

## Knee Aspiration & Injection Trainer with Ultrasound Capabilities

**NEW  
PRODUCT**

**70103**

An anatomically accurate adult knee model for injection and aspiration of synovial fluid from the knee joint, from both the lateral and medial aspects, using ultrasound-guidance or palpation.



*Learning has never been more lifelike*

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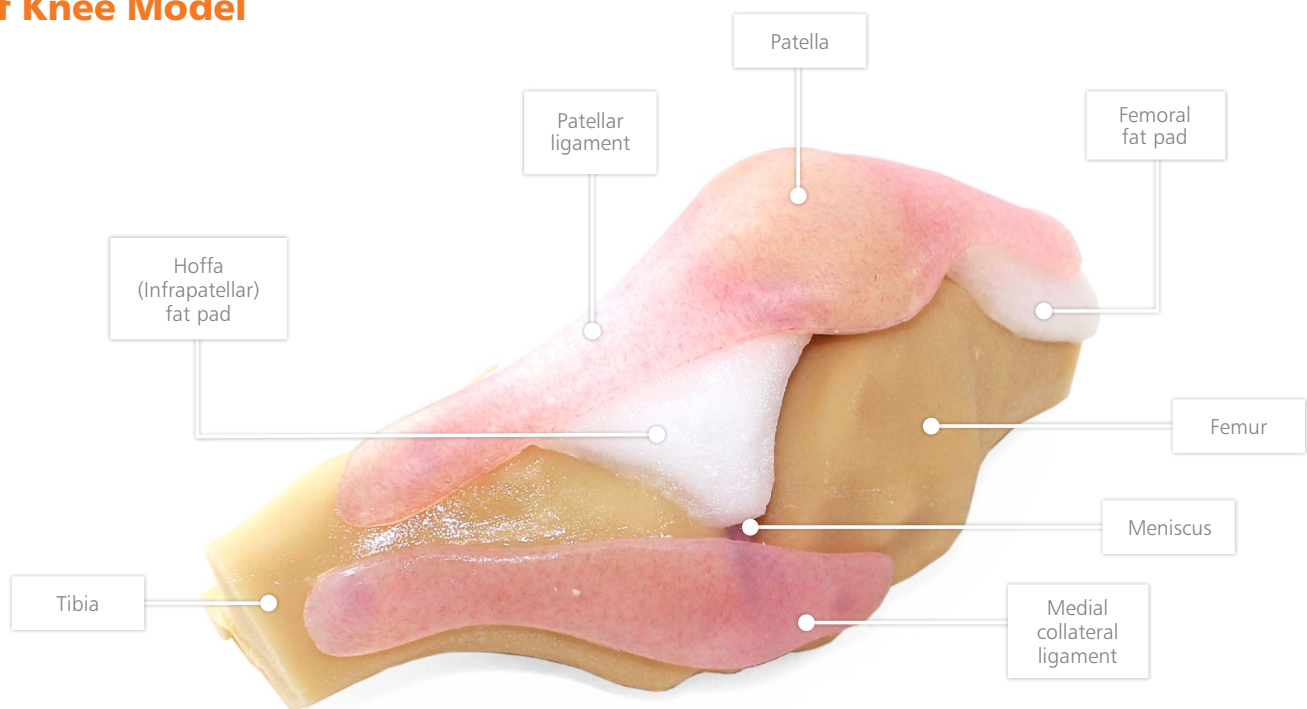
The robust sealed knee includes knee joint, patella, patellar tendon, and the suprapatellar space.

Key anatomical landmarks are realistic to palpate, enabling injection and aspiration aim to be practised, and accuracy

improved. Discrete muscle, skin and fat layers, provide realistic tissue and needle response.

The model was evaluated by Charles Wakeley (Bristol Royal Infirmary) and Andrew Grainger (Leeds Teaching Hospitals, UK).

