

First U.S. trial using GI Genius™ intelligent endoscopy module shows 50% reduction in missed colorectal polyps with Artificial Intelligence (AI) technology versus standard colonoscopy

Dublin, Ireland – 18 March 2022: Cosmo Pharmaceuticals N.V. (SIX: COPN, XETRA: C43) (“Cosmo”) announced that Medtronic on 16 March 2022 issued the following release:

Medtronic plc (NYSE: MDT), a global leader in healthcare technology, today announced final findings from a randomized, international, multi-center study that confirmed the effectiveness of the GI Genius™ intelligent endoscopy module, which uses AI as an aid in detecting colorectal polyps during colonoscopy, potentially helping to prevent colorectal cancer (CRC). The study, published on March 15 in *Gastroenterology*, the official medical journal of the American Gastroenterological Association, found that the use of GI Genius in conjunction with colonoscopy significantly decreases the miss rate (2x) of colorectal polyps and adenomas compared to standard colonoscopy.

In colonoscopies performed as part of the study, adenoma miss rate (AMR) was significantly lower when GI Genius was used as compared to a non-AI-assisted colonoscopy (15.5% vs 32.4%; p-value <0.001). These findings demonstrate that the use of GI Genius during colonoscopy significantly decreases the miss rate of both adenomas and polyps, further confirming the benefit GI Genius adds to colonoscopy procedures.¹ The study further found that false negative rates, when a GI Genius-assisted colonoscopy detected adenoma(s) after an initial standard colonoscopy did not, were much lower than that of non-AI-assisted colonoscopies (6.8% vs. 29.6%). In this study, a false negative indicates patients with an initial standard colonoscopy where no adenoma was detected were subsequently found to have at least one adenoma during a second AI-assisted colonoscopy.

“We know that colonoscopy is the gold standard for colon cancer screening and this study unequivocally demonstrates that AI-technology can help physicians better detect polyps during the procedure,” said Dr. Austin Chiang, M.D., M.P.H., chief medical officer of the Gastrointestinal business, which is part of the Medical Surgical Portfolio at Medtronic. “As a gastroenterologist, I worry about missed polyps because around half of all cases of post-colonoscopy colorectal cancer may be attributed to not catching them during the index colonoscopy.^{2,3} The impact of missed polyps could ultimately be the difference between life and death when we consider that 90% of patients with colon cancer can beat it when it’s caught early.”⁴

“These findings emphasize the value of artificial intelligence in increasing precancerous polyp detection in colonoscopy,” said Douglas K. Rex, M.D., MASGE, president, American Society for Gastrointestinal Endoscopy. “The purpose of most colonoscopies is to prevent patients from getting colon cancer. So, the more help I get in finding polyps the better. I have a very high adenoma detection rate but, in my experience, there are times GI Genius has identified polyps that I might have otherwise missed.”

The findings confirm topline results of the DETECT study from November 2021 that both AMR and polyp miss rate (PMR) significantly improve when GI Genius is used during colonoscopy. The study was funded by Cosmo Pharmaceuticals, the developer and manufacturer of Medtronic’s GI Genius system.

“This study underscores that the GI Genius system better supports physicians working to detect polyps and lesions,” said Michael Wallace, M.D., M.P.H., John C. Andersen Professor of Medicine at Mayo Clinic, who led the study. “I could not be prouder of the work we have done in partnership with Medtronic to bring to market a disruptive technology that is improving colorectal cancer screenings and potentially saving lives.”

The study (clinicaltrials.gov identification number: NCT03954548) was conducted in eight centers across the U.S., Italy, and the United Kingdom in university hospitals and community clinics. Study

subjects included male and female patients aged 45 or older undergoing a screening or surveillance colonoscopy for colorectal cancer. Overall, 249 subjects were randomized (1:1) in the study, of whom 230 subjects completed the study and were included in the analysis, undergoing two consecutive colonoscopies that were randomly assigned in order of which they were conducted: one with GI Genius and a colonoscopy with white light endoscopy.

Medtronic is the exclusive worldwide distributor of the GI Genius module which was granted De Novo authorization from the U.S. FDA on April 9, 2021. In addition to the United States, the GI Genius module is available in Europe and select markets in Asia, Australia, and the Middle East.

Findings published in Gastroenterology show that AI technology assisted coloscopy improves the accuracy of polyp detection, which plays an important role in the prevention of colorectal cancer. The full article can be read here: [https://www.gastrojournal.org/article/S0016-5085\(22\)00238-4/fulltext#relatedArticles](https://www.gastrojournal.org/article/S0016-5085(22)00238-4/fulltext#relatedArticles)

¹ <https://www.cosmopharma.com/news-and-media/news-releases/2021/19-11-2021>

² Zhao S, Wang S, Pan P, et al. Magnitude, Risk Factors, and Factors Associated With Adenoma Miss Rate of Tandem Colonoscopy: A Systematic Review and Meta-analysis. *Gastroenterology* 2019;156:1661-1674.e11

³ Robertson, D.J.; Lieberman, D.A.; Winawer, S.J.; Ahnen, D.J.; Baron, J.A.; Schatzkin, A.; Cross, A.J.; Zauber, A.G.; Church, T.R.; Lance, P.; et al. Colorectal Cancers Soon after Colonoscopy: A Pooled Multicohort Analysis. *Gut* 2014, 63, 949–956.

⁴ National Cancer Institute. Cancer stat facts: colon and rectum cancer. National Cancer Institute Website. <http://seer.cancer.gov/statfacts/html/colorect.html>. Accessed Feb. 7, 2017.

About Cosmo

Cosmo is a pharmaceutical company focused on developing and commercialising products to treat selected gastrointestinal disorders, to improve endoscopy quality measures through aiding the detection of colonic lesions and to treat selected dermatological conditions. Cosmo develops and manufactures products which are distributed globally including Lialda®, Uceris®/Cortiment® and Winlevi®. Cosmo has also developed medical devices for endoscopy and has a partnership with Medtronic for the global distribution of GI Genius™ which uses artificial intelligence to help detect potential signs of colon cancer. Cosmo has licensed Aemcolo® to Red Hill Biopharma Ltd. for the US and has licensed Relafalk® to Dr. Falk GmbH for the EU and other countries. For additional information on Cosmo and its products please visit the Company's website: www.cosmopharma.com

Disclaimer

Some of the information contained in this press release contains forward-looking statements. Readers are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those in the forward-looking statements as a result of various factors. Cosmo undertakes no obligation to publicly update or revise any forward-looking statements.

Contact

Hazel Winchester
Head of Investor Relations
Cosmo Pharmaceuticals N.V.
Tel: +353 1 817 03 70
hwinchester@cosmopharma.com