1 **Treatment & Condition**

Autologous chondrocyte implantation using chondrosphere for treating symptomatic articular cartilage defects of the knee.

2 **Associated appraisal body & Summary of ruling**

Autologous chondrocyte implantation (ACI) using chondrosphere is recommended as an option for treating symptomatic articular cartilage defects of the femoral condyle and patella of the knee (International Cartilage Repair Society grade III or IV) in adults, only if:

- the person has not had previous surgery to repair articular cartilage defects
- there is minimal osteoarthritic damage to the knee (as assessed by clinicians experienced in investigating knee cartilage damage using a validated measure for knee osteoarthritis) and
- the defect is over 2 cm².

Articular cartilage refers to hyaline cartilage on the articular surfaces of the bone. Articular cartilage damage in the knee can be caused directly by acute injury, often as a result of sporting activity, for example repetitive trauma such as high-impact sports.

Damage of the articular cartilage does not heal on its own and can be associated with symptoms such as knee pain, knee swelling, knee locking and giving way of the knee joint.

Chondrosphere is another option for treating symptomatic articular cartilage defects of the knee. Other options include TA 477 which uses implantation without chondrosphere.

3 **Number of people in Northern Ireland expected to take up service/therapy (including new cases per year)**

Chondrosphere is another option for treating symptomatic articular cartilage defects of the knee. The Resource Impact Template for existing NICE guidance (TA477) suggests that approximately 12 patients would require treatment annually in Northern Ireland.

4 **Patient Access Scheme availability**

(Yes/No)
**5 Costs (before PAS if applicable)**

**5.1 Drug cost per patient per annum (for new and prevalent cases)**

The typical cost of treatment is expected to be £10,000 per patient.

**5.2 Infrastructure per annum**

The technology is an option alongside current standard treatment options and is similarly priced.

The typical cost of treatment is expected to be £10,000 (for chondrosphere) per patient. This treatment is about 50% of the cost of the technologies used in TA477. As this treatment is not available in Northern Ireland, arrangements will be made with other providers to ensure the implementation of this Technology Appraisal.

If this treatment has to be provided in England, additional travel costs are estimated at £28k.

**5.3 Current in year costs**

The estimated recurrent cost is estimated at c £120k. Actual costs will be determined from providers of this therapy.

If this treatment has to be provided in England, additional travel costs are estimated at £28k.

Costs in year will depend on the number of patients treated.

**5.4 Recurrent costs per annum**

The estimated recurrent cost is estimated at c £120k. Actual costs will be determined from providers of this therapy.

If this treatment has to be provided in England, additional travel costs are estimated at £28k.

**6 Expected implementation period**

There is no impediment to implementation of this guidance.

**7 Commissioning arrangements**

This regimen will be formally commissioned by the HSCB/PHA initially on a cost-per-case (CPC) basis for a period of 12 months. After this time, numbers of patients who received or are receiving treatment will be reviewed and consideration will be given to moving to recurrent funding to support this regimen.
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<th><strong>Monitoring arrangements</strong></th>
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<td>The HSCB cost per case process will generate quarterly reports on the number of applications.</td>
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<th><strong>DHSSPS Legislative/Policy Caveats</strong></th>
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<td>This advice does not override or replace the individual responsibility of health professionals to make appropriate decisions in the circumstances of their individual patients, in consultation with the patient and/or guardian or carer. This would, for example, include situations where individual patients have other conditions or complications that need to be taken into account in determining whether the NICE guidance is fully appropriate in their case.</td>
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