Supplemental Material to:

Dataset 1: Mean, standard deviation (SD) range in H19-ICR (values in %)

	CpG* 1	CpG* 2	CpG 3	CpG 4	CpG 6	CpG* 7	CpG* 8	CpG* 9	CpG 10	CpG 11	CpG 12	CpG* 13	CpG* 14
Mean	91,17	92,5	88,7	75,2	85,57	93,1	91,73	91,47	83,4	88,03	84,47	94,63	90,43
2SD	4,88	5,42	4,62	13,34	3,4	9,99	5,78	6,38	8,72	4,32	10,64	5,16	5,76
Range	86-96	87-97	84-93	61-88	82-88	83-100	85–97	85-97	74-92	83–92	73–95	89–99	84–96

* Equivalent CpG values

Dataset 2: Mean, standard deviation (SD) range in KvDMR (values in %)

	CpG 1	CpG 2	CpG 3	CpG* 4	CpG 5	CpG* 6	CpG* 7	CpG* 8	CpG* 9	CpG* 10	CpG* 11	CpG* 12	CpG* 13	CpG 14	CpG 15	CpG 16	CpG 17	CpG 18	CpG* 19	CpG* 20	CpG 21
Mean	1,37	0,5	1,37	0,9	2,2	1,07	0,97	1	0,97	1,3	1,1	0,73	0,77	0,43	1,4	0,47	1,53	0,6	1,17	0,83	0,17
2SD	1,34	1,46	1,22	0,96	0,96	1,28	0,82	0,90	0,98	0,94	0,96	1,56	1,36	1,36	1,34	0,57	1,26	1,12	1,06	1,3	0,92
Range	0-2	0-1	0-2	0-1	1-3	0-2	0-1	0-1	0-1	0-2	0-2	0-2	0-2	0-1	0-2	0-1	0-2	0-1	0-2	0-2	0-1

* Equivalent CpG values

Dataset 3: Mean, standard deviation (SD) range in SNRPN-ICR (values in %)

	CpG 1	CpG* 2	CpG* 3	CpG 4	CpG* 5	CpG* 6	CpG* 7	CpG* 8	CpG* 9	CpG* 10	CpG* 11	CpG* 13	CpG* 14	CpG* 15	CpG* 16	CpG* 17	CpG* 18	CpG* 19	CpG 20	CpG 21
Mean	1,87	1,37	1,33	0,43	0,53	1,50	0,53	0,80	1,17	1,33	1,07	1,40	0,73	1,00	0,83	1,13	1,37	0,83	0,47	1,60
2SD	1,94	1,7	1,32	1,36	1,36	2,02	1,64	2,12	2,42	2,7	2,28	2,44	2,02	2,34	2,04	2,22	2,66	2,46	1,72	3,42
Range	0-3	0-3	0-2	0-1	0-1	0-3	0-2	0-2	0-3	0-4	0-3	0-3	0-2	0-3	0-2	0-3	0-4	0-3	0-2	0-5

* Equivalent CpG values

Dataset 4: Mean, standard deviation (SD) range in GTL2-DMR (values in %)

	CpG 1	CpG 2	CpG 3	CpG* 4	CpG* 5	CpG* 6	CpG* 7	CpG* 8	CpG 9	CpG* 10	CpG* 11	CpG* 12	CpG* 13	CpG 14	CpG 15	CpG 16	CpG* 17	CpG* 18	CpG 19	CpG 20	CpG 21
Mean	0,63	0,60	2,10	1,40	1,07	0,83	1,27	1,13	0,63	0,90	0,97	0,87	1,23	2,07	1,87	1,97	0,83	1,23	0,70	1,53	1,30
2SD	1,22	1,00	1,22	1,62	1,56	1,18	1,38	1,56	1,12	0,80	0,36	0,86	1,14	0,5	0,7	0,82	0,76	1	0,94	1,02	1,06
Range	0-1	0-1	0-3	0-3	0-2	0-2	0-2	0-2	0-1	0-1	0-1	0-1	0-2	0-2	0-2	0-2	0-1	0-2	0-1	0-2	0-2

* Equivalent CpG values

Dataset 5: Mean, standard deviation (SD) range in IG-DMR (values in %)

	CpG* 1	CpG* 2	CpG 3	CpG 4	CpG 5
Mean	90,57	92,33	62,27	83,23	66,37
2SD	6,58	8,7	7,14	6,72	6,38
Range	97-83	100-83	69-55	89-76	72-59