## Internal Anatomy of Knee Model



## Skills

- Injection into joint cavity
- Aspiration of synovial fluid from both the lateral and medial aspects
- Competence using ultrasound technology to perform systematic scanning techniques and examination of the knee joint
- Identification of anatomical landmarks using ultrasound guidance or the palpation method
- Patient positioning and management
- Recognition of joint effusion
- Ballottement

The following key anatomical landmarks are realistic to palpate:

- Skin
- Subcutaneous fat, quadriceps tendon & patellar ligament
- Prefemoral fat pad
- Suprapatellar fat pad
- Hoffa (Infrapatellar) fat pad
- Femur
- Medial & lateral collateral ligament
- Tibia
- Patella
- Joint space & synovial recess
- Meniscus
- Muscle mass of quadriceps



Performing knee aspirations and injections are fundamental skills required for Core Medical Trainees, as well as Rheumatologists, Doctors practising General Medicine and Orthopaedic Surgeons

Core Medical Trainees	"CMTs should try to gain at least some experience and independent competency if possible in procedure relating to knee aspiration."	<i>Specialty Training Curriculum for Core Medical Training, Joint Royal Colleges of Physicians Training Board, 2009, amended 2013</i>
Rheumatology	"To be able to aspirate and inject joints competently using the appropriate techniques."	<i>Section 5 Practical Procedures, Specialty Training Curriculum for Rheumatology, Joint Royal Colleges of Physicians Training Board, 2010</i>
Orthopaedics	"A trainee must be able to demonstrate their competence in the procedures of aspiration and injection of knee joint".	<i>Section: Applied Clinical Skills: General, Page 55, Specialist Training in Trauma &amp; Orthopaedics Curriculum, 2013</i>



## Product Qualities

- Discrete muscle and skin layers provide realistic tissue and needle response
- Anatomically accurate synovial sac and palpable patella
- Realistic colour and consistency of synovial fluid
- 1000+ stabs per module with 21 gauge needle
- Precise, palpable anatomy with bony landmarks
- Robust, sealed knee unit that holds all anatomy
- Key internal landmarks visible under ultrasound
- Compatible with all standard ultrasound machines
- Echolucent material allows aspiration and injection under ultrasound-guidance or using the palpation method
- Suitable for undergraduate and postgraduate medical study
- Knee skin is watertight
- Can be used with leg supports for supine position, or without leg supports for side of bed position
- Caters for ultrasound-guided technique as well as palpation
- Separate Fluid Bag & Stand ensure the model is easy to use and mobile
- Clear indicator on Fluid Bag to prevent overfilling
- Latex free
- Skin washable using mild soap and water



Ultrasound image (Patella insertion)

- **70104** 1 Ultrasound Knee Module for Aspiration & Injection
- **70106** 1 Fluid Bag and Stand
- **70107** 1 Synovial Fluid (including Syringe)
- **70108** 1 Needle Set – 3 Green (21 gauge) Needles, 1 Syringe, 1 Sharps Bin
- **BKS1846195004** Joint and Soft Tissue Injection (5th edition)
- 1 Leg Unit, including Removable Supports
- 1 Carry Case for Knee

## Other products in our Joint Injection Range

For practising soft tissue joint injection used for the treatment of injuries and arthritis.

Developed in collaboration with Dr Trevor Silver, whose book on Joint and Soft Tissue Injection (5th edition) is included.

### Skills

- Injection techniques
- Patient posture and management
- Palpation techniques
- Identifying anatomical landmarks

### Product Qualities

	30010	30080	30031	30100
Easy-to-use Feedback Console: LEDs light up when correct injection sites have been acquired	•	•	•	•
Supplied with 'No Trace' marker for illustrating underlying anatomical landmarks	•	•	•	-
Contains latex	•	•	•	-

**NB:** Not suitable for ultrasound training

### Shoulder for Joint Injection

30010



### Elbow for Joint Injection

30080



### Hand & Wrist for Joint Injection

30031



### Foot & Ankle for Joint Injection

30100



*For demonstration or to order*

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V.1 July 2016