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14th

ABSTRACT BOOK

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SCIENTIFIC SECRETARIAT

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Dear Colleagues,

This year we are organizing the **14th International Gastrointestinal Cancers Conference (IGICC2024)** between **28 November – 1 December 2024** in CVK Park Bosphorus Hotel, İstanbul Turkey.

Considering the success of the first thirteen conferences 14th IGICC will be again an indispensable opportunity for education and update of the treatment of gastrointestinal cancers, providing a clear overview for treatment, with the focus on individualized, multidisciplinary approach with the participation of broad range of experts. Besides educational sessions high quality abstracts are welcomed for presentation in oral and poster sessions.

Our conference will include all gastrointestinal, hepatobiliary, pancreatic malignancies as well as NETs, GISTs and gastrointestinal lymphomas and issues related to the care of patients with gastrointestinal cancer. The delegates will gain a greater understanding of current clinical practices in gastrointestinal malignancies with lectures by high profile international speakers, with presentations of cutting-edge research and clinical practice, clinical case discussions, seminars and with a wide range of submitted papers. IGICC will create opportunities for participants to present and share experiences, explore new directions and debate topics with international experts.

I cordially invite you to participate in this meeting by attending and submitting your scientific work as an abstract to be considered for presentation in **IGICC 2024**.

We are looking forward to meeting you for **İstanbul IGICC 2024**.

Prof. Dr. Şuayib Yalçın
Conference Presedent

ORAL PRESENTATIONS

[OP-001]

AGE-RELATED DISPARITIES IN NON-METASTATIC COLORECTAL CANCER: IMPACT OF EARLY CHEMOTHERAPY DISCONTINUATION ON SURVIVAL OUTCOMES

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Introduction: Patients aged >=70 comprise about half of new colorectal cancer (CRC) diagnoses, facing higher treatment risks from frailty and comorbidities [1,2,3]. This study compares clinicopathological characteristics, treatments, and survival outcomes between elderly (>=70) and younger (<70) non-metastatic CRC patients at our center.

Materials-Methods: We included non-metastatic CRC patients followed at Ankara University Faculty of Medicine, dividing them into two groups: >=70 year-old and <70 year-old. Clinicopathological characteristics and treatment features were collected and analyzed retrospectively, for overall survival (OS) using univariate and multivariate analyses.

Results: The study included 414 patients with a median age of 64 years (56.8% male). The <70-year-old group had 304 and the >=70-year-old group had 110 patients. The elderly group had higher rates of hypertension, coronary artery disease(CAD), and smoking (P<0.001), and lower ECOG PS of 0-1 (P<0.001), BMI (P=0.042), plasma albumin (P<0.001), and hemoglobin levels (P=0.017). All patients underwent R0 resection. Tumor characteristics were similar between groups(Table 1).

The cohort included 311 colon and 103 rectal cancer patients. A higher proportion of elderly patients did not receive perioperative chemotherapy(P<0.001). XELOX was the most common regimen for both groups, while FOLFOX was more frequent in younger and monotherapy was more common in the elderly. Chemotherapy duration was similar, but dose reductions were more frequent in the elderly (41.6% vs. 19.2%, P<0.001), often starting from the first dose (P<0.001). Neutropenia and diarrhea were the main adverse events. Early termination of chemotherapy due to intolerance was more common in elderly. Fewer elderly received neoadjuvant radiotherapy for rectal cancer (62.1% vs. 89.2%, P=0.001), with short-course radiotherapy preferred for this group (Table 2).

5-year OS rates were 83% in the non-elderly and 64.7% in the elderly group, with similar recurrence rates (20.9% vs. 16.1%, P=0.304). OS was significantly shorter in the elderly (P=0.004) (Figure 1).

In univariate analysis, shorter OS was linked to female gender (P=0.046), ECOG PS >=2 (P<0.001), hypertension (P=0.006), CAD (P<0.001), rectal cancer (P<0.001), and high-grade tumors (P=0.033). Chemotherapy dose reduction did not adversely affect OS (P=0.599), but early termination did (P<0.001). Multivariate analysis showed age was not an independent risk factor for OS (HR:2.169, 95%CI:0.944-4.985, P=0.068), while rectal cancer (HR:2.751, 95%CI:1.361-5.561, P=0.005) and early termination of adjuvant chemotherapy (HR:4.138, 95%CI:1.971-8.690, P<0.001) were independent risk factors for worse OS (Table 3).

