



Vesalius

— ESSENTIAL SMART

Quantum Molecular Resonance Platform

Combining science and
technology to improve health
and quality of life



QMR TECHNOLOGY

QMR Technology (Quantum Molecular Resonance) (6) is at the heart of all of Telea Medical's devices. It does not use heat to interact with biological tissues and allows a working temperature below 50° C. This is possible thanks to a frequency spectrum whereby the energy transferred to the tissue interacts directly at the molecular level.

QMR is a unique and innovative technology that has been developed and patented by Telea Medical, an Italian company established in 1988.

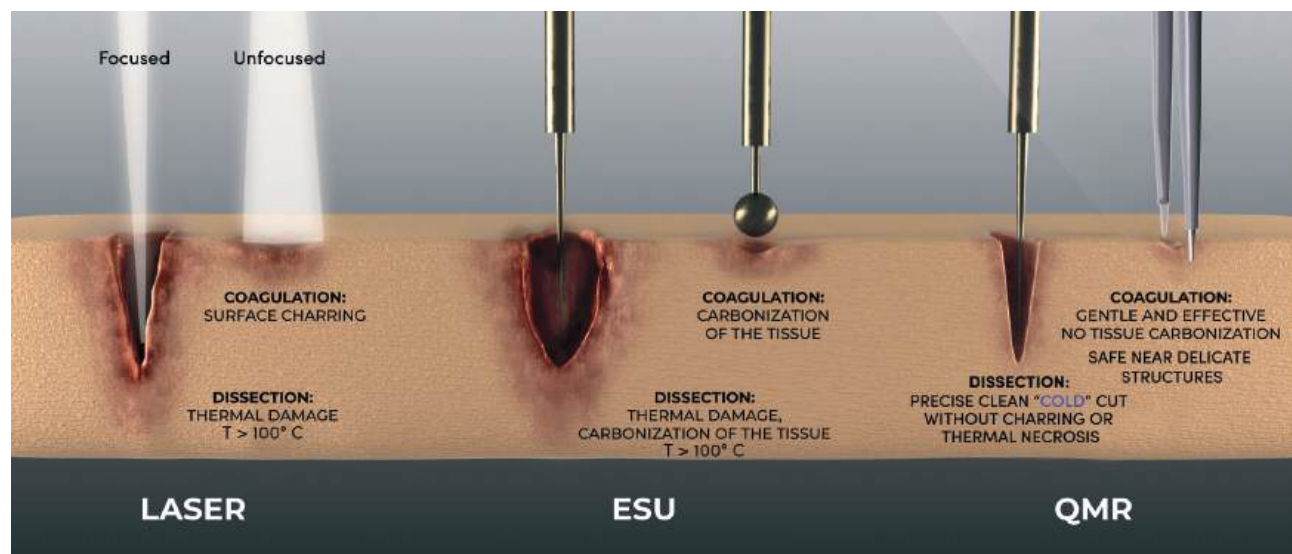
COAG

Our signature bipolar coagulation is known for its precision and efficacy. By exploiting out-of-resonance frequencies, the protein denaturation of fibrinogen is activated, which transforms into fibrin, achieving blood coagulation without damage to the vessel.

The result is a precise and delicate coagulation that does not collapse the vessels and preserves the surrounding tissues.

PRESERVE THE TISSUE

QMR Technology provides a clear improvement in surgery compared to standard technology (both laser and electrosurgery) which allows to preserve the tissues thanks to less thermal damage (2). The cut and the coagulation are effective and precise (3,7).



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— ESSENTIAL SMART

Vesalius ESSENTIAL SMART is a QMR device from the VESALIUS line that is ideal for use in neurosurgery, spinal surgery and skull base surgery.

The product has been specially designed to offer the best coagulation performance in any setting. With QMR technology it is possible to obtain a more delicate and precise coagulation, particularly where there is blood pooling in the surgical field.

Vesalius ESSENTIAL SMART has a unique bipolar output for tissue coagulation and a simple and intuitive interface. The 4.3" display on the control panel enables the precise output to be selected.

FIELDS OF APPLICATION

- Neurosurgery
- Skull base
- Spinal surgery



MAIN FEATURES

S.M.A.R.T. (SELF MONITORING AND RECOGNITION TECHNOLOGY)

This is an innovative functionality of the VESALIUS range of products which allows communication between the device and the accessory connected.

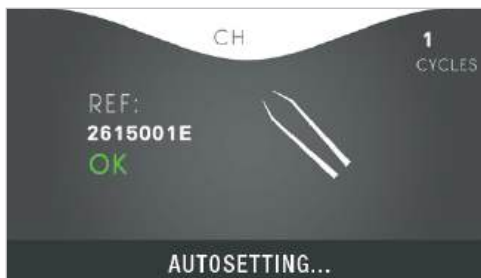
This technology allows the functions of the accessory to be set automatically and the operator to receive important information about the accessory itself (for example, product code and number of uses) to help the OR operator to manage the life cycle, avoiding the risk of overuse.