* Equivalent CpG values

Dataset 6: ART outcome

Case	Mature oocytes	ART Treatment	Zygotes	Embryo quality[1]				Non-viable embryos	Transferred embryos	Gestation	Sacs	Heartbeat	Miscarriage	Birth	Sex	Weigth (mg)
				A	B	C	D									
1	5	ICSI	4		1	1	1	1	BCD	Negative						
2	11	IVF	6						CRYO							
				1	1		1	1	ABD	Negative						
3	15	ICSI	9			3	3	3	CC	Negative						
	13		9			2	3	4	CDD	Negative						
6	12	IVF	12	1		2	3	2	AD	Positive	1	1		1	female	3550
9	15	ICSI	11	3			4	1	AA	Positive	2	2		2	male + female	2340 + 2130
10	2	ICSI	2				2		DD	Negative						
	4	ICSI	2			1	1		CD	Positive	2	2		unknown		
11	3	ICSI	2	1			1		AD	Negative						
	6	ICSI	6	1		1	2	2	AC	Negative						
	2	ICSI	1				1		D	Negative						
	9	IVF/ICSI	6				4	2	DDD	Negative						
	16	ICSI	12	1		3	2	2	AC	Positive	0					
12	6	ICSI	5				2	3	DD	Positive	1	1		1	male	3560
13	6	ICSI	6	2		2	2		AA	Positive	1	1		unknown		
15	12	IVF	8	1	1		1	2	AB	Negative						
17	21	ICSI	17						CRYO							
				1	1			2	BC	Positive	0					
20	2	ICSI	1				1		D	Positive	1	1		1	female	2800
	1	ICSI	1				1		D	Negative						
	17	ICSI	13	1	2	1	1	3	AB	Positive	2	2		unknown		
24	17	ICSI	17	1	3		1	3	AB	Positive	1	1		1	male	3390
25	11	ICSI	6	1			2	3	AD	Positive	2	2	1	unknown (1Sac)		

26	5	ICSI	2			1		1	C	Negative							
	5	ICSI	5			2	1	2	CD	Negative							
27	7	IVF	5	2	2			1	AA	Negative							
	13	IVF	11	3		2	1	2	AA	Positive	1	1			1	male	unknown
	7	IVF	6		2	1	1	2	BB	Negative							
28	7	ICSI	5	3		1	1		A	Positive	1	1			1	male	3120
30	8	ICSI	7				1		D	Positive	1	1			1	male	2900
31	10	ICSI	7	1		1	5		AD	Positive	2	2	2				
32	12	IVF	7	1	3		1	2	AB	Negative							
33	13	ICSI	8			2	3	3	CC	Negative							
34	6	ICSI	3	1			1	1	AD	Positive	1	1	1				
	4	ICSI	1	1					AD	Negative							
36	8	ICSI	6		1	4		1	BC	Positive	1	1			1	female	unknown
37	9	ICSI	7		2		2	3	BB	Positive	1	1			1	female	3150
40	8	ICSI	4				3	1	DDD	Positive	1	1			unknown		
41	15	IVF/ICSI	10				5	1	DD	Negative							
							4		DD	Positive	1	1			1	female	2900
42	8	ICSI	5	2		1	1	1	AA	Positive	2	2			2	male + female	1350 + 1550
43	2	ICSI	2				1	1	D	Negative							
	3	ICSI	3	1			1	1	AD	Positive	2	2			unknown		
44	5	ICSI	2		1		1		BD	Negative							
	2	ICSI	1	1					A	Negative							
	3	ICSI	1	1					A	Negative							
	11	ICSI	10	1	2	1	1	2	AB	Positive	2	2			unknown		
45	9	IVF/ICSI	6						CRYO								
				1		1		1	AC	Negative							
							1	2	D	Negative							
	16	IVF	10	2		1	1	3	AA	Negative							
	12	IVF/ICSI	12	2	1	2	2	1	AA	Negative							