Discussion: This study finds that age does not independently affect survival in non-metastatic CRC patients, but early discontinuation of adjuvant chemotherapy does. Reducing dose or using monotherapy may help elderly patients complete treatment

Keywords: colorectal cancer, elderly, chemotherapy

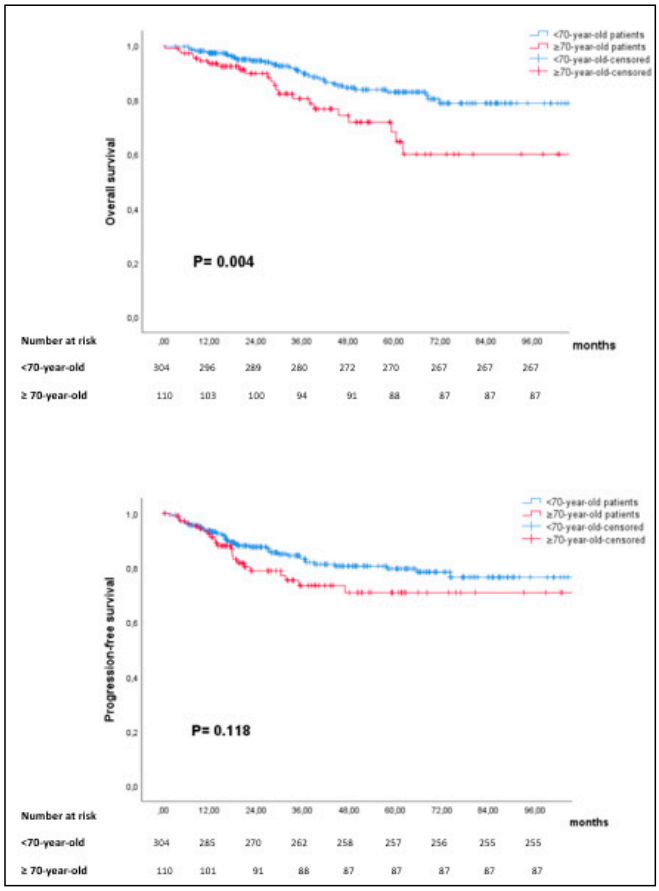

Figure 1. Kaplan-Meier analysis showing a) overall survival (OS) and b) progression-free survival (PFS) of patients