AUTO-START & AUTO-STOP

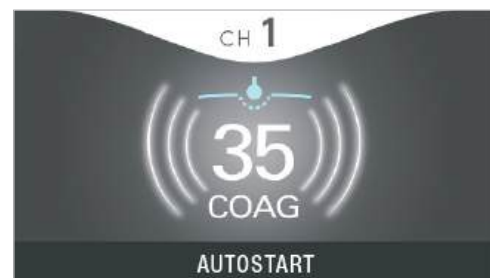
Vesalius ESSENTIAL SMART is equipped with SMART technology that activates the function quickly and precisely once the tissue is touched and deactivates it by moving the instrument away from the tissue.

RECOGNITION OF ACCESSORIES

SMART technology allows the accessory to be recognised, displaying the relevant parameters such as product code, number of uses left and where available, sets the recommended function and output of the accessory.



ACCESSORIES RECOGNIZED AND AUTOMATICALLY SET



BIPOLAR AUTOSTART AND AUTOSTOP

PRECISE BIPOLAR COAGULATION

By applying Vesalius forceps we can achieve coagulation without causing tissue adhesion at the forceps tips. Forceps tips do not require any cleaning despite repeated dissections and haemostasis procedures throughout the surgery.



STANDARD SURGICAL FORCEPS



Vesalius BIPOLAR FORCEPS

BENEFITS

- No necrotic tissue or thermal damage (2)
- Reduced intraoperative blood loss
- Precise removal of tissue in a practically bloodless field (2)
- No irrigation needed, but, in case it's required from surgeon, the Vesalius FLOW is available
- Less post-operative pain (1)
- Wide range of single- and multi-use bipolar faces available
- Very low working temperature (4,5)
- Reduced duration of surgery (3,7)

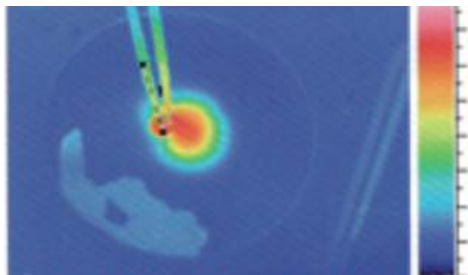
Vesalius FLOW
code: 3101001



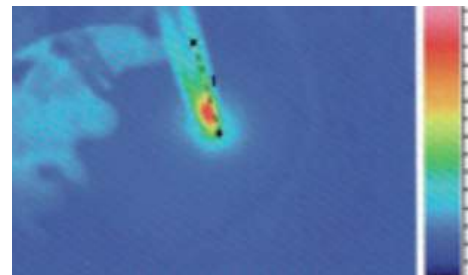
NO THERMAL DISPERSION

QMR Technology allows precise and effective bipolar coagulation.

While the standard technology shows a scattered temperature profile around the surgical site, QMR technology is precise and effective in respecting surrounding tissues (8).



STANDARD TECHNOLOGY



QMR TECHNOLOGY

MINIMUM NECROTIC TISSUE

The histologic analysis shows how in the case of QMR use there is no necrosis and a limited area of oedema, which with standard technology appears much more extensive and exhibits necrosis (8).



STANDARD TECHNOLOGY



QMR TECHNOLOGY

NON-STICK BIPOLAR FORCEPS

All Vesalius forceps are real non-stick forceps as they are made with tips entirely in solid-state silver alloy.

LEONARDO



Ergonomically shaped forceps, sturdy stems and an active tip length of 8mm.

SILVERSLIM-EVO



Ideal forceps for key-hole procedures under the microscope, equipped with thin stems, anti-reflection treatment and depth lines. Length of the active tip equal to 4mm.

SILVERSLIM-MICROEVO



Evolution of the EVO forceps, equipped with thin stems, anti-reflection treatment, depth lines and tips angled at various angles. Length of the active tip of only 2mm for maximum precision.

BLACK-SOUL



The single-use version of the valued SILVERSLIM-EVO design. Practical, precise and price competitive forceps. Length of the active tip equal to 4mm.





Accessories included in the box:

1x power cord, 1x 2504018 - double electric pedal with ball, 1x user manual.

WIRED TROLLEY

Dimensions: 500x400x930 mm

code: 2507002



Vesalius ESSENTIAL SMART Code: 2501035

Supply Connection: 100-230V ~ 50/60Hz
Quantized High Frequencies Spectrum:
4 MHz with harmonics

BIPOLAR output power

- COAG 70W/100 Ω

2-PIN AMERICAN STANDARD BIPOLAR CABLE

cable's length: 4 m

code: 2506018



2-PIN AMERICAN STANDARD SINGLE USE STERILE BIPOLAR CABLE

cable's length: 3 m

code: 2506017E



SINGLE ELECTRIC PEDAL

cable's length: 4 m

code: 2504011



Reference List

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Vesalius

— ESSENTIAL SMART

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