“The moveable Saturn™ laser means I can ablate the zona exactly where I want to, without having to move the embryo”

Samantha Knight, SPIRE London Fertility Clinic, UK

**Precise**
Sub-micron accuracy and unique computer controlled laser with guaranteed laser alignment

**Curved Biopsy Mode**
Biopsy Mode allows accurate laser drilling along a drawn straight or curved line

**Easy to Use**
Intuitive RI Viewer™ software with streamlined user interface. An optional programmable foot pedal controls software and laser functions

**Rapid**
Faster than ever directional laser increases functionality and decreases procedure times

**Safest Power**
Lowest laser pulse times for minimal energy near critical cells. Exclusion Zone™ feature ensures cell safety

**Multi-Pulse Mode**
Rapid fire options
Faster Biopsies

The Saturn 5™ Laser System’s Biopsy Mode is helping you to advance improvements in biopsy methods; potentially reducing procedure time, and lowering the incidence of blastocyst collapse and the need to mechanically tear off cells.1

Using the Biopsy Mode, you can draw a straight or curved line along the sample and then select the number and size of the holes on it, then simply “fire”. The laser will ablate exactly along the chosen path. It means you no longer need to move the holding pipette at all. Indeed, for assisted hatching a holding pipette is not required. It is that easy.

The Saturn 5™ Laser System’s Biopsy Mode is quickly proving to be an essential tool in the practice of biopsying across the world.

Sub-micron Accuracy

As Saturn 5™’s pilot laser travels down the same fibre optic path as the ablation laser, it guarantees consistent positioning. You can calibrate and verify hole size and firing position with sub-micron accuracy simply and quickly, leaving more time for your procedures.

Totally committed to embryo safety

Multiple safety features reassure you that the Saturn™ laser is the safest laser on the market. To keep your embryos safe, features include the Exclusion Zone™2.

The Saturn™ employs a higher laser power to apply less total energy to make a specified hole size, in comparison to lower power laser systems3.

Always spot-on

In addition to its intuitive use and safety assurances, the new Saturn 5™ features class-leading software, RI Viewer™. The software offers uncluttered full screen imaging from the microscope, digital magnification and a modern, clean user interface.

Intuitive software as standard

Energy delivered vs. hole diameter3

In addition to its intuitive use and safety assurances, the new Saturn 5™ features class-leading software, RI Viewer™. The software offers uncluttered full screen imaging from the microscope, digital magnification and a modern, clean user interface.

Intuitive Software

As the only moveable laser for ART, Saturn™ lasers are spearheading a revolution in hatching and biopsy techniques in labs all over the world.

Applications4

For Blastocyst/Trophoectoderm Biopsy, the Saturn 5 Active™ is unparalleled in its ease of use. The directional laser allows the user to make multiple ablations across the trophectoderm cells without needing to move the blastocyst. This gives the user superb accuracy, safety and incredible speed.

For Blastomere Biopsy, Polar Body Biopsy and Blastocyst Collapsing (for vitrification), the Saturn 5 Active™ directional laser allows the embryo to stay in the desired position and focus so that ablations can be made wherever required without additional manipulation. Our unique Biopsy Mode also allows safe multi-pulse drilling along a predetermined line.

For Assisted Hatching, the directional laser means that accurate ablations can be made without the need to hold the embryo, making it very quick and accurate, with no additional consumable costs.

Using Saturn 5 Active™, you will find these procedures are almost effortless and can be performed quickly and accurately. These procedures can require difficult embryo manipulation when performed using fixed lasers. Using a Saturn 5 Active™ has clear advantages to the welfare of the embryo.

Saturn 5™ Laser Systems are Class 1 laser products as defined by international laser safety standards. They are CE-marked and FDA cleared5.


3 RI White Paper – “A comparison of different power levels used by laser systems in the IVF Laboratory” – Available upon request.

4 The applicability of procedures is dependent on the regulations of the country into which the device is sold.

5 In the USA, FDA cleared for clinical use for Laser Assisted Hatching (LAH) only.
Saturn 5™ Lasers

Specifications

Microscope Compatibility

**Nikon**
- TMD, D200/300
- TE200/300, TE2000, Ti

**Zeiss**
- Axiovert 40/100/200,
- Axio Observer

**Olympus**
- IMT2, IX50/70,
- IX51/71/81, IX53/73/83

**Leica**
- DMIRB, DMi3000B/4000B/6000B
- DMiL

Pilot Laser
- 630-650nm spot targeting solid state diode laser - red pilot beam guarantees the position of the invisible ablation laser

40x Objective
- Custom designed objective for optimum laser transmission, crystal clear imaging and minimal laser pulse times. Tested and proven not to exhibit astigmatism with Saturn 5™ Laser Systems

Ablation Laser
- 1480nm / 400mW solid state diode laser. Pulse length range 0.001-2.0ms / 1-2000 µs
- Class 1 laser product (IEC 60825-1:2007)
- Tested and proven not to exhibit thermal lensing

Laser Unit Dimensions
- (WxDxH) 220mm x 180mm x 34mm

CRi Oosight™ Compatibility
- Compatible with CRi Oosight™ and SpindleView™ systems

Operation Software
- RI Viewer™ imaging software included – with digital laser targeting

PC System Requirements
- Operating systems: Windows 8, Windows 7, Windows Vista, Windows XP

Mains Input
- 100-240VAC, 50-60Hz