Colon Cancer
Colon Adenocarcinoma

What is Colon Adenocarcinoma?
Colon Adenocarcinoma is the most common type of gastrointestinal cancer, with about 150,000 cases each year in the United States. This type of cancer begins in the cells of glandular structures in the inner layer of the colon and spreads first into the wall of the colon and potentially into the lymphatic system and other organs. Colon Adenocarcinoma can be treated, with 50 percent of patients surviving for at least five years. Early-stage colon cancers have survival rates of 70 to 90 percent.

Who is most likely to have Colon Adenocarcinoma?
Colon cancer stems from colon polyps that turn cancerous, and individuals who develop polyps are at the highest risk of colon cancer. For this reason, individuals with a family history of adenomatous polyposis or Gardner's syndrome — both marked by the growth of multiple colon and rectal polyps — are at high risk. Individuals age 50 or older who are not screened regularly for polyps are at higher risk, as well, since polyps grow in 30 percent of individuals past the age of 50. Colon cancer also is associated with a diet high in fat and beef and low in fiber. Other risk factors include a personal history of previous cancer or inflammatory bowel disease.

What characterizes Colon Adenocarcinoma?
Colon Adenocarcinoma progresses slowly and may not present symptoms for up to five years. As the cancer grows, symptoms become more likely and can include rectal bleeding, fatigue, shortness of breath, angina, changes in bowel habits, abdominal discomfort, anemia or bowel obstruction.

What tests can help identify Colon Adenocarcinoma?
Because most colon adenocarcinomas do not present symptoms, most are found through regular physical examinations. About 5 to 10 percent of colon cancers are initially discovered during a digital rectal exam (DRE), in which a primary care physician inserts a lubricated, gloved finger into the patient's rectum. A blood test also can show the possibility of colon cancer, as can various tests that examine the colon. These tests include colonoscopy, flexible sigmoidoscopy, or double-contrast barium enema.

How does a pathologist diagnose Colon Adenocarcinoma?
Once the possibility of colon cancer is found, each polyp is removed through colonoscopy or flexible sigmoidoscopy. In some cases, when the tumor is advanced, the polyps may be removed as part of surgery. In any case, it is the pathologist who closely examines the polyp's cells—called a biopsy sample—under a laboratory microscope to determine the specific diagnosis.

What else does the pathologist look for?
The pathologist notes the size of the tumor, how close the cancer is to the edge of the removed tissue, and whether or not the tumor invaded blood or lymphatic vessels. These factors determine the likelihood of the cancer remaining in or returning to the affected area. In some situations, a primary care physician or specialist may order imaging tests including a chest x-ray or CT scan to see if the tumor has spread to the lungs, lymph nodes, liver, or ovaries. With all necessary tests completed, the pathologist determines the cancer's stage. Stage 1 Colon Adenocarcinomas are small and confined to the colon, and stage 4 tumors have spread beyond areas near the colon. Stages between 2 and 3 describe conditions in between these two extremes.

For more information, go to: www.cancer.gov (National Cancer Institute) or www.oncologychannel.com.