## **SUPPLEMENTARY DATA**

## Supplementary Table SI Demographic and treatment characteristics of women who recommenced ART treatment for a second ART-conceived baby, Australia and New Zealand.

Characteristics	Number of women	%
Total number of women initiating ART treatment for a second ART-conceived live birth	15 325	
Number of women achieving a second ART-conceived live birth	8946	58.4
Female age in years at initial attempt for second ART-conceived live birth; median (IQR)	36 (32–38)	
<30	1354	8.8
30–34	4952	32.3
35–39	6343	41.4
40–44	2580	16.8
>44	96	0.6
Cause of infertility as diagnosed at initial attempt for second ART-conceived live birth		
Male-only	2737	17.9
Female factor		
Tubal disease only	637	4.2
Endometriosis only	917	6
Combined tubal and endometriosis	666	4.3
Other female factor only	2057	13.4
Combined male–female factors	3187	20.8
Unexplained	3285	21.4
Not stated	1838	12
Period of time (in years) between the first ART-conceived live birth and initial attempt for second ART-conceived live birth		
<i td="" year<=""><td>3663</td><td>23.9</td></i>	3663	23.9
≥ I and <2 years	8523	55.6
$\geq$ 2 and $<$ 3 years	2323	15.2
≥3 years	816	5.3
Initiated for the second ART-conceived live birth with frozen embryo/s collected in the cycle that resulted in the first ART-conceived live birth		
Yes	11 196	73.1
No	4129	26.9
Total number of initiated single cycles <sup>‡</sup> (average number per woman)	38 102 (2.6)	
Total number of embryo transfer cycles (average number per woman)	32 871 (2.1)	
Fresh cycles	, ,	
Total number of embryo transfer cycles (average number per woman)	10 832 (0.7)	
Live births from fresh embryo transfer cycles (% of events)	2808	25.9
Number of fresh embryos transferred per embryo transfer event		
I embryo (% of fresh embryo events)	8026	74. I
≥2 embryos (% of fresh embryo events)	2806	25.9
Frozen/thaw cycles		
Total number of thaw embryo transfer cycles (average number per woman)	22 039 (1.4)	
Live births from frozen/thaw embryo transfer cycles (% of events)	6138	27.8
Number of frozen/thaw embryos transferred per embryo transfer event		
I embryo (% of frozen/thaw embryo transfer events)	20 28 I	92.0
>2 embryos (% of frozen/thaw embryo transfer events)	1758	8.0

Women who conceived their first live birth following ART treatment performed in 2009–2013, and treatment followed up until 31 December 2015

IQR: interquartile range

<sup>&</sup>lt;sup>‡</sup>Either an initiated ovarian stimulation cycle or an initiated frozen/thaw cycle.