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Saturn
RI

SATURN 5™

Fixed and Directional Laser System

PRECISE

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

RAPID

Faster than ever directional laser increases functionality and decreases procedure times

CURVED BIOPSY MODE

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

SATURN 5™

FASTER BIOPSIES

The Saturn 5 Biopsy Mode helps you to significantly improve biopsy methods, potentially reducing procedure time, lowering the incidence of blastocyst collapse and eliminating the need to mechanically tear off cells[1]. Using Biopsy Mode, you can draw a straight or curved line along the sample, select the number and size of holes, then simply “fire”. The laser will ablate exactly along the chosen path, meaning you no longer need to move the holding pipette at all. It is that easy.

ALWAYS SPOT-ON

As the Saturn 5 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.

COMMITMENT TO EMBRYO SAFETY

Multiple safety features ensure the Saturn laser is the safest laser on the market. To keep your embryos safe, features include the Exclusion Zone[2] which can be set according to distance. By employing a higher laser power, the Saturn Laser applies less total energy to make a specified hole size, in comparison to lower power laser systems[3].

IMAGE GALLERY

RI Viewer Image Gallery provides centralised access to all images and videos taken of your samples. Files can be assigned to patient folders with ease, notes added or images printed. It simplifies your workflow and keeps you organised.

INTUITIVE SOFTWARE AS STANDARD

In addition to its intuitive use and safety assurances, the new Saturn 5 features RI Viewer software. The software offers uncluttered full screen imaging from the microscope, digital magnification and a modern, clean user interface. RI Viewer also offers a recording function, line measurement tools which are visible on-screen and are printable, plus a built-in laser simulator for training and demonstration purposes. RI Viewer supports a range of languages.

[1,2,3] *Please see page 6 for references.*

EASY TO USE

Intuitive RI Viewer software with streamlined user interface. An optional programmable foot pedal controls software and laser functions

SAFEST POWER

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

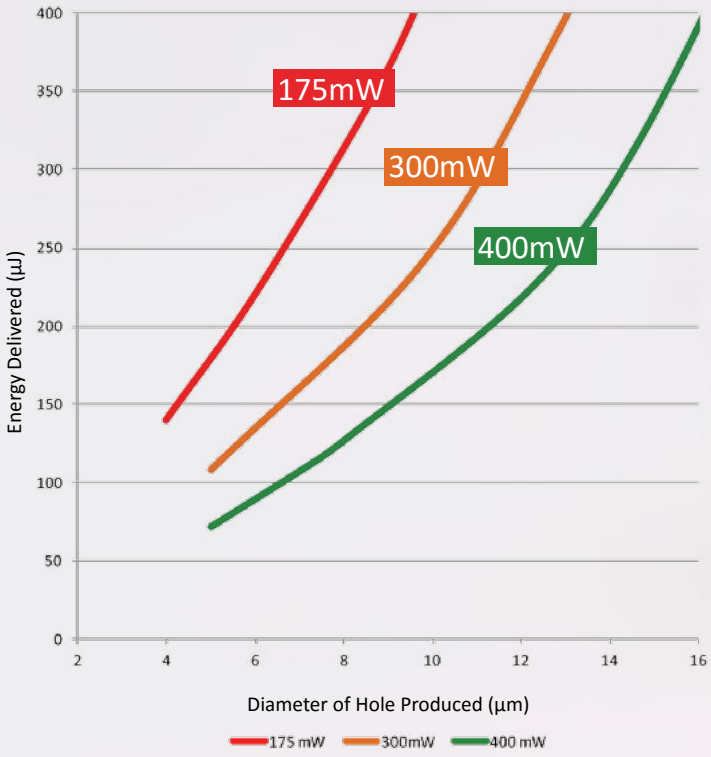
VERSATILE

Compatible with all popular brands of micromanipulators and inverted microscopes, available with a choice of 20x and 40x objectives

“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

ENERGY DELIVERED VS HOLE DIAMETER[3] USING SATURN LASER (400mW)



SATURN 5™

APPLICATIONS[4,5]

For blastocyst/trophectoderm biopsy, the Saturn 5 Active is unparalleled in its ease of use. The directional laser allows you to make multiple ablations across the trophectoderm cells without needing to move the blastocyst. This offers 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 Biopsy Mode also allows safe drilling along a predetermined line.

For assisted hatching, the moveable laser means accurate ablations can be made without the need to hold the embryo, avoiding additional consumable costs.

You will find these procedures can be performed quickly and accurately using the Saturn 5 Active, unlike fixed lasers.

"The Saturn 5 Laser has really improved and sped up my procedures. The Saturn 5 Active Laser is very impressive as it gives you a lot of freedom in how you do the procedures, the software is very easy to use, very comprehensive and the biopsy mode helps me process the cells for PGD."

Dr Melihan Bechir
Fertilia MedLife, Romania

[1]Lloyd S, Doshi A, Harper J, Application note. A new method of biopsying TE cells using the latest Saturn 5 Active Laser System offers several potential ways to improve your procedures - Available on request.

[2]Chatzimeletiou, K., Picton, H.M & Handyside, A.H., 2001. Use of non-contact, infrared laser for zona drilling of mouse embryos: assessment of immediate effects on blastomere viability. Reproductive Biomedicine Online, 2(3), p.178. Available at: http://www.ncbi.nlm.nih.gov/pubmed/12537793 .

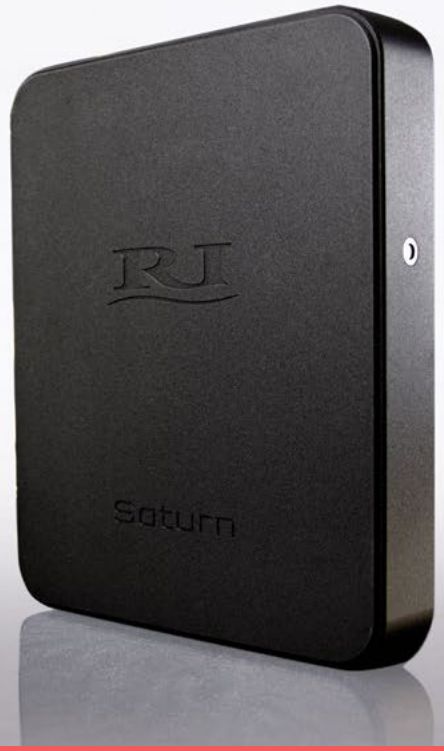
[3]RI White Paper. A comparison of different power levels used by laser systems in the IVF laboratory – Available upon request.

[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 embryo biopsy, trophectoderm biopsy, blastocyst collapsing and Laser Assisted Hatching (LAH).

MICROSCOPE COMPATIBILITY

Nikon	TMD, Ti, Diaphot 200/300, TE200/300, TE2000,
Leica	DMIRB, DM IL, DMI3000B/4000B/6000B , DMi8
Olympus	IMT2, IX50/70, IX51/71/81, IX53/73/83
Zeiss	Axiovert 40/100/200, Axio Observer



CLASS I LASER

Saturn 5 Laser Systems are Class I laser products as defined by international laser safety standards. They are CE marked and FDA cleared[5]

ESSENTIAL BIOPSY TOOL

The Saturn 5 Biopsy Mode is quickly proving to be an essential tool in the practise of biopsying across the world

TOTAL CONTROL

Preset options allow Lab Managers to predefine their preferred laser setting for each procedure helping to speed up and standardise processes

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