European Commission consultation on the regulations of advanced therapy medicinal products

About Parkinson's

Parkinson's is a progressive neurological disorder for which there is currently no cure. It is associated with the death of nerve cells in the mid-brain which results in the loss of the chemical messenger dopamine. This affects learned voluntary movements such as walking, talking, writing and swallowing. As the condition progresses it impacts on all aspects of the person's life and the lives of those around them.

As well as the symptoms that affect movement, people with Parkinson's can find that other issues, such as tiredness, pain, depression and constipation, can have an impact on their day-to-day lives.

Advanced therapies for Parkinson's

Parkinson's UK welcomes the opportunity to respond to this consultation as research into, and development of, advanced therapies is important for the treatment of Parkinson's.

Currently there are three main types of advanced therapies that are being researched and trialled for Parkinson's. These are:

1. Gene therapy – a clinical study is currently underway in the US which is assessing the potential for gene therapy for the treatment of advanced Parkinson's.[1]
2. Neuro-regenerative agents – an early stage trial of a new technology and a new drug using a novel delivery system is currently taking place in the UK.
3. Stem cells – while the current studies for potential stem cell therapy for Parkinson's are in the stage of using animal models, it is anticipated that human clinical trials will take place in the future. A clinical research programme, funded through the EU's Seventh Framework Programme for Research (FP7), that is currently underway called TransEuro[2] involves the transplantation of foetal brain tissue into the area of the brain affected by Parkinson's. This is serving as a "proof of concept" study to demonstrate that cell transplantation is a viable therapeutic approach.

We are aware that to date there has not been any advanced therapies for the treatment of neurological disorders, such as Parkinson's, authorised for marketing. Therefore, although we recognise that developing advanced therapies for these conditions is a complex area, it is important that research in to these therapies continues to move forward.

[1] http://www.clinicaltrials.gov/ct2/show/NCT01621581?term=GDNF&rank=1
[2] http://www.transeuro.org.uk/

Consultation topics

1. Marketing authorisation application requirements for advanced therapy medicinal products

The issue of proportionality is key. Each therapy should be considered on its own merits and it is not always possible to have uniform regulations for every therapy. A uniform approach can be used for "classic" drugs which are essentially external chemicals administered peripherally (e.g. by mouth or injection) and can be discontinued easily if adverse effects are reported. However for advanced therapies this isn't as easy, as it is possible for delivery systems to be less uniform.

For example, a current early stage trial of a neuro-regenerative peptide in the UK will be given by a catheter inserted directly into the brain. Obviously the regulations for this trial will have to be specific for this treatment and will consider the relative risks and benefits of the treatment alone as there is no obvious comparator. Similarly in the current study of gene therapy[3], the gene is injected directly into the brain, but once in cannot be removed. Therefore, a discrete protocol will be required for this.

Overall, these examples highlight how each therapy needs to be considered separately with a strict risk/benefit analysis carried out. However, information obtained from other trials using the same mechanistic approach can inform the decision.

2. Requirements for combined advanced therapy medicinal products

If the therapy involves more than one novel therapeutic approach, it is important that the application should be considered as "stand alone" and a decision made as to whether each component of the therapy should be assessed on its own or in combination. In the current early stage trial of a neuro-regenerative peptide for Parkinson's, the medical device that will be used for drug administration (a delivery pump) is also being tested in combination with the drug itself. While it would be possible to test the delivery system alone, this is not possible for the drug as there is no comparable mechanism by which it can be injected into the brain. Therefore, in this case, we cannot test the drug on its own.

The same would be true for other novel delivery systems whereby they are the only way to administer a novel drug or therapeutic agent.

3. Hospital exemption

When a product is assessed by the European Medicine Agency's Committee for Advanced Therapies (CAT), guidelines are needed to clarify when and for which therapeutic indications hospital exemption can take place. We suggest that a report on each occasion should be submitted to CAT for an initial period

[3] http://www.clinicaltrials.gov/ct2/show/NCT01621581?term=GDNF&rank=1

(approx. 6 months). This will provide an indication as to how widespread the use of the product is and whether it is at a sufficient level to require full market authorisation.

4. Incentives for the development of advanced therapy medicinal products

Parkinson's UK agrees with the provision of incentives for the development of advanced therapy medicines.

It is important to have an environment that doesn't hinder the development of novel products. While the current drugs treat the symptoms of Parkinson's, there is a need for a new generation that actually treats the condition – by stimulating nerve cell regrowth or replacing the dead cells. This may include novel advanced therapies so incentives should be available for companies, particularly smaller biotech companies, to develop these therapeutic approaches. There is also a key role of patient organisations to be involved in all stages of the process.

5. Scope and adaptation to technical progress

It is not possible to predict what is going to be developed in the future. Therefore, the regulations should take account of the likelihood of future technological developments and should be sufficiently flexible to stimulate new approaches rather than stifle them, which would be a disincentive to smaller biotech companies. These are the organisations that are most likely to develop novel therapeutic agents.

About Parkinson's UK

Every hour, someone in the UK is told they have Parkinson's. One in 20 is under the age of 40. There are approximately 127,000 people with Parkinson's in the UK.

We bring people with Parkinson's, their carers and families together via our network of local groups, our website and free confidential helpline. Specialist nurses, our supporters and staff provide information and training on every aspect of Parkinson's.

As the UK's Parkinson's support and research charity we're leading the work to find a cure, and we're closer than ever. We also campaign to change attitudes and demand better services.

Our work is totally dependent on donations.

For more information please contact Rachel Evans, Clinical Research Policy and Campaigns Advisor, revans@parkinsons.org.uk