HFEA Licence Committee Meeting

19 July 2012

Finsbury Tower, 103-105 Bunhill Row, London, EC1Y 8HF

Minutes – Item 3

Centre 0006 (The Lister Fertility Clinic) – PGD for Congenital Disorder for Glycosylation Type 1B (OMIM #602579)

Members of the Committee:	Committee Secretary:
David Archard (lay) Chair Anna Carragher (lay) Sue Price (professional) Debbie Barber (professional) Rebekah Dundas (lay) - VC	Lauren Crawford Legal Adviser: Juliet Oliver, Field Fisher Waterhouse

Declarations of Interest: members of the Committee declared that they had no conflicts of interest in relation to this item.

The following papers were considered by the Committee

- Cover sheet
- Executive Summary
- PGD Application form
- Redacted Peer Review
- Genetic Alliance opinion

The Committee also had before it

- HFEA Protocol for the Conduct of Licence Committee Meetings and Hearings
- 8th edition of the HFEA Code of Practice
- Human Fertilisation and Embryology Act 1990 (as amended)
- Decision trees for granting and renewing licences and considering requests to vary a licence (including the PGD decision tree); and
- Guidance for members of Authority and Committees on the handling of conflicts of interest approved by the Authority on 21 January 2009.
- Guidance on periods for which new or renewed licences should be granted
- Standing Orders and Instrument of Delegation
- Indicative Sanctions Guidance
- HFEA Directions 0000 – 0012
- Guide to Licensing

- Compliance and Enforcement Policy
- Policy on Publication of Authority and Committee Papers
- HFEA Pre-Implantation Diagnostic Testing ("PGD") Explanatory Note For Licence Committee

Discussion

1. 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.

2. The Committee noted that the Centre's proposed purpose of testing the embryos was as set out in paragraph 1ZA(1)(b) of schedule 2 of the Act, ie. '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'.

3. The Committee noted Congenital Disorder of Glycosylation Type 1B (CDG1B)(OMIM #602579) is a disorder that is inherited in an autosomal recessive manner. There is a 1 in 4 chance of an embryo being affected by this condition where both parents are carriers.

4. The Committee noted that CDG1B is a rare inherited metabolic disease where defective carbohydrate compounds are attached to glycoproteins, thus impairing glycoprotein function. The predominant symptoms are chronic diarrhoea and vomiting with delay in growth/development, and excessive protein loss due to intestinal disorder (protein losing enteropathy, enterocolitis cystica superficialis and intestinal lymphangiectasis). Liver disease may also be present causing abnormal blood clotting with life threatening gastrointestinal bleeding. Morbidity is related to recurrent thrombotic events hypoproteinemia; anemia; hypoglycaemia with convulsions; apnea and hepatomegaly.

5. The Committee noted that CDG1B is a fully-penetrant condition. The condition usually presents during infancy and can be fatal, if left untreated.

6. The Committee noted that there is treatment available which may include oral administration of mannose. This can be an effective therapy, relieving many of the clinical features of the disease, although hepatic fibrosis may remain.

7. The Committee had regard to its explanatory note in particular paragraph 5.3 which says ‘When assessing the seriousness of the disability, illness or condition, the Licence Committee will take into account the following factors:
   a) Age of onset
   b) Symptoms of the disease
   c) Whether the condition is treatable
   d) What type of treatment is available for those conditions that can be treated
   e) Effect on the quality of life
   f) Variability of symptoms

8. The Committee noted within the application the Centre states ‘Growth and developmental delay may occur, but there is no intellectual or neurological impairment.’ Elsewhere in the papers were references to mental disability "the risk of severe physical and/ or mental disability and handicap in the affected is extremely high".

9. The Committee noted the Peer Reviewer does not distinguish between this particular type of Congenital Disorder of Glycosylation for which the application is made and others. In answering the questions the Peer Reviewer refers to all the “known CDG’s”. The only time that type 1B is commented on separately is when the Peer Reviewer says “Only CDG1B is treatable – with mannose”.

10. The Committee noted that it was unclear from the papers whether the disorder leads to any mental impairment: the peer reviewer's comments are ambiguous in that they appear not to refer specifically to CDG type 1B. The Committee also felt that it lacked sufficient information about the nature of the treatment and any side effects, the effectiveness of the treatment and degree of hypatic fibrosis which may remain, and information about quality of life in a treated person. The papers appear to describe the severe end of symptoms in circumstances where the condition is not diagnosed at birth and treatment was not available from birth.

11. The Committee considered further information was required in order to understand the seriousness of the disease particularly in circumstances where treatment is available from birth. Also the Committee felt it would be assisted by further information about the effects of the condition on the quality of life and clarity on whether this type of Congenital Disorder of Glycosylation leads to mental impairment.

12. The Committee concluded that it did not have enough information to make a decision and decided to adjourn this item for receipt of further information. The Committee requested a peer review which addressed CDG 1B, and invited the Centre to provide additional information and or clarification as to:

    - Mannose – how effective is it, how is it administered, does it have side effects?
    - What is the progression of liver disease in a treated person
    - The degree, if any, of mental impairment in CDG 1B

13. The Committee request that this information is submitted in time to be heard at the next meeting of the Licence Committee on the 30 August 2012, which, given the need to avoid delay in considering this application, it agreed could be up to and including 29 August 2012.

Signed: Date: 25/07/2012

David Archard (Chair)