ELEVIEW™ CASE STUDY

Hernando Gonzalez, MD
Hennepin County Medical Center
Department of Medicine
Division of Gastroenterology

Colorectal cancer develops from changes in benign polyps in the lining of the gastrointestinal tract.[1] The Paris classification system divides colorectal polyps into 2 broad categories based on their morphology: protruded and flat. The protruded lesions include type 0-Ip (pedunculated) and type 0-Is (sessile). The flat lesions include type 0-IIa (flat elevated, height less than 2.5 mm), type 0-IIb (completely flat), type 0-IIc (depressed), and type 0-III (excavated).[2] Flat lesions usually require submucosal injection before resection.[3]

Endoscopic mucosal resection (EMR) was developed for the removal of benign and early malignant lesions confined to the superficial layers (mucosa and submucosa) of the gastrointestinal tract.[4] In EMR, a submucosal injection creates a cushion for the polyp, which can then be snared either en bloc or piecemeal.[3] The advantage of en bloc removal is that it allows for full histological assessment of the complete resection.[5]

Eleview™ is a ready-to-use, sterile, submucosal injection agent that has been cleared for use by the FDA.[6] It is designed to provide a submucosal cushion of optimal height and duration, creating a long-lasting cushion that lasts for up to 45 minutes.[6,7] It has been premixed with methylene blue to create a contrast with the natural color of the mucosa, allowing the endoscopist to perceive the exact position of the cutting device. This helps to visualize the margins of the target lesion and to decrease risk of damage to the muscular layer, which could lead to perforation. [6,7] Eleview™ is also compatible with most common endoscopic devices.[6]

Eleview™ Used in EMR With a Lateral Spreading Tumor:

- Description: granular type, IIa, Nice classification type 2, ~3 cm in size
- Location: ascending colon
- Procedure: removed completely by submucosal injection of Eleview™ in a piecemeal fashion
  - A total of 5 mL of Eleview™ was used (10 mL/ampoule)

PRESENTATION

POST-INJECTION

RESECTION

POST-RESECTION

ARIES Pharmaceuticals, Inc.
Member of Cosmo Pharmaceuticals NV Group

Eleview™

Economic Case Study: Eleview™ vs Voluven® Plus Methylene Blue

The goal of this economic case study is to assess the cost of Eleview™ vs Voluven® plus methylene blue, our standard of care for submucosal injection agents. In our practice, we routinely use 10 mL to 20 mL of submucosal injection agent, Voluven® plus methylene blue, when we inject a patient for EMR. However, the 10 mL to 20 mL of Voluven® plus methylene blue used does not represent the entire cost of the procedure, as the opened containers left over after the procedure must be discarded to ensure sterility for other patients.

Voluven® costs $69* per bag (500 mL), while methylene blue costs $168 per vial (10 mL). Eleview™ is packaged in 10 mL single use vials, 5 to a box, with a cost of $81 per vial. In our economic model, shown in Table 1, the cost per patient is broken down both by the cost per injection (either 10 mL or 20 mL) and the overall cost per patient, including waste. In this scenario, using Eleview™ will save our practice $75 to $156 per patient (Table 1).

Table 1. Breakdown of cost per patient/procedure

	Eleview™	Voluven® Plus Methylene Blue
10 mL per patient	$81 ($0 waste) **Total: $81/patient**	Voluven: $69/bag (500 mL) ($1.38 injection agent per patient + $67.62 waste per patient) Methylene blue: $168/vial (10 mL) ($16.80 injection agent per patient + $151.20 waste per patient) **Total: $237/patient**
20 mL per patient	$162 ($0 waste) **Total: $162/patient**	Voluven: $69/bag (500 mL) ($2.76 injection agent per patient + $66.24 waste per patient) Methylene blue: $168/vial (10 mL) ($33.60 injection agent per patient + $134.40 waste per patient) **Total: $237/patient**
Savings with Eleview™: $75 to $156 per patient		

In our practice, we perform approximately 150 endoscopic resections requiring submucosal injection per year. On an annual basis, using Eleview™ results in a cost savings that ranges from $11,250 to $22,500 per year (Table 2).

Table 2. Service line impact from replacing Voluven plus methylene blue with Eleview™

10 mL per patient	Number of annual cases requiring lift: Savings per patient with Eleview™: Annual contribution margin dollar improvement:	150 $156 **$23,400/year**
20 mL per patient	Number of annual cases requiring lift: Savings per patient with Eleview™: Annual contribution margin dollar improvement:	150 $75 **$11,250/year**
Savings with Eleview™: $11,250 to $23,400 per year		

Using Eleview™ can result in significant cost savings per year. However, in this economic scenario, cost savings are only 1 advantage of using Eleview™. Other advantages to our practice include:

- Reduced compounding time and increased workflow efficiency
- Reduced storage space
- Reduced waste

*All numbers are based on nationally available costs.

1. Simon K. Colorectal cancer development and advances in screening. *Clin Interv Aging*. 2016;11:967-976. **2.** Participants in the Paris Workshop. The Paris endoscopic classification of superficial neoplastic lesions: esophagus, stomach, and colon. *Gastrointest Endosc*. 2003;58(6)(suppl):S3-S43. **3.** Fyock CJ, Draganov PV. Colonoscopic polypectomy and associated techniques. *Worlda J Gastroenterol*. 2010;16(29):3630-3637. **4.** Hwang JH, Konda V, Abu Dayyeh BK, et al; ASGE Technology Committee. Endoscopic mucosal resection. *Gastrointest Endosc*. 2015;82(2):215-226. **5.** Bujanda L, Cosme A, Gil I, Arenas-Mirave JI. Malignant colorectal polyps. *World J Gastroenterol*. 2010;16(25):3103-3111. **6.** Eleview™ Instructions for Use. Aries Pharmaceuticals, Inc. 2017. **7.** Data on file. Aries Pharmaceuticals, Inc.