# Assisted reproductive technology in Australia and New Zealand 2013

### Supplementary tables

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## Abbreviations and symbols

ART assisted reproductive technology

ICSI intracytoplasmic sperm injection

IVF in vitro fertilisation

OPU oocyte pick-up

PESA percutaneous epididymal sperm aspiration

#### Introductory notes

This document contains the supplementary on-line tables for the Assisted reproductive technology in Australia and New Zealand 2013 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-2013

## Treatment cycles undertaken in 2013 and resulting pregnancy and birth outcomes

This supplement presents information on assisted reproductive technology (ART) treatment cycles undertaken in fertility clinics in Australia and New Zealand in 2013, along with the resulting pregnancy and birth outcomes.

The data (Tables S1 to S21) presented 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, 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, 2013

|                             |           | Autolog    | ous                           |        |                         |        |
|-----------------------------|-----------|------------|-------------------------------|--------|-------------------------|--------|
| Cause of infertility        | Fresh IVF | Fresh ICSI | Fresh<br>other <sup>(a)</sup> | Thaw   | Oocyte/embryo recipient | All    |
|                             |           |            | Numb                          | per    |                         |        |
| Male factor only            | 1,172     | 6,914      | 855                           | 5,493  | 289                     | 14,723 |
| Female factor               | 4,674     | 5,720      | 1,640                         | 6,602  | 992                     | 19,628 |
| Tubal disease only          | 839       | 666        | 164                           | 1,047  | 45                      | 2,761  |
| Endometriosis only          | 942       | 892        | 238                           | 1,147  | 97                      | 3,316  |
| Other female factor only    | 2,216     | 3,623      | 1,063                         | 3,633  | 772                     | 11,307 |
| Combined female factor      | 677       | 539        | 175                           | 775    | 78                      | 2,244  |
| Combined male/female factor | 993       | 4,132      | 736                           | 3,129  | 332                     | 9,322  |
| Unexplained                 | 3,929     | 4,664      | 1,256                         | 5,424  | 362                     | 15,635 |
| Not stated                  | 1,319     | 4,264      | 816                           | 4,248  | 330                     | 10,977 |
| All causes                  | 12,087    | 25,694     | 5,303                         | 24,896 | 2,305                   | 70,285 |
|                             |           |            | Per ce                        | ent    |                         |        |
| Male factor only            | 9.7       | 26.9       | 16.1                          | 22.1   | 12.5                    | 20.9   |
| Female factor               | 38.7      | 22.3       | 30.9                          | 26.5   | 43.0                    | 27.9   |
| Tubal disease only          | 6.9       | 2.6        | 3.1                           | 4.2    | 2.0                     | 3.9    |
| Endometriosis only          | 7.8       | 3.5        | 4.5                           | 4.6    | 4.2                     | 4.7    |
| Other female factor only    | 18.3      | 14.1       | 20.0                          | 14.6   | 33.5                    | 16.1   |
| Combined female factor      | 5.6       | 2.1        | 3.3                           | 3.1    | 3.4                     | 3.2    |
| Combined male/female factor | 8.2       | 16.1       | 13.9                          | 12.6   | 14.4                    | 13.3   |
| Unexplained                 | 32.5      | 18.2       | 23.7                          | 21.8   | 15.7                    | 22.2   |
| Not stated                  | 10.9      | 16.6       | 15.4                          | 17.1   | 14.3                    | 15.6   |
| All causes                  | 100.0     | 100.0      | 100.0                         | 100.0  | 100.0                   | 100.0  |

<sup>(</sup>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, 2013

|                             | Source of sperm |                 |        |             |         |             |        |             |  |  |  |
|-----------------------------|-----------------|-----------------|--------|-------------|---------|-------------|--------|-------------|--|--|--|
|                             | Husband/p       | Husband/partner |        | or          | Not sta | ited        | Tota   | al          |  |  |  |
| Cause of infertility        | Number          | Per<br>cent     | Number | Per<br>cent | Number  | Per<br>cent | Number | Per<br>cent |  |  |  |
| Male factor only            | 12,845          | 89.0            | 819    | 5.7         | 770     | 5.3         | 14,434 | 100.0       |  |  |  |
| Female factor               | 15,113          | 81.1            | 2,015  | 10.8        | 1,508   | 8.1         | 18,636 | 100.0       |  |  |  |
| Tubal disease only          | 2,456           | 90.4            | 109    | 4.0         | 151     | 5.6         | 2,716  | 100.0       |  |  |  |
| Endometriosis only          | 2,841           | 88.3            | 154    | 4.8         | 224     | 7.0         | 3,219  | 100.0       |  |  |  |
| Other female factor only    | 7,998           | 75.9            | 1,578  | 15.0        | 959     | 9.1         | 10,535 | 100.0       |  |  |  |
| Combined female factor      | 1,818           | 83.9            | 174    | 8.0         | 174     | 8.0         | 2,166  | 100.0       |  |  |  |
| Combined male/female factor | 8,063           | 89.7            | 259    | 2.9         | 668     | 7.4         | 8,990  | 100.0       |  |  |  |
| Unexplained                 | 12,604          | 82.5            | 1,535  | 10.1        | 1,134   | 7.4         | 15,273 | 100.0       |  |  |  |
| Not stated                  | 8,730           | 82.0            | 938    | 8.8         | 979     | 9.2         | 10,647 | 100.0       |  |  |  |
| All causes                  | 57,355          | 84.4            | 5,566  | 8.2         | 5,059   | 7.4         | 67,980 | 100.0       |  |  |  |