Table 1. Clinicopathological Characteristics of Patients

	All patients, n=414	*<70-year-old, n=304*	*>=70-year-old, n=110*	*P value*
Age at diagnosis, years, median (min-max)	64 (17-90)	60 (17-69)	74 (70-90)	<0.001
Gender, n (%) Male Female	 235 (56.8) 179 (43.2)	 167 (54.9) 137 (45.1)	 68 (61.8) 42 (38.2)	 0.212
Comorbidities, n (%) Diabetes Hypertension CAD	 97 (23.4) 166 (40.1) 82 (19.8)	 71 (23.4) 93 (30.6) 40 (13.2)	 26 (23.6) 73 (66.4) 42 (38.2)	 0.952 <0.001 <0.001
BMI, median, kg/m2	26.3 (14.6-46.5)	26.5 (14.6-46.5)	25.3 (17.7-39.3)	0.042
ECOG performance status 0-1 >=2	 374 (90.3) 40 (9.7)	 291 (95.7) 13 (4.3)	 83 (75.5) 27 (24.5)	 <0.001
Smoking history, n (%) Never Ex-smoker Current smoker	 165 (45.2) 152 (41.6) 48 (13.2)	 151 (50.3) 105 (35) 44 (14.7)	 14 (21.5) 47 (72.3) 4 (6.2)	 <0.001
Tumor location, n (%) Right sided Left sided Rectum	 124 (30) 187 (45.2) 103 (24.9)	 85 (28) 145 (47.7) 74 (24.3)	 39 (35.5) 42 (38.2) 29 (26.4)	 0.195
Urgent surgery, n (%)	28 (6.8)	21 (6.9)	7 (6.4)	0.846
Stage, n (%) Stage I Stage II Stage III	 20 (4.8) 186 (44.9) 208 (50.2)	 15 (4.9) 138 (45.4) 151 (49.7)	 5 (4.5) 48 (43.6) 57 (51.8)	 0.694
Grade, n (%) Low-grade High-grade	 345 (90.6) 36 (9.4)	 248 (89.2) 30 (10.8)	 97 (94.2) 6 (5.8)	 0.142
Mucinous tumor, n (%)	78 (18.8)	58 (19.1)	20 (18.2)	0.837
MSI status, n (%) MSS MSI-H	 316 (89.3) 38 (10.7)	 248 (89.9) 28 (10.1)	 68 (87.2) 10 (12.8)	 0.501
Plasma CEA level, ng/mL	2.6 (0.3-413.7)	2.4 (0.3-413.7)	3.0 (0.5-48.4)	0.541
Plasma CA 19-9 level, U/mL	11.4 (0.8-1135)	10.3 (0.8-700)	15 (0.8-1135)	0.259
Serum albumin, n (%) <=4 g/dL >4 g/dL	 169 (41.2) 241 (58.8)	 108 (36) 192 (64)	 61 (55.5) 49 (44.5)	 <0.001
Plasma hemoglobin level, g/dL	12.5 (3.7-17.9)	12.6 (5.8-17.9)	11.7 (3.7-16.7)	0.017

Table 2. Univariate and Multivariate Analysis of Factors Affecting Overall Survival

	All patients, n=414	*<70-year-old, n=304*	*>=70-year-old, n=110*	*P value*
Perioperative chemotherapy, n (%) Not recieved FOLFOX XELOX Fluoropyrimidine-based monotherapy	 100 (24.2) 98 (23.7) 139 (33.6) 77 (18.6)	 56 (18.4) 91 (29.9) 108 (35.5) 49 (16.1)	 44 (40) 7 (6.4) 31 (28.2) 28 (25.5)	 <0.001
Duration of chemotherapy, weeks, median (min-max)	24 (6-24)	24 (6-24)	24 (6-24)	0.095
Chemotherapy dose reduction, n (%)	73 (23.3)	48 (19.2)	25 (41.6)	<0.001
Reason for dose reduction, n (%) Reduced from first dose* Diarrhea Neuropathy Neutropenia Other (s)	 26 (35.6) 10 (13.7) 6 (8.2) 23 (31.5) 8 (11)	 8 (17) 7 (14.9) 6 (12.8) 19 (40.4) 7 (14.9)	 18 (69.2) 3 (11.5) 0 (0) 4 (15.4) 1 (3.8)	 <0.001
Early termination of chemotherapy, n (%)	42 (13.2)	30 (11.9)	12 (18.5)	0.161
Reason for early termination of chemotherapy Treatment intolerance Patient refusal Recurrence of disease Infectious complications	 29 (69) 4 (9.5) 7 (16.7) 2 (4.8)	 20 (66.7) 4 (13.3) 4 (13.3) 2 (6.7)	 9 (75) 0 (0) 3 (25) 0 (0)	 0.364
Neoadjuvant RT**, n (%) Not recieved Short-course radiotherapy Long-course radiotherapy	 19 (18.4) 17 (16.5) 67 (65)	 8 (10.8) 11 (14.9) 55 (74.3)	 11 (37.9) 6 (20.7) 12 (41.4)	 0.001

