### OPERATION: ..... Anterior Cruciate Ligament (ACL) Reconstruction (arthroscopic) – using autograft

### PROCEDURE:

The Anterior cruciate is a ligament that runs inside the knee from the thigh bone to the shin bone giving stability to the knee joint. Loss or damage of the ligament can make the knee more prone to ‘giving way’. Your ACL has torn (ruptured).

You may have come to a joint decision with your surgeon to attempt a reconstruction. Unfortunately, once this ligament has torn, it cannot usually be repaired. As a result, a new ligament must be made from elsewhere (a graft).

You will be seen by the surgeon on the day of the operation. The surgeon will take the opportunity to mark your leg with a felt pen. This is to ensure the correct leg will be operated on. If you have any questions, now is a good time to ask them.

An anaesthetic will be administered in theatre. This may be a general anaesthetic (where you will be asleep) or a local block (e.g. where you are awake but the area to be operated is completely numbed). You must discuss this and the risks with the anaesthetist.

A tight inflatable band (tourniquet) may be wrapped around your thigh to limit the amount of bleeding.

During the operation, the surgeon will perform a telescope examination of your knee (an arthroscopy). Small cuts are made through skin which has been cleaned by antiseptic solution. The cuts are usually no bigger than 1cm and made either side of the knee cap. A telescope with a camera at the end (less than the width of a pencil) can look into the knee and shows a picture on a nearby television screen.

The surgeon will introduce other instruments through the second cut. Any “tidying up” of any other structures can be done at this point (such as smoothening cartilage).

A graft also needs to be taken. There are a few methods and types of graft available.
Whichever your surgeon chooses depends on their preference or suitability for your case. The two common techniques used are either taking a tendon from the hamstring muscles or using part of the ligament that runs from the kneecap to the shin bone (patellar-tendon graft). Both involve making cuts in the skin in front of the knee.

Tunnels are drilled which allow the graft to pass through the knee joint. This graft is then held into position at both ends by screws, pins or slings. It is important to get the right tension on the ligament as it is fixed.

The open skin is then closed with stitches or metallic clips.

You will wake up in the recovery room with a bandage around the knee.

You may feel sore. This is normal. However, if the pain is intolerable, it is very important you tell the nursing staff.

When you are feeling well enough, and you have been shown how to walk with crutches, you will be allowed to go home.

You should partial weight bear until told to walk normally by your surgeon. You will more than likely be introduced to a rehabilitation (physio) program. It is very important you attend this strictly.

***please be aware that a surgeon other than your consultant but with adequate training or supervision may perform the operation***

**ALTERNATIVE PROCEDURE:** Some patients simply avoid activities that cause their knees to be unstable.

Physiotherapy and increasing strength of hamstrings and quadriceps may be able to compensate for the injury. The knee may still however be prone to ‘giving way’ and instability.

The decision to proceed to a reconstruction should be a joint one between yourself and the surgeon.

There are also alternative methods of reconstruction and numerous grafts that can be used. You should discuss the options with your surgeon beforehand.

**RISKS**

As with all procedures, this carries some risks and complications.

**COMMON (2-5%)**

**Pain:** the knee will be painful after the procedure. Pain killers (Analgesics) will be given to prevent this including enough to go home with.

**Numbness:** the skin around the knee or shin may be temporarily or more permanently numb due to damage of small nerves.
## Swelling/ Haemarthrosis
This is a collection of fluid or less commonly, blood in the knee joint. In most cases, the body will absorb the fluid itself. If the swelling becomes too large, the surgeon may feel an operation is necessary.

**Stiffness:** you may have difficulty in straightening your knee or squatting.

**Persistent pain:** pain may persist after the procedure. A repeat arthroscopy or other knee operation may be required.

**Continued instability:** weakness and instability may occur despite adequate surgery.

## LESS COMMON (1-2%) 

**Infection:** the wound sites may become red, painful and hot. There may also be a discharge. These are signs of infection and can usually be treated by antibiotics. The infection may spread to the knee joint itself (requiring a washout) and removal of the graft. Infection may also spread to the blood (sepsis) requiring intravenous antibiotics.

**Graft rupture:** (torn graft) this may occur after further trauma. Further surgery may be necessary.

## RARE (<1%)

**Damage to structures within the knee:** this is rare, but may cause further damage and symptoms. This may need further treatment including operation. These include fractured knee cap (patella) if a patellar tendon graft is used.

**Damage to the skin under the tourniquet:** this may require dressing, surgery or skin graft. There may also be numbness of the skin under the tourniquet, this is usually temporary.

**Damaged instruments:** these may break within the knee and require an opening of the joint to remove them.

**Abnormal wound healing:** the scar may become thick, red and painful (keloid scar). This is more common in Afro-Caribbeans. There may also be delayed wound healing for numerous reasons.

**Compartment syndrome:** this is a build up pressure within the lower leg and can cause nerve damage, blood vessel damage and muscle damage. If this occurs, an emergency operation will have to be performed to prevent death of tissue of the lower leg/foot.

**Blood clots:** DVT (deep vein thrombosis) is a blood clot in a vein. These may present as red, painful and swollen legs (usually). The risks of developing a DVT are greater after any surgery (and especially bone surgery). Although they are painful, a DVT can also pass in the blood stream and be deposited in the lungs (a pulmonary embolism –PE). This is a very serious condition which affects your breathing.

**Osteoarthritis:** this can be more common after joint operations.
**Confirmation of consent:**

I have read/understand the procedure, risks and complications. I have asked questions and raised any immediate concerns I might have. I understand another surgeon other than my consultant may perform the operation (although they will have adequate training/supervision).

**I understand** that I will have the opportunity to discuss the details of anaesthesia with an anaesthetist before the procedure.

**I understand** that any procedure in addition to those described on this form will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

Signature………………………………………………………………

Print name………………………………………………………………

Date……../…/20…

2nd Confirmation………………………………………..Date…………../…..20….

NAME of SURGEON (Capital letters)………………………………..

SIGNATURE of SURGEON……………………………………

POSITION……………………………………………………………..

DATE……../………/20…..

I also give consent for my notes, any data recorded during this operation and tissue discarded during the operation to be used for any current or future trials □

Signature……………………………………………..Date………………..