Table S3: Outcome of embryo transfer cycles by technique of sperm retrieval, Australia and New Zealand, 2013

| Stage/outcome of treatment                  | Ejaculate | Epididymis <sup>(a)</sup> | Testicular | Other | Not stated |
|---|-----------|---------------------------|------------|-------|------------|
| Embryo transfers                            | 51,838    | 566                       | 2,099      | 71    | 352        |
| Clinical pregnancies                        | 16,045    | 196                       | 632        | 14    | 122        |
| Live deliveries <sup>(b)</sup>              | 12,208    | 140                       | 506        | 9     | 99         |
| Clinical pregnancies per transfer cycle (%) | 31.0      | 34.6                      | 30.1       | 19.7  | 34.7       |
| Live deliveries per transfer cycle (%)      | 23.6      | 24.7                      | 24.1       | 12.7  | 28.1       |

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

Table S4: Embryo transfer cycles by number of embryos transferred, treatment type and procedure, Australia and New Zealand, 2013

| Number of _ |           | Autologous |          | Oocyte/embryo |        |  |
|-------------|-----------|------------|----------|---------------|--------|--|
| embryos     | Fresh IVF | Fresh ICSI | -        |               | All    |  |
|             |           |            | Number   |               |        |  |
| 1           | 7,643     | 14,537     | 19,710   | 1,589         | 43,479 |  |
| 2           | 2,076     | 5,103      | 3,451    | 421           | 11,051 |  |
| ≥ 3         | 66        | 273        | 50       | 7             | 396    |  |
| Total       | 9,785     | 19,913     | 23,211   | 2,017         | 54,926 |  |
|             |           |            | Per cent |               |        |  |
| 1           | 78.1      | 73.0       | 84.9     | 78.8          | 79.2   |  |
| 2           | 21.2      | 25.6       | 14.9     | 20.9          | 20.1   |  |
| ≥ 3         | 0.7       | 1.4        | 0.2      | 0.3           | 0.7    |  |
| 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.

<sup>(</sup>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 S5: Outcome of embryo transfer cycles by stage of embryo development, Australia and New Zealand, 2013

|   | Fres                | sh          |   | Thaw  |                                    |
|---|---------------------|-------------|---|---|------------------------------------|
| Stage/outcome of treatment                  | Cleavage<br>embryos | Blastocysts | Thawed and transferred cleavage embryos | Thawed cleavage embryos and transferred blastocysts | Thawed and transferred blastocysts |
| Embryo transfers                            | 14,350              | 16,064      | 7,013                                   | 1620  | 15,879                             |
| Clinical pregnancies                        | 3,281               | 6,114       | 1,318                                   | 556   | 5,740                              |
| Live deliveries <sup>(a)</sup>              | 2,458               | 4,763       | 963                                     | 436   | 4,342                              |
| Clinical pregnancies per transfer cycle (%) | 22.9                | 38.1        | 18.8                                    | 34.3  | 36.1                               |
| Live deliveries per transfer cycle (%)      | 17.1                | 29.7        | 13.7                                    | 26.9  | 27.3                               |

<sup>(</sup>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, 2013

|                             | Pregnancy outcome |          |        |                                |        |                               |        |          |  |  |
|-----------------------------|-------------------|----------|--------|--------------------------------|--------|-------------------------------|--------|----------|--|--|
|                             | Miscarriage       |          |        | Fetal reduction or termination |        | Ectopic/heterotopic pregnancy |        | tal      |  |  |
| Cause of infertility        | Number            | Per cent | Number | Per cent                       | Number | Per cent                      | Number | Per cent |  |  |
| Male factor only            | 675               | 91.2     | 27     | 3.6                            | 38     | 5.1                           | 740    | 100.0    |  |  |
| Female factor               | 975               | 91.3     | 33     | 3.1                            | 60     | 5.6                           | 1,068  | 100.0    |  |  |
| Tubal disease only          | 139               | 93.9     | 1      | 0.7                            | 8      | 5.4                           | 148    | 100.0    |  |  |
| Endometriosis only          | 143               | 94.1     | 2      | 1.3                            | 7      | 4.6                           | 152    | 100.0    |  |  |
| Other female factor only    | 584               | 91.0     | 22     | 3.4                            | 36     | 5.6                           | 642    | 100.0    |  |  |
| Combined female factor      | 109               | 86.5     | 8      | 6.3                            | 9      | 7.1                           | 126    | 100.0    |  |  |
| Combined male/female factor | 456               | 92.9     | 14     | 2.9                            | 21     | 4.3                           | 491    | 100.0    |  |  |
| Unexplained                 | 702               | 91.8     | 31     | 4.1                            | 32     | 4.2                           | 765    | 100.0    |  |  |
| Not stated                  | 461               | 91.3     | 1      | 0.2                            | 43     | 8.5                           | 505    | 100.0    |  |  |
| All causes                  | 3,269             | 91.6     | 106    | 3.0                            | 194    | 5.4                           | 3,569  | 100.0    |  |  |

