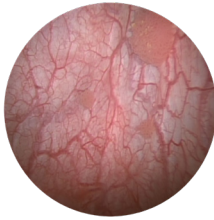


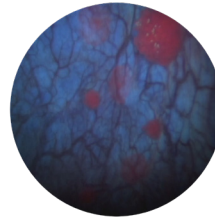


# CYSTOSCOPY FACT SHEET

## Blue Light Cystoscopy (BLC™) with Cysview® (hexaminolevulinate HCl) for Bladder Cancer



Bladder image using white light  
cystoscopy alone



Same image after using BLC with Cysview  
as an adjunct to white light

### Bladder Cancer Detection

Cystoscopy is the gold standard diagnostic tool for bladder cancer detection. Doctors who suspect patients may have bladder cancer use this procedure to look inside the bladder. A cystoscope lets the doctor inspect the bladder lining very closely for any abnormal growths or suspicious areas. Historically, cystoscopy was performed using only white light for visualizing suspicious lesions.<sup>1</sup>

Unfortunately, there is a high risk of recurrence in bladder cancer and 30-44% of all patients have evidence of tumor on repeat TURBT upto 8 weeks.<sup>2</sup> This may be due to doctors being unable to detect, and therefore remove, all of the cancer during the initial resection.

### Blue Light Cystoscopy with Cysview®

Blue Light Cystoscopy (BLC™) with Cysview® is a technology that significantly improves the detection of non-muscle invasive bladder cancer compared to traditional White Light Cystoscopy alone.<sup>3</sup>

Cysview is an optical imaging agent indicated for use in the cystoscopic detection of carcinoma of the bladder, including carcinoma in situ (CIS), among patients suspected or known to have lesion(s) on the basis of a prior cystoscopy, or in patients undergoing surveillance cystoscopy for carcinoma of the bladder.<sup>3</sup> Cysview is taken up by cancer cells in the bladder making them glow bright pink under blue light. Because of this, BLC™ with Cysview improves the detection of tumors and therefore can lead to a more complete resection, less residual tumors and better management decisions.<sup>3</sup>

- A solution containing the drug is placed in the bladder using a catheter one hour prior to the cystoscopic procedure. During this time Cysview is absorbed by cancerous tissue.<sup>3</sup>
- The doctor performs the cystoscopy by using both white light and blue light.<sup>3</sup>

### Inclusion of BLC with Cysview in Guidelines

The clinical value of BLC with Cysview has been included in several guidelines. Guidelines and recommendations have been published by the following organizations:<sup>4,5</sup>

- American Urological Association (AUA), Society of Urological Oncology (SUO) (2016) – in the enhanced cystoscopy section, Blue Light Cystoscopy is recommended (Moderate Recommendation; Evidence Strength: Grade B) for use in patients with NMIBC at the time of transurethral resection of bladder cancer tumors (TURBT) to increase detection and decrease recurrence.<sup>4</sup>
- National Comprehensive Cancer Network (NCCN) (2018) – Enhanced (blue light and narrow band imaging) cystoscopy may be useful in identifying lesions not visible using white light cystoscopy.<sup>5</sup>

### Clinical Overview

- Phase III studies using BLC with Cysview demonstrated a statistically significant difference in the detection of:
  - Ta/T1 tumors, with additional tumors detected in 16.4% of patients using BLC with Cysview<sup>3</sup>
  - CIS, with 34.6% patients who recurred with CIS were detected with BLC only<sup>2</sup>
  - recurrence, with 20.6% recurrent patients were found with Cysview alone through flexible cystoscopy<sup>2</sup>

**Cysview is not a replacement for random bladder biopsies or other procedures used in the detection of bladder cancer.**



## Prescribing Information

Cysview is an optical imaging agent indicated for use in the cystoscopic detection of carcinoma of the bladder, including carcinoma in situ (CIS), among patients suspected or known to have lesion(s) on the basis of a prior cystoscopy, or in patients undergoing surveillance cystoscopy for carcinoma of the bladder. Cysview is used with the KARL STORZ D-Light C Photodynamic Diagnostic (PDD) system to perform Blue Light Cystoscopy (BLC™) as an adjunct to the white light cystoscopy.

## Important risk & safety information

Cysview is not a replacement for random bladder biopsies or other procedures used in the detection of bladder cancer.

Anaphylactoid shock, hypersensitivity reactions, bladder pain, cystitis, and abnormal urinalysis have been reported after administration of Cysview. The most common adverse reactions seen in clinical trials were bladder spasm, dysuria, hematuria, and bladder pain.

Cysview should not be used in patients with porphyria, gross hematuria, or with known hypersensitivity to hexaminolevulinate or any derivative of aminolevulinic acid. Cysview may fail to detect some malignant lesions. False positive fluorescence may occur due to inflammation, cystoscopic trauma, scar tissue, previous bladder biopsy and recent BCG therapy or intravesical chemotherapy. No specific drug interaction studies have been performed.

Safety and effectiveness have not been established in pediatric patients. There are no available data on Cysview use in pregnant women. Adequate reproductive and developmental toxicity studies in animals have not been performed. Systemic absorption following administration of Cysview is expected to be minimal. There are no data on the presence of hexaminolevulinate in human or animal milk, the effects on a breastfed infant, or the effects on milk production. The development and health benefits of breastfeeding should be considered along with the mother's clinical need for Cysview and any potential adverse effects on the breastfed infant from Cysview or from the underlying maternal condition.

Cysview is approved for use with the KARL STORZ D-Light C Photodynamic Diagnostic (PDD) system. For system set up and general information for the safe use of the PDD system, please refer to the KARL STORZ instruction manuals for each of the components.

**Prior to Cysview administration, read the Full Prescribing Information and follow the preparation and reconstitution instructions.**

### References

1. Tanaka MF, Sonpavde G. Diagnosis and management of urothelial carcinoma of the bladder. *Postgrad Med.* 2011; 123(3): 43-55.
2. Daneshmand S, Patel S, Lotan Y, et al. Efficacy and safety of blue light flexible cystoscopy with hexaminolevulinate in the surveillance of bladder cancer: A phase III, comparative, multicenter study. *J Urol.* 2018; 199(5): 1158-1165. doi: 10.1016/j.juro.2017.11.096. *Epub* 2017 Dec 2.
3. Cysview® [prescribing information]. Photocure, Inc. Princeton, NJ; 2018.
4. Chang SS, Boorjian SA, Chou R, et al. Diagnosis and Treatment of Non-Muscle Invasive Bladder Cancer: AUA/SUO Guideline. *J Urol.* 2016;196(4):1021-9.
5. NCCN. NCCN Clinical Practice Guidelines- *Bladder Cancer.* 2018; version 4.2018.