PICKUPSIM™

Oocyte Pick-Up High Fidelity Simulator

High Fidelity
All the provided exercises reproduce **real clinical cases**.

Haptic Feedback
Haptic feedback system to let the user experience the **follicle wall resistence.**

Echographic Monitoring
Real time visualization by a simulated Ultrasound monitor.

PickUpSim™ is an innovative, high fidelity system for the simulation of the human ovum collection procedure in the context of assisted human reproduction. The simulator includes an haptic feedback system and a virtual ultrasound monitor.

PickUpSim™ enables hands-on procedural training and permits, thanks to its haptic feedback, simulation of the resistance to penetration of the soft tissues traversed by the Ovum Aspiration Needle, in particular the ovarian surface and the ovarian follicle.

MAIN TECHNICAL FEATURES

- Haptic feedback
- Simulation of the deformation imposed by the needle on the soft tissues
- Simulation of follicle emptying and re-filling
- Scenarios based on real clinical images

Ultrasound monitoring includes:

- Monitoring of the procedure by a simulated Ultrasound monitor
- Real time simulation of emptying and re-filling of the follicles

Permitted movements and ultrasound monitoring

- Needle movements are allowed both in the forward and in the backward direction
- It is possible to move the ultrasound probe in the sagittal plane and to observe a coherent and real-time modification of the scene (allowing the user to investigate the volume of the follicles and to choose the proper entry plane for the needle)
- It is possible to rotate the ultrasound probe and to get a transverse view (in order to allow the user to investigate blood vessels and to differentiate vessels from follicles)
- Simulated aspiration of follicles driven by a foot pedal pump
- Possibility to touch the vessels (arteries or veins)
- It is possible to fill the test tube with the follicular fluid
- As an advanced setting, the user can also modify the physics of the environment and modify the visibility of the needle in order to create more challenging scenarios

Exercise and Simulations

The user can practice and develop competency using simulation scenarios based on real clinical images.

The scenarios available take into account:
- The proper movements to reach the target follicles
- The proper suction and washing timing
- The avoidance of critical anatomical structures
- A user's performance can be evaluated on all the above aspects
- At the end of the procedure, an indicative global score will be given to the user based on his performance

Control
The intuitive control software runs on instructor PC.

External LCD Display
The external virtual monitor is able to display real ultrasound images.

The PickUpSim™ includes:

- PickUpSim™ main white box including a real pick-up needle and a simulated transvaginal ultrasound probe
- Simulated aspiration pump pedal
- Laptop PC with pre-installed PickUpSim™ software (7 clinical cases)
- LCD 21,5″ monitor
- IP67 certified and waterproof transport case for the main white box
- User manual
- Installation support and remote training
- Lifetime free software updates and upgrades

Advanced Clinical Case Package
(Optional PKS03):

New advanced clinical case package that includes 3 extra cases regarding hyperstimulation, endometriosis, lateral follicle distribution.

✓ **1 YEAR** WARRANTY

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CERTIFIED

PickUpSim™ is a product from Accurate, a company blending international experience, scientific research, engineering and development of truly effective hi-tech educational solutions in the medical field. (Patent Number 1412785).

Clinical use disclaimer: PickUpSim™ is licensed for use for educational purposes only. PickUpSim™ is not intended for clinical use.

FOR FURTHER INFORMATION
HTTP://PICKUPSIM.ACCURATESOLUTIONS.EU/