 2.6 | 3.5 | 3.4 | 3.9 | 3.1 | 3.2 | 3.5 |
| Higher order multiple | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(a) Age at time of delivery

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: Delivery outcomes by maternal age, Australia and New Zealand, 2017

| Delivery outcome | Age group (years) ^(a) | | | | | | All |
|------------------------------|----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | ≤ 24 | 25-29 | 30-34 | 35-39 | 40-44 | ≥ 45 | |
| | n | | | | | | |
| Live delivery ^(b) | 114 | 1,438 | 5,091 | 5,777 | 2,121 | 279 | 14,820 |
| Stillbirth ^(c) | 1 | 12 | 33 | 35 | 11 | 2 | 94 |
| Not stated | 1 | 7 | 25 | 37 | 10 | 0 | 80 |
| Total | 116 | 1,457 | 5,149 | 5,849 | 2,142 | 281 | 14,994 |
| | % | | | | | | |
| Live delivery ^(b) | 98.3 | 98.7 | 98.9 | 98.8 | 99 | 99.3 | 98.8 |
| Stillbirth ^(c) | 0.9 | 0.8 | 0.6 | 0.6 | 0.5 | 0.7 | 0.6 |
| Not stated | 0.9 | 0.5 | 0.5 | 0.6 | 0.5 | 0.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(a) Age at time of delivery

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

(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, 2017

| Pregnancy outcome | Number of embryos transferred | | | All |
|----------------------------------|-------------------------------|--------------|---------------|--------------|
| | One | Two | Three or more | |
| | | n | | |
| Miscarriage | 2,878 | 381 | 7 | 3,266 |
| Fetal reduction or termination | 158 | 19 | 0 | 177 |
| Ectopic or heterotopic pregnancy | 188 | 32 | 1 | 221 |
| Total | 3,224 | 432 | 8 | 3,664 |
| | | % | | |
| Miscarriage | 89.3 | 88.2 | 87.5 | 89.1 |
| Fetal reduction or termination | 4.9 | 4.4 | 0.0 | 4.8 |
| Ectopic or heterotopic pregnancy | 5.8 | 7.4 | 12.5 | 6.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

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: Deliveries by delivery outcome and number of embryos transferred, Australia and New Zealand, 2017

| Delivery outcome | Number of embryos transferred | | | All |
|------------------------------|-------------------------------|--------------|---------------|---------------|
| | One | Two | Three or more | |
| | | n | | |
| Live delivery ^(a) | 13,530 | 1,285 | 5 | 14,820 |
| Stillbirth ^(b) | 88 | 6 | 0 | 94 |
| Not stated | 75 | 5 | 0 | 80 |
| Total | 13,693 | 1,296 | 5 | 14,994 |
| | | % | | |
| Live delivery ^(a) | 98.8 | 99.2 | 100.0 | 98.8 |
| Stillbirth ^(b) | 0.6 | 0.5 | 0.0 | 0.6 |
| Not stated | 0.5 | 0.4 | 0.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

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

(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: Deliveries by gestational age and number of embryos transferred, Australia and New Zealand, 2017

| Gestational age (weeks) | Number of embryos transferred | | | All |
|-------------------------|-------------------------------|--------------|---------------|---------------|
| | One | Two | Three or more | |
| <i>Mean (weeks)</i> | 38.1 | 36.8 | 38.4 | 38 |
| | n | | | |
| ≤ 27 | 150 | 25 | 0 | 175 |
| 28-31 | 135 | 28 | 0 | 163 |
| 32-36 | 1,251 | 290 | 0 | 1,541 |
| < 37 ^(a) | 1,536 | 343 | 0 | 1,879 |
| ≥ 37 | 12,134 | 943 | 5 | 13,082 |
| Total | 13,693 | 1,296 | 5 | 14,994 |
| | % | | | |
| ≤ 27 | 1.1 | 1.9 | 0.0 | 1.2 |
| 28-31 | 1.0 | 2.2 | 0.0 | 1.1 |
| 32-36 | 9.1 | 22.4 | 0.0 | 10.3 |
| < 37 ^(a) | 11.2 | 26.5 | 0.0 | 12.6 |
| ≥ 37 | 88.6 | 72.8 | 100.0 | 87.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

(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: Deliveries by plurality, treatment type and procedure, Australia and New Zealand, 2017

| Gestation | Autologous | | | | All |
|-----------------------|--------------|--------------|--------------|-------------------------|---------------|
| | Fresh IVF | Fresh ICSI | Thaw | Oocyte/embryo recipient | |
| | n | | | | |
| Singleton | 3,510 | 2,140 | 8,114 | 692 | 14,456 |
| Twin | 154 | 78 | 279 | 20 | 531 |
| Higher order multiple | 2 | 0 | 5 | 0 | 7 |
| Total | 3,666 | 2,218 | 8,398 | 712 | 14,994 |
| | % | | | | |
| Singleton | 95.7 | 96.5 | 96.6 | 97.2 | 96.4 |
| Twin | 4.2 | 3.5 | 3.3 | 2.8 | 3.5 |
| Higher order multiple | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

