

# Successful launch of new urology pump making TUR and other urologic endoscopic operations both safer and faster

## **Bonvisi's urology pump ENDO P® helps preventing serious complications such as TUR syndrome**

*The Swedish ENDO P® urology pump made its first successful clinical appearance some months ago on the Swedish market. First hospital to use it routinely is Uddevalla hospital, part of the NU-healthcare in Sweden. ENDO P® has also been well received by clinical users in several other Swedish hospitals. Since the launch, ENDO P® has been further improved with a unique warning function that monitors unexpected uptake of fluids during surgery and alerts any kind of leakage.*

The ENDO P® pump has a unique, patented technology for regulating the irrigation flow in an innovative way that simplifies endoscopic surgeries (TUR surgeries) in all parts of the urinary tract. The patented method is developed by the Swedish med-tech company Bonvisi AB.

### **Blood loss reduced by 41%**

Results from a controlled clinical evaluation show that blood loss can be reduced with up to 41%, and fluid consumption with up to 28%, during TUR-P operations compared to TUR-P with irrigation by gravity. Reduced bleeding in turn leads to improved visibility, which means safer and faster operations. The heavily reduced consumption of sterile irrigation fluid also saves costs.

– Reduced bleeding and fluid consumption per-operatively is a direct result of the unique method the Bonvisi product uses for fluid control, says Anders Möllstam, inventor, founder and Managing Director of Bonvisi.

### **New unique safety function**

Bonvisi has now further improved ENDO P® with a warning function that alerts the user at any kind of leakage, mechanical or physical. The new function makes ENDO P® even more preventive against TUR syndrome and other risks, and it's a unique function not available during gravity driven irrigation or in other endoscopic pumps.

– We have been using urology pumps since the late 1990s, but with ENDO P® this area takes a great leap forward. Thanks to the precise delivery of fluid and pressure into the surgical area we can carry out operations that are both safer and faster, says Thomas Ranch, senior physician at the urology clinic at Uddevalla hospital in Sweden. It is a great advantage for the urologist to be able to control the pressure or flow with a simple kick on the footpedal. Now, with the new safety features in Endo P we can be alerted if a patient potentially is at risk of TUR Syndrome.

With several unique benefits, ENDO P® might be the next paradigm shift, setting a new standard in TUR surgery. Several doctors claim that they don't see the reason to use gravity driven fluid for TUR operations when they can use a pump that automatically gives them control over pressure levels in the operation area.

– Through feedback from doctors and health authorities, we know that they need new

innovations like Endo P, helping hospital staff to prevent problems like TUR syndrome, and giving the user a pressure guard when operating in sensitive areas like the kidney tracts, says Anders Elf, Director Sales & Marketing at Bonvisi.

### **Traditional irrigation methods**

At traditional TUR surgery, free and partly unregulated fluid flow is usually used to flush the operation area clean of tissue debris and blood. When the irrigation needs to be enhanced, for instance to improve the visibility during the operation, the nurse must raise the fluid bag or put uncontrolled pressure on the bag, to increase flow and/or pressure. This causes a fluctuating pressure in the operation area that is difficult to control. If this pressure is too high, tissue damage can occur or fluids can be forced into the patient's blood stream, which can cause TUR Syndrome, a severe complication to TUR surgery.

### **How ENDO P® works**

The urology pump ENDO P® regulates the in- and outflow of fluids during TUR surgery via a patented method for delivery of an optimal flow and fluid pressure. The method dynamically adjusts flow and pressure based on the patient's systemic blood pressure. The doctor can separately adjust the flow rate and fluid pressure via a foot pedal, i.e. the doctor can choose to leave the software controlled delivery of fluids, and for a limited period of time go up or down in flow or pressure but continue to keep control. This has in the clinical settings proved to be very useful, especially in bladder- and stone cases. ENDO P® continuously gives information of flow and pressure in the display, and it stops, plus provides the user an alert, if the pressure for some reason should be too high. All new functions will be tested in spring 2016, in cooperation with selected clinics in Sweden, before the next generation ENDO P® pumps will be launched at the end of May.



*Next generation of ENDO P®*

*For more information please contact:*

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*ENDO P® is developed by Swedish med-tech company Bonvisi AB in cooperation with several Swedish scientists. In 2016 the company will launch ENDO P® on several European markets. By the end of 2016 the company plans to apply for sales permission in USA. The unique regulating mechanism for fluid control that Bonvisi has developed is patented in Sweden and pending approvals in several other countries. The company also has additional patent and brand protection for its products.*