Table S7: Deliveries by cause of infertility and delivery outcome, Australia and New Zealand, 2013

|                             |           |                     | Delivery out     | ome                      |                      |          |
|-----------------------------|-----------|---------------------|------------------|--------------------------|----------------------|----------|
|                             | Live deli | very <sup>(a)</sup> | Stillbirth (feta | al death) <sup>(b)</sup> | Total <sup>(c)</sup> |          |
| Cause of infertility        | Number    | Per cent            | Number           | Per cent                 | Number               | Per cent |
| Male factor only            | 2,964     | 98.7                | 22               | 0.7                      | 3,004                | 100.0    |
| Female factor               | 3,606     | 98.6                | 41               | 1.1                      | 3,658                | 100.0    |
| Tubal disease only          | 510       | 98.1                | 7                | 1.3                      | 520                  | 100.0    |
| Endometriosis only          | 678       | 99.1                | 4                | 0.6                      | 684                  | 100.0    |
| Other female factor only    | 2,018     | 98.6                | 24               | 1.2                      | 2,047                | 100.0    |
| Combined female factor      | 400       | 98.3                | 6                | 1.5                      | 407                  | 100.0    |
| Combined male/female factor | 1,821     | 98.5                | 15               | 0.8                      | 1,848                | 100.0    |
| Unexplained                 | 2,866     | 98.3                | 24               | 0.8                      | 2,915                | 100.0    |
| Not stated                  | 1,705     | 98.4                | 13               | 0.8                      | 1,732                | 100.0    |
| All causes                  | 12,962    | 98.5                | 115              | 0.9                      | 13,157               | 100.0    |

<sup>(</sup>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.

<sup>(</sup>b) A stillbirth (fetal death) 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 (fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

<sup>(</sup>c) Total includes deliveries where birth outcome was unknown.

Table S8: Deliveries by gestational age and cause of infertility, Australia and New Zealand, 2013

|                               |                        |                          | Female                     | e factor                          |                        |                             |                  |               |               |
|-------------------------------|------------------------|--------------------------|----------------------------|-----------------------------------|------------------------|-----------------------------|------------------|---------------|---------------|
| Gestational<br>age<br>(weeks) | Male<br>factor<br>only | Tubal<br>disease<br>only | Endom-<br>etriosis<br>only | Other<br>female<br>factor<br>only | Combined female factor | Combined male/female factor | Un-<br>explained | Not<br>stated | All<br>causes |
| Mean<br>(weeks)               | 38.2                   | 38.0                     | 38.1                       | 37.9                              | 37.9                   | 38.1                        | 38.1             | 38.2          | 38.1          |
| ,                             |                        |                          |                            |                                   | Number                 | •                           |                  |               |               |
| ≤ 27                          | 33                     | 9                        | 10                         | 33                                | 6                      | 26                          | 41               | 24            | 155           |
| 28–31                         | 36                     | 6                        | 10                         | 31                                | 7                      | 24                          | 35               | 18            | 167           |
| 32–36                         | 326                    | 56                       | 63                         | 241                               | 55                     | 208                         | 208              | 312           | 193           |
| ≥ 37                          | 2,609                  | 449                      | 601                        | 1,742                             | 339                    | 1,590                       | 2,527            | 1,497         | 11,354        |
| Total                         | 3,004                  | 520                      | 684                        | 2,047                             | 407                    | 1,848                       | 2,915            | 1,732         | 13,157        |
| ≤ 36 <sup>(a)</sup>           | 395                    | 71                       | 83                         | 305                               | 68                     | 258                         | 388              | 235           | 1,803         |
|                               |                        |                          |                            |                                   | Per cent               | t                           |                  |               |               |
| <27                           | 1.1                    | 1.7                      | 1.5                        | 1.6                               | 1.5                    | 1.4                         | 1.4              | 1.4           | 1.2           |
| 28–31                         | 1.2                    | 1.2                      | 1.5                        | 1.5                               | 1.7                    | 1.3                         | 1.2              | 1.0           | 1.3           |
| 32–36                         | 10.9                   | 10.8                     | 9.2                        | 11.8                              | 13.5                   | 11.3                        | 7.1              | 18.0          | 1.5           |
| ≥ 37                          | 86.9                   | 86.3                     | 87.9                       | 85.1                              | 83.3                   | 86.0                        | 86.7             | 86.4          | 86.3          |
| Total                         | 100.0                  | 100.0                    | 100.0                      | 100.0                             | 100.0                  | 100.0                       | 100.0            | 100.0         | 100.0         |
| ≤ 36 <sup>(a)</sup>           | 13.1                   | 13.7                     | 12.1                       | 14.9                              | 16.7                   | 14.0                        | 13.3             | 13.6          | 13.7          |