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, 2017

| Gestational age (weeks) | Live birth ^(a) | | Stillbirth ^(b) | | All ^(c) | |
|----------------------------|---------------------------|-------------|---------------------------|------------|--------------------|--------------|
| | n | % | n | % | n | % |
| <i>Mean (weeks)</i> | 38.0 | | 25.8 | | 37.9 | |
| ≤ 27 | 136 | 65.1 | 72 | 34.4 | 209 | 100.0 |
| 28-31 | 194 | 92.4 | 16 | 7.6 | 210 | 100.0 |
| 32-36 | 1,862 | 99.1 | 15 | 0.8 | 1,878 | 100.0 |
| < 37 ^(d) | 2,192 | 95.4 | 103 | 4.5 | 2,297 | 100.0 |
| ≥ 37 | 13,119 | 99.3 | 8 | 0.1 | 13,209 | 100.0 |
| Not Stated | 32 | 97.0 | 0 | 0.0 | 33 | 100.0 |
| Total^(e) | 15,343 | 98.7 | 111 | 0.7 | 15,539 | 100.0 |

(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 88 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, 2017

| Birthweight (grams) | Live birth ^(a) | | Stillbirth ^(b) | | All ^(c) | |
|------------------------|---------------------------|--------------|---------------------------|--------------|--------------------|--------------|
| | n | % | n | % | n | % |
| <i>Mean (grams)</i> | 3,222 | | 930 | | 3,221 | |
| < 1,000 | 115 | 0.7 | 60 | 54.1 | 175 | 1.1 |
| 1,000-1,499 | 182 | 1.2 | 4 | 3.6 | 186 | 1.2 |
| 1,500-1,999 | 335 | 2.2 | 4 | 3.6 | 339 | 2.2 |
| 2,000-2,499 | 999 | 6.5 | 5 | 4.5 | 1,004 | 6.5 |
| < 2,500 ^(d) | 1631 | 10.6 | 73 | 65.8 | 1704 | 11.0 |
| 2500-2,999 | 2,794 | 18.2 | 5 | 4.5 | 2,799 | 18.0 |
| 3,000-3,499 | 5,474 | 35.7 | 2 | 1.8 | 5,476 | 35.2 |
| 3,500-3,999 | 3,965 | 25.8 | 1 | 0.9 | 3,966 | 25.5 |
| ≥ 4,000 | 1,285 | 8.4 | 0 | 0.0 | 1,285 | 8.3 |
| Not stated | 194 | 1.3 | 30 | 27.0 | 309 | 2.0 |
| Total | 15,343 | 100.0 | 111 | 100.0 | 15,539 | 100.0 |

(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 88 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, 2017

| Birthweight (grams) | Autologous | | | | All |
|------------------------|--------------|--------------|--------------|-------------------------|---------------|
| | Fresh IVF | Fresh ICSI | Thaw | Oocyte/embryo recipient | |
| <i>Mean (grams)</i> | 3,123 | 3,144 | 3,264 | 3,171 | 3,221 |
| | n | | | | |
| < 1,000 | 45 | 32 | 92 | 6 | 175 |
| 1,000-1,499 | 58 | 35 | 88 | 5 | 186 |
| 1,500-1,999 | 106 | 47 | 166 | 20 | 339 |
| 2,000-2,499 | 280 | 187 | 477 | 60 | 1,004 |
| < 2,500 ^(a) | 489 | 301 | 823 | 91 | 1704 |
| 2,500-2,999 | 782 | 451 | 1,431 | 135 | 2,799 |
| 3,000-3,499 | 1,330 | 834 | 3,040 | 272 | 5,476 |
| 3,500-3,999 | 888 | 508 | 2,403 | 167 | 3,966 |
| ≥ 4,000 | 249 | 138 | 850 | 48 | 1,285 |
| Not stated | 86 | 64 | 140 | 19 | 309 |
| Total | 3,824 | 2,296 | 8,687 | 732 | 15,539 |
| | % | | | | |
| < 1,000 | 1.2 | 1.4 | 1.1 | 0.8 | 1.1 |
| 1,000-1,499 | 1.5 | 1.5 | 1.0 | 0.7 | 1.2 |
| 1,500-1,999 | 2.8 | 2.0 | 1.9 | 2.7 | 2.2 |
| 2,000-2,499 | 7.3 | 8.1 | 5.5 | 8.2 | 6.5 |
| < 2,500 ^(a) | 12.8 | 13.0 | 9.5 | 12.4 | 11.0 |
| 2,500-2,999 | 20.4 | 19.6 | 16.5 | 18.4 | 18.0 |
| 3,000-3,499 | 34.8 | 36.3 | 35.0 | 37.2 | 35.2 |
| 3,500-3,999 | 23.2 | 22.1 | 27.7 | 22.8 | 25.5 |
| ≥ 4,000 | 6.5 | 6.0 | 9.8 | 6.6 | 8.3 |
| Not stated | 2.2 | 2.8 | 1.6 | 2.6 | 2.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