Treatment Characteristics of Patients

Table 3

Variable	*Univariate analysis*	*Multivariate analysis*		
	P value	*Hazard ratio*	*95% CI*	*P value*
Age <70-year-old >=70-year-old	0.004	1 2.169	0.944-4.985	0.068
Gender Male Female	0.046	1.005 1	0.478-2.115	0.989
ECOG performance status 0-1 >=2	<0.001	1 1.608	0.571-4.527	0.369
Comorbidities Diabetes (no vs. yes) Hypertension (no vs. yes) CAD (no vs. yes)	0.767 0.006 <0.001	1.077 1.898	0.442-2.621 0.733-4.912	0.870 0.187
Tumor location Colon cancer Rectal cancer	<0.001	1 2.751	1.361-5.561	0.005
Urgent surgery (no vs. yes)	0.738			
Stage Stage I-II Stage III	0.392			
Tumor grade Low grade High grade	0.033	1 2.014	0.765-5.304	0.156
Lymphovascular invasion (no vs. yes)	0.791			
Perineural invasion (no vs. yes)	0.096			
Microsatellite instability MSS MSI-H	0.945			
Mucinous tumor (no vs. yes)	0.411			
Perioperative chemotherapy (no vs. yes)	0.078			
Dose reduction of chemotherapy (no vs. yes)	0.599			
Early termination of chemotherapy (no vs. yes)	<0.001	4.138	1.971-8.690	<0.001
Serum albumin <=4 g/dL >4 g/dL	0.066			

[OP-002]

PERIOPERATIVE NIVOLUMAB COMBINED WITH NEOADJUVANT CHEMOTHERAPY IN LOCALLY ADVANCED GASTRIC/GASTROESOPHAGEAL JUNCTION ADENOCARCINOMA: TWO-CENTER EXPERIENCE

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Background: The exact role of ICIs, particularly nivolumab, in the perioperative management of locally advanced gastric/gastroesophageal junction (GEJ) adenocarcinoma remains uncertain.

Materials-Methods: Clinical and pathological data were retrospectively collected for previously untreated, clinical stage T3-4bN0-3M0 (stage II-III) gastric/GEJ adenocarcinoma patients who received perioperative nivolumab, either in combination with chemotherapy or ipilimumab, between January 2021 and August 2024.

Results: A total of 12 eligible patients (10 males/2 females) were included. Five patients (41.7%) were classified as MSI-H/dMMR, and nine patients (75%) had a PD-L1 CPS of >=5. The median numbers of immunotherapy and chemotherapy cycles prior to surgery were 6 (range, 3-8) and 8 (range, 1-8), respectively. Only one patient with MSI-H/dMMR gastric adenocarcinoma received dual immunotherapy with nivolumab and ipilimumab, while other patients received perioperative nivolumab combined with neoadjuvant chemotherapy. Overall response rate (ORR) and disease control rate (DCR) were 66.7% and 100%, respectively. All patients underwent surgical resection, with an R0 resection rate of 91.6%. In pathological examination, the pathological complete response (pCR) and major pathological response (MPR) rates in the entire cohort were 50% and 58.3%, respectively. The pCR rate was 80% in the MSI-H/dMMR subgroup and 28.6% in patients with a PD-L1 CPS of >=5. The median follow-up time was 12.3 months (range, 7.7 – 42.2). During this period, three patiens experienced tumor recurrence and two patients died, while all other patients remained in remission. The 1-year disease-free survival (DFS) and overall survival (OS) were 69.3% and 87.5%, respectively. All patients experienced at least one treatment-related adverse event (TRAE) during neoadjuvant treatment. The most common TRAEs (>10%) were anemia (91.7%), thrombocytopenia (75%), neutropenia (75%), fatigue (75%), alanine aminotransferase increase (66.7%), aspartate aminotransferase increase (66.7%), peripheral neuropathy (50%), nausea or vomiting (25%), fever (16.7%), and diarrhea (16.7%).

Conclusion: In the treatment of locally advanced gastric/GEJ adenocarcinoma, perioperative nivolumab combined with total neoadjuvant chemotherapy appears to be an effective approach for both MSI-H/dMMR patients and MSS/pMMR patients with a PD-L1 CPS of >=5, with an acceptable safety profile.