<sup>(</sup>a) A gestation of less than 37 weeks (≤ 36) is defined as a preterm delivery.

Table S9: Deliveries by gestational age and maternal age, Australia and New Zealand, 2013

| Gestational age –   |       |       | Age ( | group (years) <sup>(a)</sup> | 1     |       |        |
|---------------------|-------|-------|-------|------------------------------|-------|-------|--------|
| (weeks)             | ≤ 24  | 25–29 | 30–34 | 35–39                        | 40–44 | ≥ 45  | Total  |
| Mean (weeks)        | 37.7  | 38.1  | 38.2  | 38.1                         | 38.0  | 37.5  | 38.1   |
|                     |       |       |       | Number                       |       |       |        |
| ≤ 27                | 5     | 26    | 51    | 79                           | 17    | 4     | 182    |
| 28–31               | 2     | 26    | 56    | 55                           | 25    | 3     | 167    |
| 32–36               | 19    | 150   | 493   | 544                          | 225   | 23    | 1,454  |
| ≥ 37                | 101   | 1,237 | 3,875 | 4,311                        | 1,678 | 152   | 11,354 |
| Total               | 127   | 1,439 | 4,475 | 4,989                        | 1,945 | 182   | 13,157 |
| $\leq 36^{(b)}$     | 26    | 202   | 600   | 678                          | 267   | 30    | 1,803  |
|                     |       |       |       | Per cent                     |       |       |        |
| ≤ 27                | 3.9   | 1.8   | 1.1   | 1.6                          | 0.9   | 2.2   | 1.4    |
| 28–31               | 1.6   | 1.8   | 1.3   | 1.1                          | 1.3   | 1.6   | 1.3    |
| 32–36               | 15.0  | 10.4  | 11.0  | 10.9                         | 11.6  | 12.6  | 11.1   |
| ≥ 37                | 79.5  | 86.0  | 86.6  | 86.4                         | 86.3  | 83.5  | 86.3   |
| Total               | 100.0 | 100.0 | 100.0 | 100.0                        | 100.0 | 100.0 | 100.0  |
| ≤ 36 <sup>(b)</sup> | 20.5  | 14.0  | 13.4  | 13.6                         | 13.7  | 16.5  | 13.7   |

<sup>(</sup>a) Age at time of delivery.

Table S10: Early pregnancy loss and maternal age, Australia and New Zealand, 2013

|                                  | Age group (years) <sup>(a)</sup> |       |       |        |       |       |       |  |  |  |
|----------------------------------|----------------------------------|-------|-------|--------|-------|-------|-------|--|--|--|
| Pregnancy outcome                | ≤ 24                             | 25–29 | 30–34 | 35–39  | 40–44 | ≥ 45  | Total |  |  |  |
|                                  |                                  |       |       | Number |       |       |       |  |  |  |
| Miscarriage                      | 20                               | 267   | 860   | 1,252  | 810   | 60    | 3,269 |  |  |  |
| Termination or fetal reduction   | 2                                | 6     | 22    | 36     | 38    | 2     | 106   |  |  |  |
| Ectopic or heterotopic pregnancy | 2                                | 20    | 66    | 72     | 31    | 3     | 194   |  |  |  |
| Total                            | 24                               | 293   | 948   | 1,360  | 879   | 65    | 3,569 |  |  |  |
|                                  | Per cent                         |       |       |        |       |       |       |  |  |  |
| Miscarriage                      | 83.3                             | 91.1  | 90.7  | 92.1   | 92.2  | 92.3  | 91.6  |  |  |  |
| Termination or fetal reduction   | 8.3                              | 2.0   | 2.3   | 2.6    | 4.3   | 3.1   | 3.0   |  |  |  |
| Ectopic or heterotopic pregnancy | 8.3                              | 6.8   | 7.0   | 5.3    | 3.5   | 4.6   | 5.4   |  |  |  |
| Total                            | 100.0                            | 100.0 | 100.0 | 100.0  | 100.0 | 100.0 | 100.0 |  |  |  |

<sup>(</sup>a) Age at end of pregnancy.