(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, 2017

| Treatment type | All births | Live births | Stillbirths ^(a) | | Neonatal deaths | | Perinatal deaths ^(b) | |
|-------------------------|---------------|---------------|----------------------------|-----------------------|-----------------|-----------------------|---------------------------------|-----------------------|
| | | | n | Rate ^(c,e) | n | Rate ^(d,f) | n | Rate ^(c,g) |
| Fresh IVF | 2,296 | 2,258 | 25 | 10.9 | 11 | 4.9 | 36 | 15.7 |
| Fresh ICSI | 3,824 | 3,768 | 21 | 5.5 | 18 | 4.8 | 39 | 10.2 |
| Thaw | 8,687 | 8,590 | 60 | 6.9 | 21 | 2.4 | 81 | 9.3 |
| Oocyte/embryo recipient | 732 | 727 | 5 | 6.8 | 3 | 4.1 | 8 | 10.9 |
| All | 15,539 | 15,343 | 111 | 7.1 | 53 | 3.5 | 164 | 10.6 |

(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 88 babies.

Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2017

| Age group (years) ^(a) | All births | Live births | Stillbirths ^(b) | | Neonatal deaths | | Perinatal deaths ^(c) | |
|----------------------------------|---------------|---------------|----------------------------|-----------------------|-----------------|-----------------------|---------------------------------|-----------------------|
| | | | n | Rate ^(d,f) | n | Rate ^(e,g) | n | Rate ^(d,h) |
| ≤ 25 | 119 | 116 | 1 | 8.4 | 1 | 8.6 | 2 | 16.8 |
| 25-30 | 1,510 | 1,490 | 13 | 8.6 | 4 | 2.7 | 17 | 11.3 |
| 30-34 | 5,331 | 5,262 | 42 | 7.9 | 19 | 3.6 | 61 | 11.4 |
| 35-39 | 6,081 | 6,001 | 42 | 6.9 | 21 | 3.5 | 63 | 10.4 |
| 40-44 | 2,208 | 2,186 | 11 | 5.0 | 8 | 3.7 | 19 | 8.6 |
| ≥ 45 | 290 | 288 | 2 | 6.9 | 0 | 0.0 | 2 | 6.9 |
| Total | 15,539 | 15,343 | 111 | 7.1 | 53 | 3.5 | 164 | 10.6 |

(a) Age at time of delivery

(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 88 babies.

List of Tables

| | |
|---|----|
| Table S1: Treatment cycles by cause of infertility, treatment type and procedure, Australia and New Zealand, 2017 | 2 |
| Table S2: Autologous treatment cycles by cause of infertility and source of sperm, Australia and New Zealand, 2017 | 3 |
| Table S3: Outcome of embryo transfer cycles by technique of sperm retrieval, Australia and New Zealand, 2017 | 4 |
| Table S4: Embryo transfer cycles by number of embryos transferred, treatment type and procedure, Australia and New Zealand, 2017 | 4 |
| Table S5: Outcome of embryo transfer cycles by stage of embryo development, Australia and New Zealand, 2017 .. | 5 |
| Table S6: Clinical pregnancies of less than 20 weeks gestation by cause of infertility and pregnancy outcome, Australia and New Zealand, 2017 | 5 |
| Table S7: Deliveries by cause of infertility and delivery outcome, Australia and New Zealand, 2017 | 6 |
| Table S8: Deliveries by gestational age and cause of infertility, Australia and New Zealand, 2017 | 7 |
| Table S9: Deliveries by gestational age and maternal age, Australia and New Zealand, 2017 | 8 |
| Table S10: Early pregnancy loss by maternal age, Australia and New Zealand, 2017 | 8 |
| Table S11: Deliveries by plurality and maternal age, Australia and New Zealand, 2017 | 9 |
| Table S12: Delivery outcomes by maternal age, Australia and New Zealand, 2017 | 9 |
| Table S13: Early pregnancy loss by number of embryos transferred, Australia and New Zealand, 2017 | 10 |
| Table S14: Deliveries by delivery outcome and number of embryos transferred, Australia and New Zealand, 2017 | 10 |
| Table S15: Deliveries by gestational age and number of embryos transferred, Australia and New Zealand, 2017 .. | 11 |
| Table S16: Deliveries by plurality, treatment type and procedure, Australia and New Zealand, 2017 | 11 |
| Table S17: Gestational age of babies by birth outcomes, Australia and New Zealand, 2017 | 12 |
| Table S18: Birthweight of babies by birth outcomes, Australia and New Zealand, 2017 | 12 |
| Table S19: Birthweight of babies by treatment type and procedure, Australia and New Zealand, 2017 | 13 |
| Table S20: Perinatal mortality of babies by type of death and treatment type and procedure, Australia and New Zealand, 2017 | 14 |
| Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2017 | 14 |