

Supplementary Table 1. Donor information for embryos^a

Donor ID	Age	Oocytes Retrieved	No. Embryos Analysed	Stage of pre-implantation embryo development			Permis sion to biopsy PBs	No. Embryos Transferred	Live Birth Outcome ^d	Reason for karyomapping
				Cleavage	Morula	Blastocyst				
LB01	38	8	4	2	1	1	no	1	Live birth	PGD for single gene disorder and PGS for advanced maternal age
LB02 ^b	35	10	6	2	0	4	no	2	Twin live birth	PGD for single gene disorder
LB03	38	21	10	5	1	4	9 ^c	1	None	PGS for recurrent miscarriage
LB04	34	23	8	5	3	0	no	1	None	PGD for paternal translocation
LB05 ^e	41	27	10	10	0	0	no	1	Live Birth	PGS for advanced maternal age
Total:			38				9	5	3	

^aFrom The Bridge Centre, UK. Diagnostic follow-up in compliance with the code of practise (HFEA).

^bDonor of the two MII-arrested oocyte-PB1 duos (see Methods).

^cCorresponding embryo with both polar bodies analysed for MeioMapping.

^dembryo giving rise to live births not mapped.

^ePaternal translocation chromosomes were excluded from the analysis.

Supplementary Table 2. Donor information for oocyte-PB trios

StudyID	oocytes collected	oocytes vitrified	Oocytes used for study	Oocytes after warming	Activated oocytes	Complete trios amplified	Patient age	Pregnancy from cycle	Reason for infertility
G01	10	10	4	4	2	0	37.4	no	idiopathic
G02	6	3	3	3	3	0	36.2	yes	male factor
G03	15	10	10	5	3	0	37.6	yes	male factor
G04*	11	5	5	5	5	3	35.7	no	male factor
G05	11	6	3	3	3	0	37.3	yes	idiopathic
G06*	12	6	6	5	4	4	40.6	yes	male factor
G07*	16	9	6	6	5	1	38.4	yes	tubal
G08*	10	7	5	5	5	3	37.9	yes	endometriosis
G09*	12	fresh	2	2	2	2	33.2	yes	male factor
G10	18	18	3	2	2	0	39.0	no	male factor
			Total:	40	34	13	37.3		

*trios used to generate MeioMaps. Average age: 37.2 years.