<sup>(</sup>b) A gestation of less than 37 weeks (≤ 36) is defined as a preterm delivery.

Table S11: Deliveries by plurality and maternal age, Australia and New Zealand, 2013

|                     | Age group (years) <sup>(a)</sup> |       |       |          |       |       |        |  |  |
|---------------------|----------------------------------|-------|-------|----------|-------|-------|--------|--|--|
| Gestation           | ≤ 24                             | 25–29 | 30–34 | 35–39    | 40–44 | ≥ 45  | Total  |  |  |
|                     |                                  |       |       | Number   |       |       |        |  |  |
| Singleton           | 116                              | 1,357 | 4,231 | 4,703    | 1,844 | 174   | 12,425 |  |  |
| Twin                | 11                               | 80    | 240   | 280      | 100   | 8     | 719    |  |  |
| High order multiple | 0                                | 2     | 4     | 6        | 1     | 0     | 13     |  |  |
| Total               | 127                              | 1,439 | 4,475 | 4,989    | 1,945 | 182   | 13,157 |  |  |
|                     |                                  |       |       | Per cent |       |       |        |  |  |
| Singleton           | 91.3                             | 94.3  | 94.5  | 94.3     | 94.8  | 95.6  | 94.4   |  |  |
| Twin                | 8.7                              | 5.6   | 5.4   | 5.6      | 5.1   | 4.4   | 5.5    |  |  |
| High order multiple | 0.0                              | 0.1   | 0.1   | 0.1      | 0.1   | 0.0   | 0.1    |  |  |
| Total               | 100.0                            | 100.0 | 100.0 | 100.0    | 100.0 | 100.0 | 100.0  |  |  |

<sup>(</sup>a) Age at time of delivery.

Table S12: Delivery outcomes by maternal age, Australia and New Zealand, 2013

|                             | Age group (years) <sup>(a)</sup> |       |       |          |       |       |        |
|-----------------------------|----------------------------------|-------|-------|----------|-------|-------|--------|
| Delivery outcome            | ≤ 24                             | 25–29 | 30–34 | 35–39    | 40–44 | ≥ 45  | Total  |
|                             |                                  |       |       | Number   |       |       |        |
| Live birth <sup>(b)</sup>   | 124                              | 1,407 | 4,419 | 4,914    | 1,919 | 179   | 12,962 |
| Stillbirth (fetal death)(c) | 2                                | 24    | 32    | 42       | 13    | 2     | 115    |
| Not stated                  | 1                                | 8     | 24    | 33       | 13    | 1     | 80     |
| Total                       | 127                              | 1,439 | 4,475 | 4,989    | 1,945 | 182   | 13,157 |
|                             |                                  |       |       | Per cent |       |       |        |
| Live birth <sup>(b)</sup>   | 97.6                             | 97.8  | 98.7  | 98.5     | 98.7  | 98.4  | 98.5   |
| Fetal death <sup>(c)</sup>  | 1.6                              | 1.7   | 0.7   | 0.8      | 0.7   | 1.1   | 0.9    |
| Not stated                  | 0.8                              | 0.6   | 0.5   | 0.7      | 0.7   | 0.5   | 0.6    |
| Total                       | 100.0                            | 100.0 | 100.0 | 100.0    | 100.0 | 100.0 | 100.0  |

<sup>(</sup>a) Age at time of delivery.

<sup>(</sup>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.

<sup>(</sup>c) A stillbirth (fetal death) 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 (fetal deaths) 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, 2013

|                                  | Number of embryos tra | ansferred |               |       |
|----------------------------------|-----------------------|-----------|---------------|-------|
| Pregnancy outcome                | One                   | Two       | Three or more | All   |
|                                  |                       | Number    |               |       |
| Miscarriage                      | 2,518                 | 717       | 34            | 3,269 |
| Fetal reduction or termination   | 88                    | 18        | 0             | 106   |
| Ectopic or heterotopic pregnancy | 137                   | 53        | 4             | 194   |
| Total                            | 2,743                 | 788       | 38            | 3,569 |
|                                  |                       | Per cent  |               |       |
| Miscarriage                      | 91.8                  | 91.0      | 89.5          | 91.6  |
| Fetal reduction or termination   | 3.2                   | 2.3       | 0.0           | 3.0   |
| Ectopic or heterotopic pregnancy | 5.0                   | 6.7       | 10.5          | 5.4   |
| Total                            | 100.0                 | 100.0     | 100.0         | 100.0 |