46	5	ICSI	4			2	2		CC	Negative						
47	18	IVF/ICSI	10	1	1	1	2	1	AB	Positive	2	2		2	male + female	unknown
48	2	ICSI	2	1			1		AD	Positive	2	2		2	male + female	2630 + 2300
49	8	ICSI	6	1	1	1	2	1	AB	Negative						
50	9	ICSI	4	1		1		2	AC	Negative						
	7	ICSI	4	1		1	1	1	AC	Negative						
51	16	IVF/ICSI	11						CRYO							
						1	2	1	CDD	Negative						
				1	1		1	1	ABD	Positive	0					
53	7	ICSI	7	2			2	3	AA	Positive	1	1		1	female	3320
54	10	IVF	6						CRYO							
						1	2		CDD	Positive	1	1		1	unknown	
						2	1	1	CCD	?						
55	8	IVF	7	1			3	3	AD	Negative						
	11	IVF	9	2			3	4	AA	Positive	0					
	8	IVF	6	1					A	Positive	1	1		1	female	3160
	14	IVF	12		2				BB	Positive	1	1		unknown		
57	10	ICSI	6	4		2			AC	Positive	No					
	2	ICSI	2			1	1		CD	Negative						
58	4	ICSI	0													
	2	ICSI	1	1					A	Positive	1	1		1	male	2500
59	21	IVF/ICSI	19						CRYO							
						3	1		DDD	Negative						
					1	2	1		CDD	Negative						
60	18	ICSI	12						CRYO							
					1		3		BDD	Positive	0					
						3	1		DDD	Positive	1	1				

62	1	ICSI	1				1		D	Negative						
63	9	IVF	7	4	2		D		AA	Negative						
	10	IVF/ICSI	9	2					AA	Negative						
	7	ICSI	6													
64	4	ICSI	3				1	2	D	Negative						
66	1	ICSI	1	1					A	Negative						
67	12	IVF	9						CRYO							
					1	1	3		BCD	Positive	2	2	2			
				1	1		1	1	AB	Negative						
				1	1		1	1	BD	Positive	1	1				
68	8	ICSI	6	2		1	1	2	AA	Negative						
	8	ICSI	4	1	1				AB	Negative						
	8	ICSI	4	1	1				AB	Negative						
	8	ICSI	5		2				BB	Positive	2	2		2	male + male	2060 + 2200
69	16	ICSI	15	3		1	2	1	AA	Negative						
70	1	ICSI	1				1		D	Negative						
	15	ICSI	13	2	1	2	2		AA	Positive	1	1		1	female	1200
72	13	ICSI	11						CRYO							
					1	1	1	1	BCD	Positive	1	1				
73	5	ICSI	3		1	1	1		BC	Positive	1	1		1	female	3540
74	14	IVF	12	1		2	1	4	AC	Positive	1	1		1	female	3300
77	8	ICSI	7		1	1	3	2	BC	Negative						
78	2	ICSI	2	1			1		AD	Positive	1	1		1	female	3370
79	9	IVF	8	1	3	2	2		BB	Positive	1	1		unknown		
80	3	ICSI	2				1	1	D	Negative						
	14	ICSI	13	3		1	3	2	AA	Positive	1	1		1	female	2280
82	5	ICSI	2				2		DD	Negative						
83	8	ICSI	6						CRYO							
							2	1	DD	Negative						
	4	ICSI	3				2	1	DD	Negative						

84	6	ICSI	3				2	1	DD	Negative						
	2	ICSI	2				2		DD	Negative						
	5	IVF	4				3	1	DDD	Negative						
85	14	IVF	13	1			1		AD	Negative						
				1		1		1	AC	Positive	1	1		1	male	3980
87	7	ICSI	3						CRYO							
89	3	ICSI	2				2		DD	Positive	0					
90	4	ICSI	3		1	1		1	BC	Positive	0					
91	3	ICSI	3				2	1	DD	Negative						
	4	ICSI	4				1		D	Negative						
	9	ICSI	4	2			2		AA	Negative						
	5	ICSI	3	1	1			1	AB	Negative						
93	7	ICSI	2				2		DD	Negative						
	3	ICSI	2				2		DD	Negative						
	6	ICSI	5				5		DDD	Negative						
95	10	IVF/ICSI	5	1			2	2	AD	Negative						
	7	ICSI	5		2	1		2	BB	Positive	1	1		1	female	3000
97	11	ICSI	0													
	14	ICSI	8	1	1	1	3	2	AB	Positive	1	1		1	female	2800
98	8	ICSI	7				1		D	Positive	1	1		1	female	3150
99	13	IVF/ICSI	10						CRYO							
				1			1	2	AD	Negative						
				1	1		2	1	ABD	Negative						
101	1	ICSI	1				1		D	Negative						
	6	ICSI	3		1		1	1	BD	Negative						
	13	ICSI	9	1	3	2	1	2	AB	Negative						
105	4	ICSI	4	1	1	2			AB	Negative						
106	2	ICSI	2				2		DD	Negative						

1. Based on the following paper: Ardoy M, Calderón G. Cuadernos de Embriología Clínica: Criterios de Valoración Morfológica de Oocitos, Embriones tempranos y Blastocistos Humanos. 2nd edn, 2008. ASEBIR, Madrid, Spain (included in the reference list).