

**GASTROINTESTINAL CANCER  
TREATMENT FOR ANAL  
CANCER CONFIRMED**

The combined results of several clinical trials have shown that concurrent chemoradiation is the first-line therapy of choice in patients with anal carcinoma. This therapy is efficacious and allows sphincter preservation in many patients, which considerably impacts their quality of life. It also has the advantage of allowing salvage surgery in patients who need it. Now, RTOG 98-11—a study with long-term follow up—has confirmed that the chemotherapy regimen used in this combination should be 5-fluorouracil and mitomycin-C.

This phase III, randomized, trial assessed concurrent chemoradiation in 682 patients with anal carcinoma, of whom 649 were analysed for outcomes. The patients were randomly assigned to receive radiation and 5-fluorouracil in combination with either mitomycin-C or cisplatin. The long-term follow up was reported by Leonard Gunderson, who explains the rationale for the trial: “promising results of early-phase trials prompted the investigation of whether irradiation with 5-fluorouracil and cisplatin would provide better cancer control, lessen the incidence of colostomy and have lower toxicity for patients with anal cancer when compared with the standard of radiotherapy plus concurrent 5-fluorouracil and mitomycin-C.”

The most-important finding of this study was that the patients who received the mitomycin-C combination had a significantly better 5-year overall survival rate than those receiving the cisplatin regimen; 78.3% versus 70.7%. Gunderson suggests, “with regard to whether 5-fluorouracil and cisplatin is appropriate as concurrent chemotherapy during irradiation, the results of RTOG 98-11 suggest that concurrent 5-fluorouracil and cisplatin should be considered primarily when mitomycin-C is contraindicated.”

So, with the standard of care confirmed in this trial, the path forward will likely include novel therapies and combinations. As Gunderson outlines: “new treatment strategies, treatment intensification, treatment modification based on PET–CT response, and individualized molecular-based treatment with targeted agents may play a role in future investigations.”

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**Original article** Gunderson, L. L. *et al.* Long-term update of US GI Intergroup RTOG 98-11 phase III trial for anal carcinoma: survival, relapse, and colostomy failure with concurrent chemoradiation involving fluorouracil/mitomycin versus fluorouracil/cisplatin. *J. Clin. Oncol.* doi:10.1200/JCO.2012.43.8085