In the three years since the last colorectal cancer (CRC) symposium appeared in this journal (1), we have witnessed, for the first time, evidence for a decline in the incidence of this disease. The “challenging questions” posed in the previous series have continued to be addressed and the evolving answers have had an impact on both the clinical and cost effective approach to diagnosis and therapy.

Though CRC remains a problem of large magnitude with 550,000 incident new cases worldwide (2), the American Cancer Society has released statistics for 2007 that estimated “New Cancer Cases in the US for Colorectal Cancer” to show a modest but definite decline to 153,760 and the estimated “Cancer Deaths in the U.S. for Colorectal Cancer” also declining to 52,180 (3). This is the second consecutive year there was a drop in the number of cancer deaths, including colorectal cancer, in the United States and the drop this year was the steepest ever recorded. These statistics are even more impressive when one takes into account the rise in population figures and the graying of the population. The most accepted reason for the decline in colon cancer’s mortality is colon cancer screening. Though advances in our understanding of the multifactorial approach to prevention continue to occur, it is screening for CRC precursors with removal of precancerous as well as early cancerous lesions that continues to be the immediate best hope to effect continued reduction in these figures.

A large base of knowledge has been obtained concerning the multiple approaches that are available to effect screening. Randomized trials of fecal occult blood screening (FOBT) have indicated mortality reduction (4–6). The continued analysis of data from the National Colon Polyp Study (7) have clarified the recommendations for screening the average risk population as well as patients with first degree relatives with polyps or cancer. There is a vast clinical experience with patients who have undergone screening with FOBT, flexible sigmoidoscopy barium enema, and colonoscopy alone or in various combinations. As data continues to accumulate on outcome and costs, the Guidelines for Post Polypectomy Surveillance have been revised (8). The use of colonoscopy is the preferred approach for screening and feasibility trials have shown good results (9,10). Firm data-supporting efficacy compared to other approaches however has not been obtained. (11). Since the health care system took on support for screening, the concerns for manpower and technical facilities to provide quality performance are apparent with significant delays in appointment times for screening examinations encountered throughout the system (12).

Despite the improvement in reimbursement issues, there are still many reasons that screening rates are not optimum. These include sub optimal public awareness about the available approaches; a concern about morbidity, mortality, and discomfort from the more invasive procedures, still limits the public’s acceptance to undergo screening.

This series will update the status of the diagnosis and prevention of colorectal cancer. The beneficial trends in the mortality statistics associated with continued emphasis on screening are reviewed along with the pharmacological advancements for primary prevention.

Governmental agencies and third party carriers have for the most part effected reimbursement for colorectal cancer detection in patients with average or increased risk. A thorough understanding of the concepts, alternatives and guidelines in this symposium are essential for the practicing physician in order to translate the advances available for diagnosis and prevention into continued reductions in mortality in a cost effective approach to diagnosis and therapy.
manner. Colonoscopy is reimbursed for early detection, but what is its role in conjunction with FOBT? Is FOBT reliable for practicing physicians offices and if so which tests? These and many other practical concepts are again addressed by this symposium in this and the ensuing issues of this journal.

The stage is traditionally and again set for the symposium with a landmark overview as Dr. John H. Bond of the Minneapolis VA Medical Center and the University of Minnesota addresses the question: “Screening for Colorectal Cancer: Which Tests for Which Patients in 2007?” The natural history, and choices of approach, including newer, emerging modalities of screening are presented on the background of agreed guidelines.

From Lyon, France, Dr. Rene Lambert of the International Agency for Research on Cancer addresses the statistical basis for the legitimacy of screening for colorectal cancer. He looks at the problem from an international prospective on a multidiscipline approach covering all of the commonly used modalities.

The next article in the series provides an update on the use of stool testing for screening for CRC. The time-honored office based FOBT is compared to the Immunochemical FOBTs for clinical and practical use by Dr. James E. Allison, of the University of California San Francisco. Dr. Allison’s extensive experience with the use of these techniques gives hope in certain circumstances for improved results with this lower cost and less invasive approach as an adjunct to flexible endoscopic procedures.

Dr. Graeme P. Young from the Flinders Medical Centre in Adelaide, Australia again contributes to this series with a timely discussion of the how to approach the patient who has previously undergone polypectomy. His review of the misconceptions concerning intervals, on the background of which patients and which modalities, sets the stage for the timely update by Dr. Sidney Winawer from the Memorial Sloan Kettering Cancer Center in New York of the “New Post Polypectomy Surveillance Guidelines.”

As our knowledge and understanding of the genetics of CRC continues to increase at a rapid rate, so have advancements for potential specific non-invasive approaches to screening though the use of genetic based concepts. Kory Jasperson, Wendy Kohlman and Dr. Randall Burt from the Huntsmann Cancer Institute at the University of Utah address which patients, as well as the referral process and management for patients with a genetic risk.

The symposium concludes with an in depth and timely discussion of the important issues of chemoprevention for CRC. This avenue of approach continues to capture the imagination and research direction of many investigators in this field. Drs. Elizabeth Half and Nadir Arber from the Tel Aviv Medical Center in Tel Aviv, Israel update and supplement the excellent review provided by Dr. Paul Rozen in the last series (13). This review of the available chemo preventive agents gives hope for future progress in prevention.

Once again we have come full circle. I want to express my appreciation to each of the experts who have contributed to this symposium, the sixth that this journal has committed itself to. It is obvious that major strides in our understanding of this disease are reaping benefit in early detection as well as prevention of colorectal cancer.

References