Statutory Approvals Committee – minutes

Centre 0102 (Guy's Hospital)

Pre-implantation Genetic Diagnosis (PGD) application for Adenylosuccinate lyase deficiency (ADSL), OMIM #103050

Thursday, 25 January 2018

Church House Westminster, Dean's Yard, Westminster SW1P 3NZ

Committee members	Margaret Gilmore (Chair) Anne Lampe Anthony Rutherford Ruth Wilde	
Members of the Executive	Bernice Ash Dee Knoyle Nana Gyamfi Chereena Harriott	Committee Secretary Committee Secretary (Observing) Licensing Information Officer (Observing) Inspections & Logistics Officer (Observing)
Specialist Adviser	Dr Alison Male	
Legal Adviser	Dawn Braithwaite	Mills & Reeve LLP
Observers		

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:

- 8th 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
- 3 additional papers from the centre

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 application for Adenylosuccinate lyase deficiency (ADSL), OMIM #103050 is consistent with the peer review.

1.3. The committee noted that the Genetic Alliance opinion provided a patient perspective and supported the application.

1.4. 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.

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

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 the condition is inherited in an autosomal recessive pattern which means there is a 25% chance of an embryo being affected with the condition, if both parents have a relevant mutation.

1.8. The committee noted that the condition is a rare neurogenetic condition with fewer than 100 cases reported worldwide. The application discusses three ADSL phenotypes, though they are on a continuum. The most severe phenotype (Neonatal fatal type) presents neonatally with encephalopathy, a lack of spontaneous movement (‘floppy infant’), respiratory failure and intractable seizures, resulting in early death within the first weeks of life. A second phenotype (Type 1) usually presents in the first few months of life and is also clinically severe, characterized by severe psychomotor retardation, seizures and microcephaly, developmental arrest, lack of eye-to-eye contact, coma and death. A third ADSL phenotype (Type 2) presents in the first few years of life and is more clinically variable; those affected can suffer from mild to moderate psychomotor development delay, impaired speech development, ataxia, seizures, autism and behavioural problems.

1.9. The committee noted that current understanding is that the condition is fully penetrant.

1.10. There is no treatment available that modifies the underlying disease process in ADSL. Neonatal and Type 1 ADSL are fatal neonatally or in the first months of life and most patients suffer from these types.

1.11. The committee noted, although the abbreviation for this condition is stated in the application as ADSL, the OMIM website lists the condition as Adenylosuccinate lyase deficiency (ADSLD); the Executive suggested that this name and abbreviation should be used forthwith. The committee agreed that the condition should be named as as Adenylosuccinate lyase deficiency (ADSLD).

1.12. The committee noted the inspectorate’s request to consider whether Adenylosuccinate lyase deficiency (ADSLD), OMIM #103050, should be approved for inclusion on the PGD List. The committee agreed to consider the application on this basis.

2. Decision

2.1. The committee considered that Adenylosuccinate lyase deficiency (ADSLD), OMIM #103050 is serious given it is often fatal neonatally or in the child's first few weeks of life, observing the serious symptomatic consequences associated with the condition. The committee considered this a devastating, life-limiting condition which can have severe effects on the quality of life of those with the condition and their families.

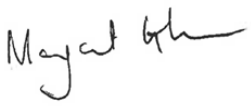
2.2. The committee had regard to its explanatory note and confirmed that, on the basis of the information presented, it was satisfied that there is a particular risk that an embryo may have the abnormality in question and that there is a significant risk, given the condition's worst symptoms, that a person with the abnormality will have or develop a serious physical or mental disability, a serious illness or any other serious medical condition. The committee was therefore satisfied that the condition Adenylosuccinate lyase deficiency (ADSLD), OMIM #103050, meets the criteria for testing under paragraph 1ZA(1)(b) and (2) of Schedule 2 of the Act.

2.3. The committee agreed to authorise testing for Adenylosuccinate lyase deficiency (ADSLD), OMIM #103050.

3. Chair's signature

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

Signature



Name

Margaret Gilmore

Date

9 February 2018