Telea MEDICAL


# Vesalius N2

## 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.

## CUT

The CUT function generates a precise cut, which is triggered by the breaking of molecular bonds. The properties of QMR allow the tissue to be preserved thanks to a low temperature and an extremely delicate incision.

## BLEND

This function lets the tissue be vaporized with minimal heat transfer to the surrounding tissues.

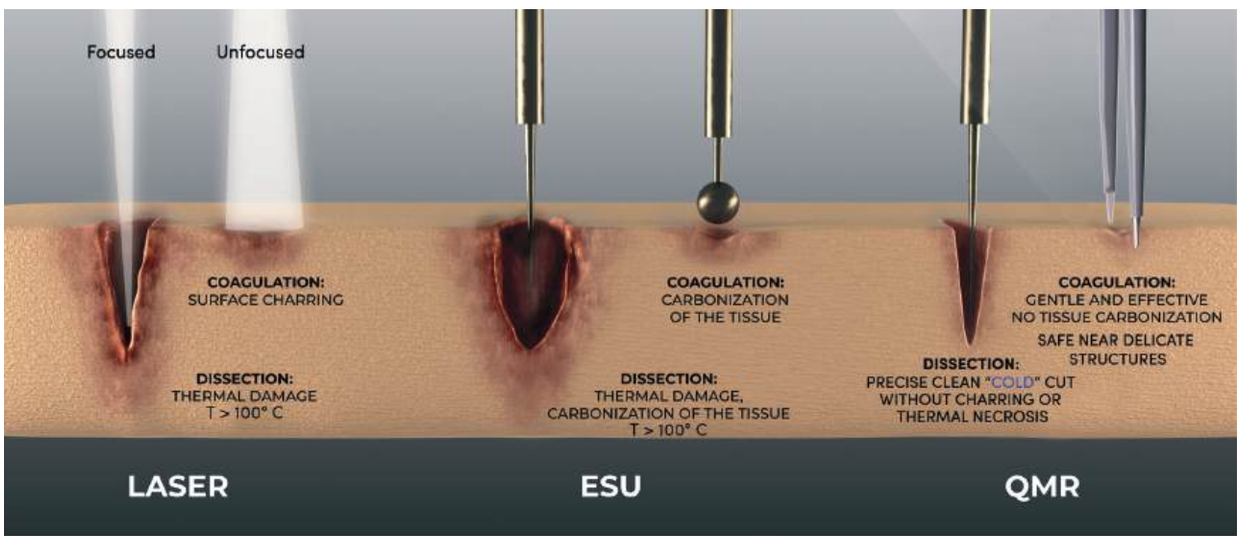
## COAG

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).



# Vesalius N2

Vesalius N2 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, and to vaporise the tissue, thanks to the CUT and BLEND bipolar functions.

Vesalius N2 comes with 2 smart programmable bipolar outputs with 3 different functions, and has a simple and intuitive interface. The 4.3'' display on the control panel allows 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. This reduces the risk of overuse in case of single-use accessories or to exceed the recommended life for the exceeding the maximum usage threshold, risking using worn out and no longer safe accessories.

## AUTO-START & AUTO-STOP

Vesalius N2 device 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.


BIPOLAR AUTOSTART AND AUTOSTOP

## RECOGNITION OF ACCESSORIES

SMART technology allows the accessory to be recognised by the device, as a consequence the relevant information such as reference code, number of uses left are displayed. Also, where available, the recommended function and recommended power for the accessory are set automatically.


ACCESSORIES RECOGNIZED AND AUTOMATICALLY SET

## PRECISE BIPOLAR COAGULATION

Precise power dosing: the Vesalius N2 is dedicated for neurosurgery and allows to finely adjust the output power thanks to the wide resolution available.
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

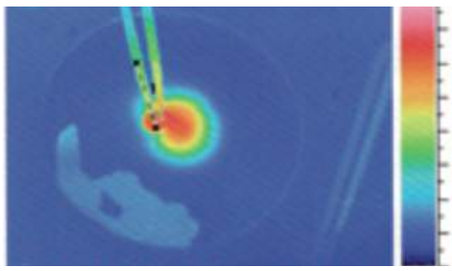
## BENEFITS

- 3 operating modes (CUT, BLEND, COAG) for each bipolar SMART output
- 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)

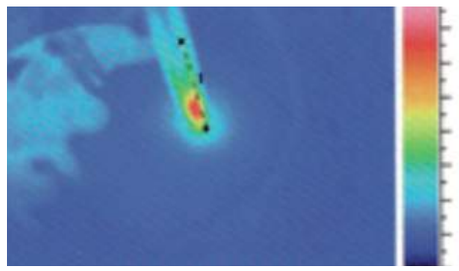
**Vesalius FLOW**
**code: 3101001**

## 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).



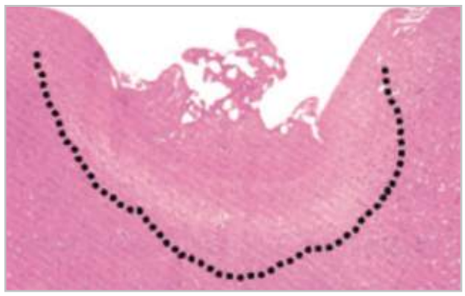
STANDARD TECHNOLOGY



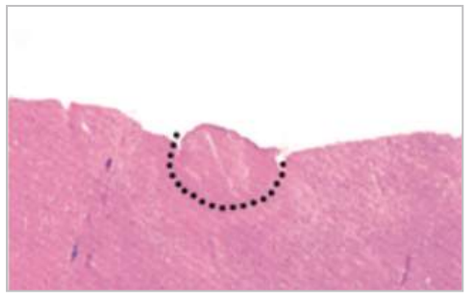
QMR TECHNOLOGY

## 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

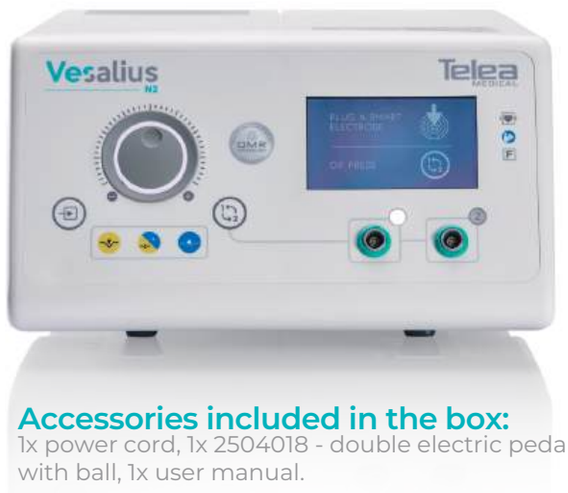
Ideal forceps for key-hole procedures under the microscope, equipped with thin stems, anti-reflection treatment and depth lines. Length of the active tip equal to 4mm.

## 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.




## Vesalius N2
## Code: 2501036

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

**BIPOLAR output powers:**

- CUT 120W / 100Ω
- BLEND 100W / 100Ω
- COAG 70W / 100Ω

## Accessories included in the box:

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

### 2-PIN AMERICAN STANDARD BIPOLAR CABLE

**cable's length: 4 m**
**code: 2506018**

### WIRED TROLLEY

**Dimensions: 500x400x930 mm**
**code: 2507002**


### 2-PIN AMERICAN STANDARD SINGLE USE STERILE BIPOLAR CABLE

**cable's length: 3 m**
**code: 2506017E - box of 5 pcs**

### DOUBLE ELECTRIC PEDAL WITH BALL

**Cable's length: 4 m**
**code: 2504018**

## Reference List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