Supplementary Table SI **Characteristics of the 42 cycles for this PGT-M cohort.**

PGD Case ID	Full gene name (HUGO Gene Nomenclature Committee)	Gene_ symbol	Genetic disorder/ (OMIM_Phenotype_ID)	Mode of inheritance	Maternal age (years)	Infertility indication (AMA, RIF, RPL, MF)
PGD063	sodium voltage-gated channel alpha subunit 5	SCN5A	Brugada syndrome 1 (601144)	AD	29	–
PGD036_C6II	BRCA1, DNA repair associated	BRCA1	Breast-ovarian cancer, familial, 1 (604370)	AD	29	–
PGD077	BRCA1, DNA repair associated	BRCA1	Breast-ovarian cancer, familial, 1 (604370)	AD	29	–
PGD078	exostosin glycosyltransferase 1	EXT1	Exostoses, multiple, type 1 (133700)	AD	29	–
PGD096	hemoglobin subunit beta	HBB	Thalassemia, beta (613985)	*AR*	26	MF
PGD107	notch, drosophila, homolog of, 1	NOTCH1	Aortic valve disease 1 (109730)	AD	29	–
PGD118	fibrillin 1	FBN1	Marfan syndrome (154700)	AD	26	–
PGD120	BRCA2, DNA repair associated	BRCA2	Breast-ovarian cancer, familial, 2 (612555)	AD	27	–
PGD123	neurofibromin 1	NF1	Neurofibromatosis, type 1 (162200)	AD	24	–
PGD124_C1	ankyrin repeat containing	KRIT1	Cerebral cavernous malformations-1 (116860)	AD	26	MF
PGD124_C2	ankyrin repeat containing	KRIT1	Cerebral cavernous malformations-1 116860	AD	26	MF
PGD124_C3	ankyrin repeat containing	KRIT1	Cerebral cavernous malformations-1 116860	AD	27	MF
PGD131	glucosylceramidase beta	GBA	Gaucher disease, type II (230900)	*AR*	39	AMA
PGD133_C2	spastin	SPG4	Spastic paraplegia 4, autosomal dominant (182601)	AD	29	–
PGD133_C3	spastin	SPG4	Spastic paraplegia 4, autosomal dominant 182601	AD	29	–
PGD133_C4	spastin	SPG4	Spastic paraplegia 4, autosomal dominant 182601	AD	30	–
PGD136	NK2 homeobox 1	NKX2-1	Choreoathetosis, hypothyroidism, and neonatal respiratory distress (610978)	AD	40	AMA
PGD148	neurofibromin 1	NF1	Neurofibromatosis, type 1 (162200)	AD	29	–
PGD156	BRCA2, DNA repair associated	BRCA2	Breast-ovarian cancer, familial, 2 (612555)	AD	28	–
PGD158	BRCA2, DNA repair associated	BRCA2	Breast-ovarian cancer, familial, 2 (612555)	AD	25	–
PGD159	BRCA1, DNA repair associated	BRCA1	Breast-ovarian cancer, familial, 1 (604370)	AD	26	MF
PGD165	neurofibromin 1	NF1	Neurofibromatosis, type 1 (162200)	AD	22	–
PGD167	polycystin 1, transient receptor potential channel interacting	PKD1	Polycystic kidney disease 1 (173900)	AD	33	–
PGD169	DM1 protein kinase	DMPK	Steinert disease (160900)	AD	39	AMA/RIF/ MF
PGD176_C1	BRCA2, DNA repair associated	BRCA2	Breast-ovarian cancer, familial, 2 (612555)	AD	29	–
PGD176_C2	BRCA2, DNA repair associated	BRCA2	Breast-ovarian cancer, familial, 2 (612555)	AD	29	–
PGD177	nyctalopin	NYX	Night blindness, congenital stationary (complete), 1 A, X-linked (310500)	*XLR*	29	MF
PGD178_C2	neurofibromin 1	NF1	Neurofibromatosis, type 1 1(62200)	AD	29	–
PGD189_C1	potassium voltage-gated channel subfamily H member 2	KCNH2	Long QT syndrome 2 (613688)	AD	32	–
PGD191_C1	telomerase RNA component	TERC	Dyskeratosis congenita, autosomal dominant 1 (127550)	AD	26	–
PGD191_C2	telomerase RNA component	TERC	Dyskeratosis congenita, autosomal dominant 1 (127550)	AD	26	–
PGD192	notch drosophila, homolog of, 3	NOTCH3	Cerebral arteriopathy with subcortical infarcts and leukoencephalopathy 1 (125310)	AD	41	AMA

Continued

Supplementary Table SI *Continued*

PGD Case ID	Full gene name (HUGO Gene Nomenclature Committee)	Gene_ symbol	Genetic disorder/ (OMIM_Phenotype_ID)	Mode of inheritance	Maternal age (years)	Infertility indication (AMA, RIF, RPL, MF)
PGD198_C1	coagulation factor VIII	F8	Hemophilia A (306700)	*XLR*	32	–
PGD203	lamin A/C	LMNA	Cardiomyopathy, dilated, 1 A (115200)	AD	29	MF
PGD252	mutl, E. coli, homolog of, 1	MLH1	Colorectal cancer, hereditary nonpolyposis, type 2 (609310)	–	24	–
PGD255	ankyrin repeat containing	KRIT1	Cerebral cavernous malformations-1 (116860)	AD	28	–
PGD260	spastin	SPG4	Spastic paraplegia 4, autosomal dominant (182601)	AD	27	–
PGD273	exostosin glycosyltransferase 1	EXT1	Exostoses, multiple, type 1 (133700)	AD	34	–
PGD274	unc13, C. elegans, homolog of, D	MUNC13-4	Hemophagocytic lymphohistiocytosis, familial, 3 (608898)	–	32	–
PGD284	alpha-1,3-glucosyltransferase	ALG6	Congenital disorder of glycosylation, type Ic (603147)	*AR*	36	–
PGD288	poly(A) binding protein nuclear 1	PABPN1	Oculopharyngeal muscular dystrophy (164300)	AD	30	–
PGD302	tuberous sclerosis 1	TSC1	Tuberous sclerosis-1 (191100)	AD	35	–
N = 42			Mean maternal age (± SD)		30 (4.4)	

PGT-M = Preimplantation genetic testing for a monogenic disorder; OMIM = Online Mendelian Inheritance in Man; AD = autosomal dominant; AR = autosomal recessive; XLR = X-linked recessive; AMA = advanced maternal age; RIF = recurrent implantation failure; RPL = recurrent pregnancy loss; MF = male factor; – = no indication of infertility.