Table S14: Deliveries by delivery outcome and number of embryos transferred, Australia and New Zealand, 2013

|   | Number of embryos transferred |        |               |        |  |  |
|---|-------------------------------|--------|---------------|--------|--|--|
| Delivery outcome                        | One Two Three or more         |        | Three or more | All    |  |  |
|   |                               | Numb   | er            |        |  |  |
| Live delivery <sup>(a)</sup>            | 10,686                        | 2,232  | 44            | 12,962 |  |  |
| Stillbirth (fetal death) <sup>(b)</sup> | 91                            | 23     | 1             | 115    |  |  |
| Not stated                              | 66                            | 14     | 0             | 80     |  |  |
| Total                                   | 10,843                        | 2,269  | 45            | 13,157 |  |  |
|   |                               | Per ce | ent           |        |  |  |
| Live delivery <sup>(a)</sup>            | 98.6                          | 98.4   | 97.8          | 98.5   |  |  |
| Stillbirth (fetal death) <sup>(b)</sup> | 0.8                           | 1.0    | 2.2           | 0.9    |  |  |
| Not stated                              | 0.6                           | 0.6    | 0.0           | 0.6    |  |  |
| Total                                   | 100.0                         | 100.0  | 100.0         | 100.0  |  |  |

<sup>(</sup>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.

<sup>(</sup>b) A stillbirth (fetal death) 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 (fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

Table S15: Deliveries by gestational age and number of embryos transferred, Australia and New Zealand, 2013

|                         | ı      | Number of embryos tra | ansferred |        |
|-------------------------|--------|-----------------------|-----------|--------|
| Gestational age (weeks) | 1      | 2                     | ≥ 3       | All    |
| Mean (weeks)            | 38.2   | 37.4                  | 37.4      | 38.1   |
|                         |        | Number                |           |        |
| ≤ 27                    | 141    | 41                    | 0         | 182    |
| 28–31                   | 114    | 52                    | 1         | 167    |
| 32–36                   | 1,000  | 440                   | 14        | 1,454  |
| ≥ 37                    | 9,588  | 1,736                 | 30        | 11,354 |
| Total                   | 10,843 | 2,269                 | 44        | 13,156 |
| ≤ 36 <sup>(a)</sup>     | 1,255  | 533                   | 15        | 1,803  |
|                         |        | Per cent              |           |        |
| ≤ 27                    | 1.3    | 1.8                   | 0.0       | 1.4    |
| 28–31                   | 1.1    | 2.3                   | 2.3       | 1.3    |
| 32–36                   | 9.2    | 19.4                  | 31.8      | 11.1   |
| ≥ 37                    | 88.4   | 76.5                  | 68.2      | 86.3   |
| Total                   | 100.0  | 100.0                 | 100.0     | 100.0  |
| ≤ 36 <sup>(a)</sup>     | 11.6   | 23.5                  | 34.1      | 13.7   |

<sup>(</sup>a) A gestation of less than 37 weeks (≤ 36) is defined as preterm.

Table S16: Deliveries by plurality, treatment type and procedure, Australia and New Zealand, 2013

|                       |           | Autologous |          | Oocyte/embryo |        |
|-----------------------|-----------|------------|----------|---------------|--------|
| Gestation             | Fresh IVF | Fresh ICSI | Thaw     | recipient     | All    |
|                       |           |            | Number   |               |        |
| Singleton             | 2,453     | 4,264      | 5,271    | 437           | 12,425 |
| Twin                  | 132       | 278        | 279      | 30            | 719    |
| Higher order multiple | 2         | 6          | 5        | 0             | 13     |
| Total                 | 2,587     | 4,548      | 5,555    | 467           | 13,157 |
|                       |           |            | Per cent |               |        |
| Singleton             | 94.8      | 93.8       | 94.9     | 93.6          | 94.4   |
| Twin                  | 5.1       | 6.1        | 5.0      | 6.4           | 5.5    |
| Higher order multiple | 0.1       | 0.1        | 0.1      | 0.0           | 0.1    |
| Total                 | 100.0     | 100.0      | 100.0    | 100.0         | 100.0  |

Table S17: Gestational age of babies by birth outcomes, Australia and New Zealand, 2013

|                         | Live de | livery <sup>(a)</sup> | Stillbirt<br>dear |          | Tot    | al <sup>(c)</sup> |
|-------------------------|---------|-----------------------|-------------------|----------|--------|-------------------|
| Gestational age (weeks) | Number  | Per cent              | Number            | Per cent | Number | Per cent          |
| Mean (weeks)            | 38      | 3.1                   | 26                | 5.9      | 35     | 5.3               |
| ≤ 27                    | 109     | 0.8                   | 85                | 61.6     | 213    | 1.5               |
| 28–31                   | 210     | 1.5                   | 10                | 7.2      | 221    | 1.6               |
| 32–36                   | 1,855   | 13.6                  | 22                | 15.9     | 1,877  | 13.5              |
| ≥ 37                    | 11,505  | 84.1                  | 21                | 15.2     | 11,591 | 83.4              |
| Total <sup>(d)</sup>    | 13,679  | 100.0                 | 138               | 100.0    | 13,902 | 100.0             |
| ≤ 36 <sup>(e)</sup>     | 2,174   | 15.9                  | 117               | 84.8     | 2,311  | 16.6              |

<sup>(</sup>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.

