

## **Adjuvant Chemoradiation for Localized Rectal Cancer: Current Trends and Future Directions**

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Preoperative chemoradiation now represents the standard adjuvant care for patients with clinical stage II or III rectal cancer. The 5-year results of the German CAO/ARO/AIO 94 trial of preoperative vs postoperative chemoradiation, using modern chemoradiation and total mesorectal surgical technique, clearly demonstrate marked improvements in treatment compliance, grade 3-4 toxicity, tumor downstaging, rates of sphincter-preservation for patients with low-lying tumors, and rates of pelvic recurrence in favor of preoperative therapy.<sup>1</sup> Moreover, recent randomized trials emphasize the importance of concurrent systemic therapy with the preoperative radiation strategy, as the addition of chemotherapy is associated with significant improvements in tumor downstaging, pathologic response, and local control over radiation alone.<sup>2-7</sup> Ongoing randomized phase II and III investigations incorporating novel systemic (capecitabine and oxaliplatin) and biologic agents (bevacizumab and cetuximab) may refine our current preoperative chemoradiation and adjuvant therapy strategies. Such intensified treatment approaches will likely lead to future trials of risk-adapted management utilizing clinical, pathologic and proteomic factors, as well as to the further use of highly conformal radiation delivery techniques, such as intensity modulated radiation therapy.

### **References**

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