Statutory Approvals Committee – minutes

Item 2

Centre 0201 (Edinburgh Assisted Conception)

Pre-implantation Genetic Diagnosis (PGD) application for PAPA (Pyogenic Arthritis, Pyoderma Gangrenosum and Acne) Syndrome, OMIM #604416

Thursday, 25 April 2019

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

Committee members	Margaret Gilmore (Chair) Bobbie Farsides (Deputy Chair) Emma Cave Tony Rutherford Ruth Wilde	
Members of the Executive	Moya Berry Catherine Burwood	Committee Secretary Licensing Manager (Observer)
Specialist Adviser	Dr Alan Fryer	
Legal Adviser	Graham Miles	Blake Morgan LLP
Observers	Amanda Evans Jennifer Rogerson	Research Manager (Induction) Research Manager (Induction)

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

1. Consideration of application

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

1.2. The committee noted that the description in the PGD application for Pyogenic Arthritis, Pyoderma Gangrenosum and Acne Syndrome (PAPA), OMIM # 604416, 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 the of 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 PAPA syndrome is inherited in an autosomal dominant pattern, which means there is a 50% chance of an embryo being affected with the condition in each pregnancy if one of the parents has a relevant mutation.

1.8. The committee noted penetrance of the condition is unknown as the condition is so rare. Dr Fryer noted that in published family trees, the penetrance appeared very high and so if a parent is affected there is a 50% chance of a child inheriting the mutation and a high chance they will be affected.

1.9. PAPA syndrome is caused by a mutation in the PSTPIP1 gene. It usually presents in early childhood with recurrent episodes of pyogenic arthritis (inflammation of joints with sterile pus) with the elbows, knees and ankles being particularly affected. These symptoms may be precipitated by trauma but often they are not. Pain can be severe. Joint erosion and destruction of the joint may develop leading to deformity.

1.10. Skin problems can start in early childhood. Very painful deep ulcers (called pyoderma gangrenosum) develop, especially in the legs. These may exacerbate minor skin injury, such as a bump (pathergy). More significant injuries can result in persistent ulcerations. Abscess formation can occur at injection sites.

1.11. There is no cure for the condition and no treatment that modifies the disease process. Treatments are not always effective.

1.12. The committee noted the inspectorate's request to consider Pyogenic Arthritis, Pyoderma Gangrenosum and Acne Syndrome (PAPA), OMIM # 604416 for inclusion on the list of conditions approved for PGD. The committee agreed to consider the application on this basis.

2. Decision

2.1. The committee considered that, in the worst-case scenario Pyogenic Arthritis, Pyoderma Gangrenosum and Acne Syndrome (PAPA), OMIM # 604416 is a serious and severely painful condition. Onset occurs in childhood and the condition is disabling and potentially life limiting. There is no cure and no treatment that modifies the disease process. The treatments used to manage the symptoms can have significant side effects. The committee considered the physical and psychological effects on individuals with this debilitating condition and the disruption it could cause to formative years and beyond.

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.

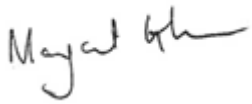
2.3. The committee was therefore satisfied that the following condition meets the criteria for testing under paragraph 1ZA(1)(b) and (2) of Schedule 2 of the Act. The committee agreed to authorise testing for:

- Pyogenic Arthritis, Pyoderma Gangrenosum and Acne Syndrome (PAPA), #OMIM 604416

3. Chairs signature

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

Signature



Name

Margaret Gilmore

Date

15 May 2019