

# **COLOGUARD®: WHAT THE TALKING BOX IS NOT TELLING US INSIGHTS INTO A POSITIVE COLOGUARD® RESULT**

*Robert Harlan*

## **Introduction**

The multitarget stool DNA (MTsDNA) test is an accepted modality for colorectal cancer (CRC) screening in average-risk individuals. However, published data on the effectiveness of MTsDNA in community practice are limited.

## **Methods**

We conducted a cross-sectional study using data from a large community gastroenterology practice for a 5 year period between June 2016 and May 2021. We compared findings on colonoscopy for patients referred for evaluation of a positive MTsDNA to a control group of average-risk individuals who underwent primary screening colonoscopy during the same time period without antecedent MTsDNA testing. We used an independent sample t-test and chi-squared test for the comparison of groups.

## **Results**

During the study period, we identified 703 MTsDNA positive patients and 24,774 average risk controls. The MTsDNA positive patients were older and more likely to be female and caucasian (Table 1). Twenty-five percent (176) of patients evaluated for positive MTsDNA tests were at a greater than average risk for colon cancer based on family history and personal history of polyps. The median withdrawal time for the MTsDNA positive group was 3 minutes longer than the screening colonoscopies (13 vs 10 min, p

## **Conclusions**

The positive predictive value for CRC in patients with a positive MTsDNA test in this large community practice sample was 2%. Thus, the finding of CRC is uncommon in patients who undergo colonoscopy for a positive MTsDNA test, though it is marginally higher than the prevalence of CRC in those undergoing primary colonoscopy for average-risk screening. Findings of any type of precancerous lesions were more common in MTsDNA positive patients. Although the MTsDNA test is intended for use in patients of average risk for CRC, 25% of patients in the MTsDNA positive group were not of average risk for CRC based on indications of family history of CRC or personal history of polyps or cancer, which indicates inappropriate use of this test and suggests a need for better education for ordering physicians. Data from this study could also help alleviate anxiety in patients once a positive result is found.