

**Supplementary Table SIII** Cycle-specific and cumulative livebirth rates for women<sup>†</sup> who initiated for the second ART-conceived livebirth with a new ovarian stimulation cycle (total women: 4,128).

Complete cycle number <sup>¥</sup>	Number of women starting cycle	Number of livebirths	Live delivery rate (%)		
			Cycle-specific (95% CI)	Cumulative Conservative (95% CI)	Optimistic (95% CI)
<b>Age-group &lt;30 years</b>					
1	303	152	50.2 (42.8-58.8)	50.2 (44.4-55.9)	50.2 (44.7-55.9)
2	105	46	43.8 (32.8-58.5)	65.3 (59.7-70.7)	72.0 (66.2-77.5)
<b>Age-group 30-34 years</b>					
1	1,103	473	42.9 (39.2-46.9)	42.9 (39.9-45.9)	42.9 (40.0-45.9)
2	448	151	33.7 (28.7-39.5)	56.6 (53.6-59.5)	62.1 (59.0-65.3)
3	198	61	30.8 (34.0-39.6)	62.1 (59.2-65.0)	73.8 (70.5-77.0)
4	85	24	28.2 (18.9-42.1)	64.3 (61.4-67.1)	81.2 (77.6-84.5)
<b>Age-group 35-39 years</b>					
1	1,759	558	31.7 (29.2-34.5)	31.7 (29.6-34.0)	31.7 (29.6-34.0)
2	861	206	23.9 (20.9-27.4)	43.4 (41.1-45.8)	48.1 (45.5-50.6)
3	469	102	21.7 (17.9-26.4)	49.2 (46.9-51.6)	59.4 (56.6-62.2)
4	249	46	18.5 (13.8-24.7)	51.8 (49.5-54.2)	66.9 (63.9-69.9)
5	140	20	14.3 (9.2-22.1)	53.0 (50.6-55.3)	71.6 (68.4-74.8)
<b>Age-group 40-44 years</b>					
1	919	109	11.9 (9.4-14.3)	11.9 (9.8-14.1)	11.9 (9.9-14.1)
2	585	47	8.0 (6.0-10.7)	17.0 (14.6-19.6)	18.9 (16.4-21.9)
3	373	27	7.2 (5.0-10.6)	19.9 (17.3-22.6)	24.8 (21.7-28.3)
4	236	7	3.0 (1.4-0.6)	20.7 (18.1-23.4)	27.0 (23.6-30.8)
5	152	9	5.9 (3.0-11.4)	21.7 (19.0-24.5)	31.4 (27.2-35.9)

<sup>†</sup> Women who conceived their first livebirth following ART treatment performed in 2009-2013, Australia and New Zealand, followed up until 31 December 2015.

<sup>¥</sup> A complete cycle is defined as all embryo transfer events associated with an ovarian stimulation.

Note: Cumulative livebirth rates were only calculated when at least 50 women had commenced an ovarian stimulation cycle for particular cycle count.