

## **Avantis Medical Systems Launches Second-Generation Third Eye<sup>®</sup> Retroscope<sup>®</sup>**

***-- Latest Technology Offers Advanced Optics for  
Adenoma Detection during Colonoscopy --***

**NEW YORK**, (December 16, 2010) – Avantis Medical Systems, Inc., a technology leader in developing novel, catheter-mounted digital imaging devices, today announced the global launch of the second-generation Third Eye<sup>®</sup> Retroscope<sup>®</sup> featuring enhanced resolution and a smaller catheter design.

The new Third Eye Retroscope offers double the optical resolution compared to the first-generation device, and its smaller size allows it to fit through the accessory channels of even the smallest colonoscopes.

In addition, the new device will work not only with the NTSC video standard, used in North America and Japan, but also with the PAL video standard used throughout most other regions.

Avantis is showcasing the second-generation technology at the 24<sup>th</sup> Annual New York Society of Gastrointestinal Endoscopy (NYSGE) Course from December 15-18, 2010.

Research studies have demonstrated that physicians can detect up to 23-25 percent additional pre-cancerous adenomas with the Third Eye Retroscope compared to a standard colonoscope alone.<sup>1,2</sup>

“The Third Eye has become an important tool in my practice because it definitely allows me to find adenomas that I wouldn’t be able to see with the colonoscope alone, and that provides a tremendous value for my patients,” said Seth Gross, MD of Norwalk Hospital in Norwalk, Connecticut. “The sharper images provided by the second-generation Third Eye will make physicians even more confident that we’re not missing any significant lesions. I’m also happy that the new device is compatible with smaller-diameter pediatric colonoscopes, since I use them even with adult patients.”

“Multiple clinical studies have shown that when physicians use a Third Eye Retroscope along with a standard colonoscope, they are able to find and remove more pre-cancerous adenomas than they can with the colonoscope alone,” said Jack Higgins, MD, Chief Medical Officer of Avantis Medical Systems. “That’s because the Third Eye provides a retrograde – or ‘backward’ – view that allows physicians to see areas that are hidden from the standard colonoscope by the folds that are present in the wall of the colon. This second-generation device represents a significant breakthrough because, in addition to improving the quality of the video imaging, this new device can be used with virtually any colonoscope, anywhere in the world.”

Jerome D. Wayne, MD of the Mount Sinai School of Medicine in New York will feature the new device in a presentation on December 17, 2010 during the NYSGE 2010 Annual Course at the New York Marriott Marquis Hotel. On the same day, attendees at the course will see the device used in a live demonstration transmitted from Lenox Hill Hospital in New York, and on the following day they will have an opportunity to use the Third Eye themselves during a hands-on workshop with anatomical models of the colon.

## **About Colon Cancer**

Colorectal cancer is the second-leading cause of cancer-related deaths in the U.S., where it kills about 50,000 people each year.<sup>3</sup> However, it can usually be prevented through early detection and removal of pre-cancerous lesions.

Cancers of the colon and rectum develop when cells in their lining become abnormal and grow out of control. Most cases begin as a small clump of cells called an adenoma, a type of polyp that can progress over a period of several years to become cancerous unless detected and removed through colonoscopy.

## **About the Third Eye Retroscope and Avantis Medical Systems, Inc.**

Avantis Medical Systems markets the Third Eye Retroscope, an FDA-cleared, disposable, catheter-based camera indicated for use with a colonoscope to provide an additional view of the colon for diagnostic purposes. Deployed through the instrument channel of a standard colonoscope, the Third Eye provides the physician with a retrograde (backward) view to complement the colonoscope's forward view of the lining of the colon.

Although colonoscopy is the gold standard for preventing colon cancer by finding and removing pre-cancerous adenomas, extensive research has documented that up to 22-24% of adenomas can be missed during standard colonoscopy.<sup>4,5</sup> Two-thirds of the large adenomas that are missed are hidden behind folds in the wall of the colon.<sup>6</sup> Because the Third Eye's retrograde view reveals the areas behind folds, clinical studies show that it allows physicians to find up to 23-25% additional adenomas compared with a standard colonoscope alone. No other technology that can be used in conjunction with a colonoscope has been shown to enhance detection of adenomas to this extent.

Avantis Medical is focused on delivering cost-effective solutions for improved detection and prevention of cancers of the gastrointestinal tract. The company has an extensive portfolio of patents covering innovative devices based on the convergent technologies of micro-chips, enhanced video processing and catheter-based delivery systems. Please visit [AvantisMedical.com](http://AvantisMedical.com) or [ThirdEyeRetroscope.com](http://ThirdEyeRetroscope.com).

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Avantis Medical Systems, Inc.  
Doug Gielow  
(408) 636 7263  
[dgielow@avantismedical.com](mailto:dgielow@avantismedical.com)

<sup>1</sup> DeMarco DC, Odstrcil E, Lara LF, et al. Impact of Experience with a Retrograde-Viewing Device on Adenoma Detection Rates and Withdrawal Times during Colonoscopy: the Third Eye Retroscope Study Group. *Gastrointest Endosc* 2010;71:542-50.

<sup>2</sup> Leufkens AM, DeMarco DC, Siersema PD, et al. Effect of a Retrograde-Viewing Device on Adenoma Detection Rate during Colonoscopy: The "TERRACE" Study. *Gastrointest Endosc* 2010;Oct (published online in advance of print).

<sup>3</sup> <http://www.cancer.org/cancer/colonandrectumcancer/detailedguide/colorectal-cancer-key-statistics>

<sup>4</sup> Rex DK, Cutler CS, Mark DG, et al. Colonoscopic miss rates of adenomas determined by back-to-back colonoscopies. *Gastroenterology* 1997;112:24-8.

<sup>5</sup> Van Rijn JC, Reitsma JB, Dekker E, et al. Polyp Miss Rate Determined by Tandem Colonoscopy: A Systemic Review. *Am J Gastroenterol* 2006;101:343-50.

<sup>6</sup> Pickhardt PJ, Nugent PA, Schindler WR, et al. Location of adenomas missed by optical colonoscopy. *Ann Intern Med* 2004;141:352-9.