

during S-1 treatment. 81% (n=17) of patients who switched to S-1 because of HFS experienced a lower grade or complete resolution of HFS. At the time of the analysis, 40 (78%) patients completed the planned adjuvant treatment. Seven (13%) patients discontinued S-1 due to toxicity. Other reasons for early discontinuation were disease recurrence (n=2, 4%) and patient preference (n=2, 4%), while 3 (6%) patients were still on treatment.

**Conclusions:** S-1 is a safe and useful alternative for patients with colon cancer experiencing capecitabine-induced HFS or CVT in the adjuvant setting and allows continuation of potentially curative treatment.

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### 114P Radiologist concordance and pathology correlation in non metastatic colon cancer (NMCC) staging

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**Background:** Preoperative staging is critical to select NMCC for neoadjuvant strategies. The reliability of CT-based staging is uncertain, with no data available on inter-radiologist agreement.

**Methods:** Data from patients with proficient MMR NMCC >pT1 undergoing surgery at three Italian centers were collected via the ALFAOMEGA Master Observational Trial (NCT04120935) and stratified by pathological (p) T and N stage. Preoperative CT scans (within 6 weeks before surgery) were independently reviewed by four radiology teams blinded to pathology. Radiological (r) T staging followed FOxTROT and OPTICAL protocols (Morton, J Clin Oncol 2023, Hu, J Clin Oncol 2024), categorized as T1–2, T3, or T4. N stage was classified as N- or N+ (Elsholtz, Eur Radiol 2021). Interobserver agreement was measured with pairwise and overall weighted Cohen's kappa ( $\kappa_w$ ). A Bayesian analysis was performed to estimate the probability of  $\kappa_w \geq 0.70$ .

**Results:** Of 115 patients, 109 (95%) were included in the analysis; 6 were excluded due to technical issues (n=3) or non-visible primary tumor (n=3). Pathology showed 32% pT2, 34% pT3, and 34% pT4; 46% pN0/1c and 54% pN1a–b/N2. Interobserver  $\kappa_w$  for rT and rN staging was 0.56 (95%CI, 0.43–0.68) and 0.51 (95%CI, 0.36–0.66), respectively. Splitting rT3 by extramural invasion depth (EMI  $\geq$ / $<$ 5 mm) improved rT agreement ( $\kappa_w$  0.61, 95%CI, 0.48–0.75). Mean sensitivity and specificity for pT2, T3, and T4 were 0.78/0.72, 0.51/0.65, and 0.33/0.92, respectively. Mean rT classification accuracy was 0.74 (pT2), 0.60 (pT3), and 0.73 (pT4). Full concordance and correct diagnosis were achieved in 54% of pT2, 27% of pT3, and 24% of pT4 cases. Concordance between r and p staging was 0.56 for pT and 0.51 for pN. Bayesian analysis showed a <0.1% probability of achieving  $\kappa_w \geq 0.70$ .

**Conclusions:** CT-based staging in NMCC shows moderate interobserver agreement and correlation to p staging. Regarding high-risk patients, limited sensitivity in identifying pT4 tumors and poor agreement between r and p N status have been reported. These findings underscore the need for advanced imaging tools to improve preoperative staging reliability.

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### 115P Changes in surgical and oncological characteristics of early-onset and late-onset colorectal cancers over five-year periods: A single-center 10-year experience

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**Background:** Colorectal cancer ranks as the second leading cause of cancer-related mortality worldwide. Although current screening protocols typically commence at the age of 45, there is a growing incidence of colorectal cancer among younger populations.

**Methods:** In our study, data from colon cancer patients with age <50 who underwent surgery between 2014–2023 were analyzed. Patients were categorized into two groups based on the time of surgery: 2014–2018 and 2019–2023. Additionally, they were classified as having early-onset colorectal cancer (EOCRC) or late-onset colorectal cancer (LOCRC) for comparative analysis.

**Results:** A total of 1557 patients were included in the study. Among them, 277 patients (17.8%) were EOCRC, and 718 patients (46.1%) underwent surgery before 2019. A statistically significant increase in the proportion of EOCRC was observed between the two time periods (12.4% vs. 22.4%,  $p < 0.001$ ). There was a notable rise in the use of minimally invasive surgery (MIS) and laparoscopic techniques over time ( $p < 0.01$ ), accompanied by a significant decline in rates of grade 3 excision, lymphatic invasion ( $p = 0.01$ ), venous invasion ( $p < 0.01$ ), and perineural invasion ( $p < 0.01$ ). While the incidence of metastatic disease decreased among EOCRC patients ( $p = 0.04$ ), it increased significantly in those with LOCRC ( $p = 0.01$ ). Although tumor histologic grade did not differ significantly between time periods overall, EOCRC cases—particularly in the 2014–2018 subgroup—were more frequently associated with high-grade tumors. In DFS analysis, the LOCRC group demonstrated a statistically significant advantage (HR=0.67,  $p < 0.01$ ). However, no significant difference in overall survival was observed between the groups ( $p = 0.96$ ).

**Conclusions:** The incidence of EOCRC had increased, accompanied by an increasing proportion of patients being diagnosed at non-metastatic stages. Although the use of MIS approaches has become more prevalent over time, the relative contribution of robotic surgery has decreased. Despite EOCRC being associated with more adverse histopathological prognostic features in both time periods, this has led to shorter DFS; however, there was no statistically significance in OS.

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### 116P Improving colorectal cancer detection with AI-assisted colonoscopy: A systematic review and meta-analysis of 38 RCTs with GRADE assessment

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**Background:** Colorectal cancer is the second leading cause of cancer-related deaths, and early detection of precancerous lesions is key to prevention. This meta-analysis evaluates the effectiveness of AI-assisted colonoscopy compared to traditional