



Third Eye® Retroscope® Demonstrates Improved Adenoma Detection

--Five Abstracts Presented at Digestive Disease Week® 2010--

New Orleans, (May 3, 2010) – Avantis Medical Systems, Inc., a technology leader in developing novel catheter-mounted digital imaging devices, today announced five new studies confirming that use of the Third Eye® Retroscope® during colonoscopy procedures increases detection of adenomas and polyps. The studies showed that physicians, even with varying years of experience, were able to detect adenomas of all sizes in elderly and young patients using the Third Eye. The studies were presented at the Digestive Disease Week® 2010 conference (DDW) taking place in New Orleans, May 1 - 5. Avantis Medical is exhibiting at booth #647.

“These data confirm that the Third Eye Retroscope improves adenoma detection rates during colonoscopy, the current gold standard for colon cancer screening,” said Jack Higgins, MD, Chief Medical Officer of Avantis Medical. “Colorectal cancer is the second-leading cause of cancer death and is easily preventable by removing pre-cancerous polyps, or adenomas, before they develop into cancer. These data, combined with an already large body of well-controlled clinical trial data, validate the Third Eye Retroscope’s potential as an essential tool in colorectal cancer screening.”

In a study entitled, “**Single-Center Evaluation Of The Third Eye Retroscope: A Back-To-Back Study**,” (M1513), Dr. Anke Leufkens, Universitair Medisch Centrum-Utrecht, Utrecht, The Netherlands, concluded that colonoscopy with the Third Eye Retroscope detected more polyps compared to colonoscopy alone. Results were from one center participating in the multi-center Third Eye Retroscope Randomized Clinical Evaluation (“TERRACE”) study. The Utrecht site analyzed 46 patients divided between two groups: the first group underwent a first procedure with the colonoscope alone and a second procedure with the colonoscope along with Third Eye Retroscope, and the other group had Third Eye colonoscopy followed by a second procedure with the colonoscope alone. Compared to using the colonoscope alone, the Third Eye Retroscope improved detection rates by 82.8% for all polyps and 53.2% for adenomas.

Dr. Bradley Creel, Baylor University Medical Center, Dallas, TX, who participated in the same TERRACE study, presented a study entitled, “**Polyp Detection With A Retrograde-Viewing Device: A Tandem Colonoscopy Study**,” (S1590), concluding that the Third Eye Retroscope can reveal polyps that are hidden from the forward-viewing colonoscope.

Fifteen (15) investigators at nine centers evaluated 298 patients in a study¹ led by Dr. Daniel DeMarco, Baylor University Medical Center, published in *Gastrointestinal Endoscopy* in March, 2010. Using data from this study, the following sub-analyses were presented:

- Led by Dr. Kapil Gupta, Hennepin County Medical Center and University of Minnesota School of Medicine, Minneapolis, MN, in a study entitled, “**Effectiveness Of Third Eye Retroscope In Detection Of Colonic Adenomas In Elderly Patients (≥ 65 Years)**” (S1133), researchers concluded that the Third Eye is effective in detecting clinically significant medium and large-sized adenomas in addition to small adenomas and that the device provides at least as much benefit for patients older than 65 years of age as it does for younger patients. Detection rates were higher for medium and large-size adenomas. Overall additional adenoma detection rates were 13.8 percent for those older than 65 years and 16.9 percent for younger patients. After each endoscopist had completed 15 procedures, detection rates improved to 26.7 percent for those patients older than 65 years of age and 23.5 percent for younger patients.

- Dr. Manoj K. Mehta, NorthShore University HealthSystem, Evanston, IL, presented poster S1597, entitled, “**Impact Of Endoscopist’s Cumulative Years Of Experience On Baseline Adenoma Detection Rates And Additional Yield Utilizing The Third Eye Retroscope.**” Endoscopists were divided into groups based upon colonoscopy experience. The physicians with 11 – 20 years’ experience showed the highest yield for baseline adenoma detection and improved detection rates when using the Third Eye Retroscope along with the colonoscope.
- Dr. Luis F. Lara, Baylor University Medical Center, presented, “**Effects Of Indication For Colonoscopy And Time Since Previous Colonoscopy On Adenoma Detection Rates Using The Third Eye Retroscope**” (S1593), concluding that use of the Third Eye Retroscope increased detection rates for adenomas and all polyps regardless of whether the indication for the procedure was for screening, for surveillance in follow-up of previous polypectomy or for diagnostic work-up of symptomatic patients.

Avantis also announced the launch of its next-generation Third Eye Retroscope, which offers significantly improved optical resolution, a smaller profile that allows the Third Eye camera and catheter to be introduced into accessory channels of even the smallest available colonoscopes and PAL video standard compatibility for use within markets outside of the United States.

“Over the last few years, Avantis has worked closely with leading gastroenterologists from around the world to produce a portfolio of quality clinical data that we believe supports broader adoption of the Third Eye as an essential complement to colonoscopy,” said Scott Dodson, President and CEO of Avantis Medical. “We look forward to seeing the Third Eye playing a greater role in helping to reduce the incidence of colorectal cancer.”

About Digestive Disease Week

DDW is the largest international gathering of physicians, researchers and academics in the fields of gastroenterology, hepatology, endoscopy and gastrointestinal surgery. Jointly sponsored by the American Association for the Study of Liver Diseases, the American Gastroenterological Association (AGA) Institute, the American Society for Gastrointestinal Endoscopy and the Society for Surgery of the Alimentary Tract, DDW takes place May 1 - 5, 2010, at the Ernest N. Morial Convention Center, New Orleans, LA. The meeting showcases approximately 5,000 abstracts and hundreds of lectures on the latest advances in GI research, medicine and technology. For more information, visit www.ddw.org.

About The Third Eye Retroscope and Avantis Medical Systems, Inc.

Avantis Medical Systems, Inc. markets the Third Eye Retroscope, an FDA-cleared, disposable, catheter-based camera indicated for use with a standard 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 backward view to complement the colonoscope’s forward view of the lining of the colon. The device is commercially available to physicians who perform colonoscopies.

The Third Eye is the only technology cleared by the FDA that enhances polyp detection when used in conjunction with a colonoscope. Although colonoscopy is the gold standard for preventing colon cancer by finding and removing polyps and other lesions, clinical literature documents that up to 22-24% of adenomas of all sizes^{2,3} and 12% of adenomas over 10 mm in size⁴ can be missed. The Third Eye has been shown in clinical studies to help physicians find up to 25% more adenomas than a standard colonoscope alone.

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

Avantis Medical Announces Clinical Data

devices based on the convergent technologies of micro-chips, enhanced video processing and catheter-based delivery systems. For more information, visit www.AvantisMedical.com or www.ThirdEyeRetroscope.com.

###

Avantis Medical Systems
Doug Gielow
(408) 636-7263
dgielow@avantismedical.com

¹ 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.

² Rex DK, Cutler CS, Mark DG, et al. Colonoscopic miss rates of adenomas determined by back-to-back colonoscopies. *Gastroenterology* 1997;112:24-8.

³ 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.

⁴ Pickhardt PJ, Nugent PA, Schindler WR, et al. Location of adenomas missed by optical colonoscopy. *Ann Intern Med* 2004;141:352-9.