LithoVue™ Single-Use Digital Ureteroscope
A single use solution for urologists

Kidney stones are quite common and usually affect people aged 30 to 60 years, as well as more men than women.[1] To diagnose kidney stones and other conditions of the kidney, ureter and bladder, doctors perform a procedure called ureteroscopy, which involves inserting a special telescope, called a ureteroscope, into the urethra and then passing it through to the bladder and then into the ureter and kidney.

The new Boston Scientific LithoVue™ Single-Use Digital Ureteroscope provides **high-quality visualisation and navigation to help urologists access, diagnose and treat stones and other conditions of the kidney, ureter and bladder**.

Kidney Stones are responsible for more than 12,000 hospital admissions each year.[2] Until now, urologists have relied upon reusable digital ureteroscopes, which are associated with several limitations and challenges, including[3,4,5,6,7]:

- Significant cost of acquisition
- Breakage, repairs and associated unpredictable repair costs
- Degradation of performance over time
- Substantial time, expense and complexity of reprocessing
- Potential procedural delays due to lack of scope availability resulting from scope repairs and reprocessing hold-ups

By providing urologists with a single-use solution, the LithoVue System eliminates the inconsistent performance and maintenance challenges associated with reusable scopes and is **designed to help urologists remove kidney stones quickly, easily, safely and affordably**.

It has also been designed with **environmental responsibility** in mind:

- Use of the LithoVue system decreases waste from disinfecting consumables such as brushes, towels and test strips[8,9,10,11]
- It helps reduce water and energy costs, as well as reprocessing requirements[12,13]
- LithoVue eliminates staff exposure to harmful toxic chemicals and the disinfecting consumables used to reprocess reusable scopes after every single use[14,15,16,17,18,19]

Boston Scientific has also worked with suppliers to incorporate recycling concerns into the LithoVue System packaging content.

LithoVue System Highlights:

- 270˚ scope deflection in both directions for accurate navigation
- 7.7F tip diameter and 9.5F outer diameter fits the average patient ureter with renal colic[20]
- To maximize visibility, a digital CMOS imager with a working distance of 2mm–50mm produces superb quality images across a depth of field that is equivalent to or better than those from other commonly used reusable scopes on the market[21]
- Light source built into ergonomic control handle

- Can be integrated into operating theatre processes:
    - Either used alone or connected to existing digital visual interface monitors and recording systems
    - Fully compatible with laser lithotripsy using existing technologies – with little or no interference from laser firing

Media contacts:
For further information contact the EMEA Corporate Communications Team

EMEA.MediaRelations@bsci.com

References

[1] NHS Choices. Last accessed February 2016. http://www.nhs.uk/Conditions/Kidney-stones/Pages/Introduction.aspx
[2] The British Association of Urological Surgeons. Last accessed February 2016 http://www.baus.org.uk/patients/conditions/6/kidney_stones
[3] Collins JW, Keeley FX, Timoney A. Cost analysis of flexible ureterorenoscopy. *Br J Urol*. 2004;93(7):1023-6.
[4] Carey RI, Martin CJ, Knego JR. Prospective evaluation of refurbished flexible ureteroscope durability seen in a large public tertiary care center with multiple surgeons. *Urology*. 2014;84:42-5.
[5] Shah K, Monga M, Knudsen B. Prospective randomized trial comparing 2 flexible digital ureteroscopes: ACMI/Olympus Invisio DUR-D and Olympus URF-V. *Urology*. 2015;85(6):1267-71.
[6] Knudsen BE, Ferraro M. Digital video flexible ureteroscopy: GyrusACMI/Olympus Invisio®DUR®-D twelve month failure and repair experience. NCS 2009.

[7] Knudsen B, Miyaoka R, Shah K, et al. Durability of the next-generation flexible fiberoptic ureteroscopes: A randomized prospective multi-institutional clinical trial. *Urology*. 2010;75:534-9.
[8] Olympus Medical Systems Corporation. Uretero-reno videoscope Olympus URF Type V. Japan, 2014.
[9] PENTAX Medical Company. Pentax ureteroreno fiberscope FUR-9P. Japan, 2011.
[10] Richard Wolf Medical Instruments Corporation. Flexible fiber ureteroscope 7325.071/7325.076. United States, 2013.
[11] Stryker Corporation. Stryker ideal eyes HD URT-7000S/7000Si flexible video ureteroscope. United States, 2012.
[12] ECRI Institute. Endoscope Reprocessing Systems. Tech IQ. 2014.
[13] Pfiedler Enterprises. The care and handling of rigid and flexible scopes (an online continuing education activity). Aurora, CO, 2013.
[14] Rutala WA, Weber DJ. Healthcare Infection Control Practices Advisory Committee HICPAC. Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008. Department of Health and Human Services; 2008.
[15] Clemens JQ, Dowling R, Foley F, et al. Joint AUA/SUNA white paper on reprocessing of flexible cystoscopes. *J Urol*. 2014;184(6):2241-5.
[16] Park S, Jang JY, Koo JS, et al. A review of current disinfectants for gastrointestinal endoscopic reprocessing. *Clin Endosc*. 2013;6(4):337-41.
[17] Smith DR, Wang RS. Glutaraldehyde exposure and its occupational impact in the health care environment. *Environ Health Prev Med*. 2006;11(1):3-10.
[18] Takigawa T, Endo Y. Effects of glutaraldehyde exposure on human health. *J Occup Health*. 2006;48(2):75-87.
[19] Rideout K, Teschke K, Dimich-Ward H, et al. Considering risks to healthcare workers from glutaraldehyde alternatives in high-level disinfection. *J Hosp Infect*. 2005;59(1):4-
[20] Song HJ, Cho ST, Kim KK. Investigation of the location of the ureteral stone and diameter of the ureter in patients with renal colic. *Korean J Urol.* 2010;51(3):198-201.
[21] Eisner B. Evaluating the image quality of a novel single-use digital flexible ureteroscope. *J Endourol*. 2015;29(1):A348

CAUTION: Law restricts this device to sale by or on the order of a physician. Indications, contraindications, precautions and warnings can be found with product labelling supplied with each device. Information for the use only in countries with applicable health authority product registrations.