The availability of more treatment options for gastrointestinal cancer requires precise and reliable pretherapeutic staging. Despite impressive technical progress in modern imaging procedures, this high level of staging quality is not yet warranted in all instances. Visual exploration of the abdominal cavity in extended diagnostic laparoscopy (EDL), including surgical dissection of areas which are primarily inaccessible, biopsy retrieval, and laparoscopic ultrasound, is superior in the diagnostic workup of early peritoneal carcinomatosis and (small) liver metastases. It is helpful to evaluate lymph node infliction and local resectability. In esophageal carcinoma, pretherapeutic EDL is invaluable in case of advanced adenocarcinoma of the distal esophagus (AEG I according to Siewert), whereas the incidence of abdominal tumor manifestations in squamous cell carcinoma is too low to perform staging laparoscopy. In advanced gastric cancer, EDL yields relevant additional information in up to 20% of cases. If a multimodal therapeutic strategy is considered, EDL should be obligatory at least in prospective therapeutic studies. In carcinoma of the pancreas, EDL is in general not recommended by the majority of centers. Selective use (in particular in advanced cancer with a high probability of local irresectability) is gaining importance. In hepatobiliary malignancy including colorectal metastases, the high yield of additional information by EDL was confirmed in recent studies.