

## Review of the Human Reproductive Technology Act 1991

Pachter, Nick

**Sent:** Thursday, March 22, 2018 4:01 PM

**To:** O'Callaghan, Jenny

**Cc:** HRTSR; Harris, Maureen

Hi Jenny and Maureen,

Genetics Services of Western Australia have reviewed the Terms of Reference and the relevant current legislation. Our comments are as follows:

'Genetic testing of embryos, saviour siblings, mitochondrial donation and gene editing technology'

saviour siblings

while the issue of saviour siblings is not specifically related to genetics, GSWA as a group would support PGD for saviour siblings in the context stated in the 'NHMRC Ethical guidelines on the use of assisted reproductive technology in clinical practice and research 2017'. Specifically preimplantation genetic testing may be used to select an embryo with compatible tissue for subsequent stem cell therapy intended for a parent, sibling or other relative.

Mitochondrial donation

Genetics Services of Western Australia would support mitochondrial donation as a process of allowing families with mitochondrial disorders to have healthy children. Traditional methods for testing a pregnancy in the setting of a female having a mitochondrial DNA mutation are complex, accuracy and interpretation is uncertain, is only available for specific mitochondrial DNA mutations and given that all of the children would inherit the mitochondrial DNA mutation from the mother limits these families' choice in having children significantly.

Gene editing technology

Gene editing technology is not at a developmental stage at present that would be useful for clinical practice in the assisted reproductive technology field.

Genetic testing of embryos

Genetic services of Western Australia concur with the information and summary in the ethical acceptability's section (8.15, 8.16, 8.17) of the preimplantation genetic testing section of part B of 'NHMRC Ethical guidelines on the use of assisted reproductive technology in clinical practice and research 2017'. We support the current system of the reproductive technology Council assessing all applications for preimplantation genetic diagnosis and also the current process where all couples undergoing PGD are seen by a geneticist or genetic counsellor to discuss the aspects of the condition in the context of PGD prior to the application. We do suggest, that the geneticist/genetic counsellor be independent of the fertility clinic, that they do not need to be working within genetic services of Western Australia, but do need to be qualified and in the case of the genetic counsellor either under the supervision of a geneticist or a HGSA board-certified genetic counsellor

Regards,  
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