Table S18: Birthweight of babies by birth outcomes, Australia and New Zealand, 2013

|                        | Live deliv | very <sup>(a)</sup> | ery <sup>(a)</sup> Stillbirth (fetal death) <sup>(b)</sup> |          | Total <sup>(c)</sup> |          |
|------------------------|------------|---------------------|--|----------|----------------------|----------|
| Birthweight (grams)    | Number     | Per cent            | Number   | Per cent | Number               | Per cent |
| Mean (grams)           | 3,21       | 5                   | 1,32   | 4        | 3,20                 | 04       |
| < 1,000                | 92         | 0.7                 | 47   | 34.1     | 139                  | 1.0      |
| 1,000–1,499            | 156        | 1.1                 | 7  | 5.1      | 163                  | 1.2      |
| 1,500–1,999            | 416        | 3.0                 | 3  | 2.2      | 419                  | 3.0      |
| 2,000–2,499            | 987        | 7.2                 | 5  | 3.6      | 992                  | 7.1      |
| 2,500–2,999            | 2,419      | 17.7                | 12   | 8.7      | 2,431                | 17.5     |
| 3,000–3,499            | 4,705      | 34.4                | 8  | 5.8      | 4,715                | 33.9     |
| 3,500–3,999            | 3,430      | 25.1                | 2  | 1.4      | 3,432                | 24.7     |
| ≥ 4,000                | 1,289      | 9.4                 | 0  | 0.0      | 1,289                | 9.3      |
| Not stated             | 185        | 1.4                 | 54   | 39.1     | 322                  | 2.3      |
| Total                  | 13,679     | 100.0               | 138  | 100.0    | 13,902               | 100.0    |
| < 2,500 <sup>(d)</sup> | 1,651      | 12.1                | 62   | 44.9     | 1,713                | 12.3     |

<sup>(</sup>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.

<sup>(</sup>b) A stillbirth (fetal death) 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 (fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

<sup>(</sup>c) Total includes babies where birth outcome was unknown.

<sup>(</sup>d) Total includes babies where gestational age was unknown.

<sup>(</sup>e) A gestation of less than 37 weeks (≤ 36) is defined as preterm.

<sup>(</sup>b) A stillbirth (fetal death) 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 (fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

<sup>(</sup>c) Total includes babies where birth outcome was unknown.

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

Table S19: Birthweight of liveborn babies by treatment type and procedure, Australia and New Zealand, 2013

|                        |           | Autologous |          | - Oocyte/embryo |        |
|------------------------|-----------|------------|----------|-----------------|--------|
| Birthweight (grams)    | Fresh IVF | Fresh ICSI | Thaw     | recipient       | All    |
| Mean                   | 3,161     | 3,156      | 3,300    | 3,103           | 3,215  |
|                        |           |            | Number   |                 |        |
| < 1,000                | 16        | 38         | 30       | 8               | 92     |
| 1,000–1,499            | 33        | 72         | 46       | 5               | 156    |
| 1,500–1,999            | 83        | 163        | 151      | 19              | 416    |
| 2,000-2,499            | 201       | 410        | 337      | 39              | 987    |
| 2,500-2,999            | 531       | 907        | 876      | 105             | 2,419  |
| 3,000-3,499            | 980       | 1,641      | 1,911    | 173             | 4,705  |
| 3,500-3,999            | 606       | 1,090      | 1,641    | 93              | 3,430  |
| ≥ 4,000                | 194       | 378        | 679      | 38              | 1,289  |
| Not stated             | 33        | 62         | 80       | 10              | 185    |
| Total                  | 2,677     | 4,761      | 5,751    | 490             | 13,679 |
| < 2,500 <sup>(a)</sup> | 333       | 683        | 564      | 71              | 1,651  |
|                        |           |            | Per cent |                 |        |
| < 1,000                | 0.6       | 0.8        | 0.5      | 1.6             | 0.7    |
| 1,000-1,499            | 1.2       | 1.5        | 0.8      | 1.0             | 1.1    |
| 1,500–1,999            | 3.1       | 3.4        | 2.6      | 3.9             | 3.0    |
| 2,000-2,499            | 7.5       | 8.6        | 5.9      | 8.0             | 7.2    |
| 2,500-2,999            | 19.8      | 19.1       | 15.2     | 21.4            | 17.7   |
| 3,000-3,499            | 36.6      | 34.5       | 33.2     | 35.3            | 34.4   |
| 3,500-3,999            | 22.6      | 22.9       | 28.5     | 19.0            | 25.1   |
| ≥ 4,000                | 7.2       | 7.9        | 11.8     | 7.8             | 9.4    |
| Not stated             | 1.2       | 1.3        | 1.4      | 2.0             | 1.4    |
| Total                  | 100.0     | 100.0      | 100.0    | 100.0           | 100.0  |
| < 2,500 <sup>(a)</sup> | 12.4      | 14.3       | 9.8      | 14.5            | 12.1   |

