HFEA Licence Committee Meeting

28 June 2012

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

Minutes – Item 3

Centre 0044 (Centre for Reproductive and Genetic Health) – PGD for Charcot Marie Tooth Disease demyelinating, type 1A (OMIM #118220)

Members of the Committee:	Committee Secretary:
David Archard (lay) Chair Anna Carragher (lay) Sue Price (professional) Rebekah Dundas (lay) - VC	Lauren Crawford Legal Adviser: Sarah Ellson, 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 Charcot Marie Tooth Disease demyelinating, type 1A (CMT1A)(OMIM #118220) is a disorder that is inherited in an autosomal dominant manner. There is a 1 in 2 chance of an embryo being affected by this condition where a parent is affected.

4. The Committee noted that this disorder affects the conduction of nerve impulses, which are slowed, due to myelin damage. The effect is to cause difficulties walking-because of muscle weakness and lack of sensation. The foot arches are generally high (called pes cavus) from an early age, and the hands may become weak in adult life. Affected individuals experience varying degrees of hand and especially foot numbness. Reflexes, such as the knee-jerk, are commonly lost (although this should not cause the person difficulties). A few people experience hand tremor and some experience a mild curvature of the spine. In the most severe cases speech and swallowing difficulties, breathing difficulties, especially when lying flat, hearing loss and vocal cord paralysis are apparent.

5. The Committee noted that CMT1A is a fully-penetrant condition, so the mutation will result in the manifestation of the disorder. For affected individuals the age of onset can vary, but the majority of individuals will present with symptoms and pes cavus from an early age. Obvious difficulty with walking is usually evident between 5 and 15 years of age.

6. 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

7. The Committee noted that the papers contained conflicting evidence and inconsistencies as to the progression of the illness and the predictability of symptoms. It felt that it lacked sufficient information about the nature of the condition at the most severe end and information about the effect of the condition of quality of life. At one point severity seems to be linked to age of onset, but at another point we are told that the condition is non-progressive. There is therefore a query as to whether or not the disease is progressive and also how predictable it is.

8. The Committee noted within the application that the Centre states ‘A few affected people experience hand tremor and some, mild curvature of the spine. The symptoms do not worsen with age, after adulthood and rarely cause an inability to walk, although some may need the aid of a walking stick.’ Elsewhere in the papers were references to the progression of the disease and the Committee considered there was confusion as to the statement that "the symptoms do not worsen with age, after adulthood".

9. In the Peer Review it was stated that there was variability in the phenotype and the Committee's understanding was that this condition is highly unpredictable. It was therefore uncertain as to the value of the Executive Summary paragraph 6.3 which referred to the obligations on Centres to comply with Schedule 2 paragraph 1ZA of the HFE Act 1990 (as amended) in relation to individual cases. In circumstances where severity is unpredictable it did not consider this would offer any assurance.

10. The Committee considered further information was required in order to understand the symptoms of the disease particularly at the severe end – the application form made brief reference to the most severe effects. Also the Committee felt it would be assisted by further information about the effects of the condition on quality of life.

11. 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 invited the Centre to provide additional information and or clarification as to::

    - Age of onset and whether the disease progresses with age
    - The predictability of the disease
    - The nature of the condition at its most severe end
    - The effects on quality of life

12. The Committee request that this information is submitted in time to be heard at the next meeting of the Licence Committee on the 19 July 2012, which, given the need to avoid delay in considering this application, it agreed could be up to and including 18 July 2012.

13. The Committee recalled that an application for CMT1A may previously have been considered and it requested that the Executive provide a copy of any previous Licence Committee minutes which would relate to this decision. The Committee was aware that other OMIM numbers may have been approved for testing for Charcot Marie Tooth Disease Type 2 but did not consider it relevant to see minutes of any such decisions. It noted the advice of its Legal Adviser that such minutes would not be binding in any way and that each application would fall to be considered based on the application and evidence before the Committee making the decision. However the Committee felt that it was relevant to consider the reasons why approval was not granted previously.

Signed: Date: 02/07/2012

David Archard (Chair)