Statutory Approvals Committee – minutes

Item 1

Centre 0006 (The Lister Fertility Clinic)

Pre-implantation Genetic Diagnosis (PGD) application for Pseudo-TORCH syndrome-type 1, OMIM #251290

Thursday, 30 May 2019

HFEA Medway Meeting Room, Level 2, 10 Spring Gardens, London, SW1A 2BU

Committee Members	Margaret Gilmore (Chair) Bobbie Farsides (Deputy Chair) Anne Lampe Tony Rutherford Rachel Cutting	
Members of the Executive	Moya Berry Catherine Burwood Debbie Okutubo Nora Cooke-O'Dowd	Committee Secretary Licensing Manager (Observer) Governance Manager (Induction) Head of Research & Intelligence (Induction)
Specialist Adviser	Dr Alison Male	
Legal Adviser	Ros Foster	Browne Jacobson LLP

Declarations of interest

- Members of the committee declared that they had no conflicts of interest in relation to this item.

The committee had before it:

- 9th edition of the HFEA Code of Practice
- Standard licensing and approvals pack for committee members.

The following papers were considered by the committee:

- Executive Summary
- PGD Application Form
- Redacted Peer Review
- Genetic Alliance UK statement
- Statutory Approvals Committee minutes 29 September 2016, PGD application for Aicardi-Goutières Syndrome Type 1
- Licence Committee minutes 26 August 2010, application for Goutières syndrome Type 2

1. Consideration of application

1.1. The committee welcomed the advice of its specialist adviser, Dr Alison Male, who confirmed that the condition was as described in the papers.

1.2. The committee noted that the description in the PGD application for Pseudo-TORCH syndrome-type 1, OMIM #251290 was consistent with the peer review.

1.3. The committee noted that the condition being applied for is not on the list of approved PGD conditions.

1.4. The committee noted that the Genetic Alliance UK statement provided a perspective on the impact of the condition on patients, their families and carers.

1.5. The committee had regard to its decision tree. The committee noted that the centre is licensed to carry out PGD. The committee was also satisfied that the centre has experience of carrying out PGD and that generic patient information about its PGD programme and associated consent forms had previously been received by the HFEA.

1.6. The committee noted that the proposed purpose of testing the embryos was as set out in paragraph 1ZA(1)(b) of Schedule 2 of the Act, i.e. 'where there is a particular risk that the embryo may have any gene, chromosome or mitochondrion abnormality, establishing whether it has that abnormality or any other gene, chromosome or mitochondrion abnormality'.

1.7. The committee noted that Pseudo-TORCH syndrome-type 1, is inherited in an autosomal recessive pattern, which means there is a 25% chance of an embryo being affected with the condition in each pregnancy if each parent has a relevant mutation.

1.8. The committee noted the penetrance of the condition is 100%.

1.9. Pseudo-TORCH syndrome-type 1 is a rare genetic condition caused by mutations in the OCLN gene. The condition is characterised by microcephaly and intracranial calcifications (presence of abnormal calcium deposits in the brain). Patients develop brain deformities whilst in the womb (polymicrogyria) and experience developmental delay and seizures. Liver and kidney dysfunction may also be present. The condition is always severe and life-limiting: the majority of patients die within the first year of life and those who do survive past the first year have severe intellectual disability and muscle spasm quadriplegia (affecting all four limbs) and speech.

1.10. There are no treatments available for Pseudo-TORCH syndrome-type 1.

1.11. The committee noted the inspectorate's request to consider Pseudo-TORCH syndrome-type 1 OMIM #251290 for inclusion on the list of conditions approved for PGD. The committee agreed to consider the application on this basis.

1.12. The committee noted the recommendation of the peer reviewer that Pseudo-TORCH syndrome-type 2 #617397, is considered alongside the application for Pseudo-TORCH syndrome-type 1. The condition is of the same phenotype as Pseudo-TORCH syndrome-type 1 and is inherited in an autosomal recessive manner. Pseudo-TORCH syndrome type 2, causes brain malformations, brain calcifications, seizures, liver dysfunction, brain haemorrhage, respiratory difficulties and a severely shortened life expectancy.

1.13. The committee also noted the peer reviewer's suggestion to include Aicardi-Goutières syndrome 7 (AGS7) OMIM #615846 in the application for PGD approval. Aicardi-Goutières syndrome 7 along with Pseudo-TORCH syndrome-types 1 and 2, is part of the larger group of type 1 interferonopathies. The committee noted that Aicardi-Goutières syndrome, types 1-6 are already licensed for PGD by the HFEA.

2. Decision

2.1. The committee considered that, in the worst-case scenario Pseudo-TORCH syndrome-type 1, OMIM #251290 and Pseudo-TORCH syndrome-type 2 OMIM #617397 are severe and life limiting conditions with multiple disabling features. There is no cure for the conditions and the majority of those affected die within the first year of life.

2.2. The committee had regard to its explanatory note and confirmed that, on the basis of the information presented, it was satisfied that there is a particular risk that an embryo may have the abnormality in question and that there is a significant risk that a person with the abnormality will, given the conditions' worst symptoms, have or develop a serious physical disability, a serious illness or any other serious medical condition.

2.3. The committee was therefore satisfied that the following conditions meet the criteria for testing under paragraph 1ZA(1)(b) and (2) of Schedule 2 of the Act. The committee agreed to authorise testing for:

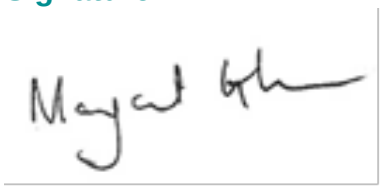
- Pseudo-TORCH syndrome-type 1, OMIM #251290
- Pseudo-TORCH syndrome-type 2, OMIM #617397

2.4. The committee agreed that as Aicardi-Goutières syndrome 7 was variable in its phenotype and of a different mode of inheritance, it was not appropriate to consider this condition under this application.

3. Chairs signature

3.1. I confirm this is a true and accurate record of the meeting,

Signature



Name

Margaret Gilmore

Date

25 June 2019