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

Table S20: Perinatal mortality of babies by type of death and treatment type and procedure, Australia and New Zealand, 2013

|  |                           | Autologous |       | Docyte/embryo |        |
|--|---------------------------|------------|-------|---------------|--------|
| Perinatal deaths <sup>(a)</sup>                            | Fresh IVF Fresh ICSI Thaw |            |       | recipient     | AII    |
| Live births <sup>(b)</sup>                                 | 2,677                     | 4,761      | 5,751 | 490           | 13,679 |
| Stillbirths (fetal deaths)                                 | 30                        | 53         | 48    | 7             | 138    |
| Neonatal death   | 10                        | 15         | 9     | 1             | 35     |
| Perinatal deaths <sup>(a)</sup>                            | 40                        | 68         | 57    | 8             | 173    |
| Total <sup>(c)</sup>                                       | 2,723                     | 4,838      | 5,844 | 497           | 13,902 |
| Stillbirths (fetal deaths) per 1,000 births <sup>(d)</sup> | 11.0                      | 11.0       | 8.2   | 14.1          | 9.9    |
| Neonatal deaths per 1,000 live births <sup>(e)</sup>       | 3.7                       | 3.1        | 1.5   | 2.0           | 2.5    |
| Perinatal deaths per 1,000 births <sup>(a)</sup>           | 14.7                      | 14.1       | 9.8   | 16.1          | 12.4   |

<sup>(</sup>a) Perinatal deaths (neonatal deaths and fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

Note: The birth status was not available for 85 babies: 16 following fresh IVF, 24 following fresh ICSI and 45 following thaw. Data should be interpreted with caution due to small numbers in certain cells.

Table S21: Perinatal mortality of babies by type of death and maternal age, Australia and New Zealand, 2013

|  | Age group (years) <sup>(a)</sup> |       |       |       |       |      |        |
|--|----------------------------------|-------|-------|-------|-------|------|--------|
| Perinatal deaths <sup>(b)</sup>                            | ≤ 24                             | 25–29 | 30–34 | 35–39 | 40–44 | ≥ 45 | Total  |
| Live births <sup>(c)</sup>                                 | 135                              | 1,484 | 4,658 | 5,198 | 2,017 | 187  | 13,679 |
| Stillbirths (fetal deaths) <sup>(d)</sup>                  | 2                                | 31    | 39    | 47    | 17    | 2    | 138    |
| Neonatal death   | 0                                | 1     | 12    | 17    | 5     | 0    | 35     |
| Perinatal deaths <sup>(b)</sup>                            | 2                                | 32    | 51    | 64    | 22    | 2    | 173    |
| Total <sup>(e)</sup>                                       | 138                              | 1,523 | 4,723 | 5,281 | 2,047 | 190  | 13,902 |
| Stillbirths (fetal deaths) per 1,000 births <sup>(d)</sup> | 14.5                             | 20.4  | 8.3   | 8.9   | 8.3   | 10.5 | 9.9    |
| Neonatal deaths per 1,000 live births <sup>(f)</sup>       | 0.0                              | 0.7   | 2.5   | 3.2   | 2.4   | 0.0  | 2.5    |
| Perinatal deaths per 1,000 births <sup>(d)</sup>           | 14.5                             | 21.0  | 10.8  | 12.1  | 10.7  | 10.5 | 12.4   |

<sup>(</sup>a) Age at time of delivery.

Note: The birth status was not reported for 85 babies: 1 from women aged ≤ 24, 8 from women aged 25–29 years, 26 from women aged 30–34 years, 36 form women aged 35–39 years, 13 from women aged 40–44 years and 1 from women aged 45 years and over. Data should be interpreted with caution due to the small numbers in certain cells.

<sup>(</sup>b) Live births include neonatal deaths.

<sup>(</sup>c) Includes cycles where pregnancy outcome was unknown.

<sup>(</sup>d) Stillbirths (fetal deaths) and perinatal death rates were calculated using all births (live births and fetal deaths) as the denominator.

<sup>(</sup>e) Neonatal death rates were calculated using all live births as the denominator.

<sup>(</sup>b) Perinatal deaths (neonatal deaths and fetal deaths) are reported by patients to fertility centre staff. These data are not official vital statistics.

<sup>(</sup>c) Includes neonatal deaths

<sup>(</sup>d) Stillbirths (fetal deaths) and perinatal deaths rates were calculated using all births (live births and fetal deaths) as the denominator.

<sup>(</sup>e) Neonatal death rates were calculated using all live births as the denominator.

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