Keywords: nivolumab, perioperative treatment, gastric cancer

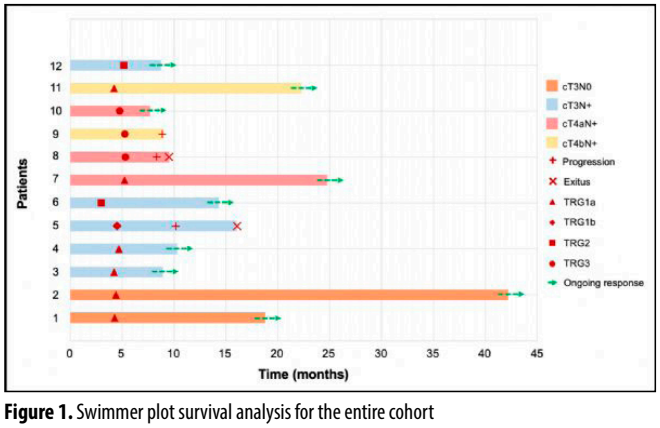

Figure 1. Swimmer plot survival analysis for the entire cohort

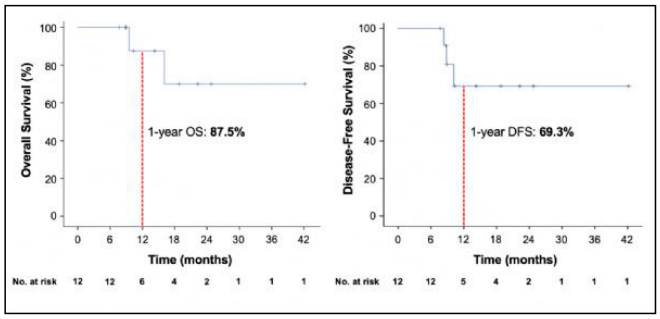

Figure 2. Survival outcomes

response was obtained in the primary pancreatic lesion. Since the patient was liver metastatic at the time of diagnosis, surgical resection was not considered and it was decided to apply radiotherapy with MR-Linac to the primary pancreatic area. The patient, who was consolidated with radiotherapy, is still being followed without disease progression in the radiological control performed nine months after the last chemotherapy cycle.

Conclusion: The combination of cisplatin and doxorubicin could be an effective treatment for patients with metastatic pancreatoblastoma, as well as a promising neoadjuvant approach for patients with locally advanced, unresectable pancreatoblastoma.

Keywords: Pancreatoblastoma, systemic treatment

[OP-003]

EFFICACY OF CISPLATIN PLUS DOXORUBICIN COMBINATION THERAPY IN ADULT PANCREATOBLASTOMA: A REPORT OF TWO CASES

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Background: Adult pancreatoblastoma is an aggressive malignant disease, accounting for <1% of all pancreatic tumors. Given its rarity and the limited data from primarily case reports, there is no concensus on the treatment of advanced pancreatoblastoma. Herein, we report two adult pancreatoblastoma cases in which significant clinical and pathological responses were achieved with cisplatin plus doxorubicin regimen.

Case 1: In a 20-year-old female patient, abdominal ultrasonography performed due to abdominal pain revealed perihepatic, peripancreatic, and periduodenal lymphadenopathies measuring up to 5 cm. The 18F-FDG PET-CT scan reported conglomerate lymphadenopathies measuring up to a total of 130x85x185 mm. The pathological evaluation of biopsy specimens resulted in the diagnosis of pancreatoblastoma. After four cycles of the cisplatin (75 mg/m2 Q3W) plus doxorubicin (60 mg/m2 Q3W) regimen, a near-complete metabolic regression was evident in 18F-FDG PET-CT scan. The final abdominal CT scan, performed after completing six cycles of the cisplatin plus doxorubicin regimen, revealed a primary tumor of 21x14 mm in the pancreatic head and accompanying peripancreatic, periportal, and interaortocaval lymphadenopathies. The patient was underwent surgery with R0 resection, and the pathological assessment demonstrated a near-complete pathological response, with only 5% tumor cells remaining in the primary lesion and complete response in the lymph node metastases. Nine months after the surgery, the patient is still being followed without disease recurrence.

Case 2: A 21-year-old female patient initially presented with right upper quadrant pain. In the abdominal MRI and 18F-FDG PET-CT scan, a pancreatic mass of 44x49 mm was observed in the uncinate process, along with multiple liver metastases. The initial biopsy from the liver metastasis which was performed and reported at a different center indicated adenocarcinoma with neuroendocrine differentiation. After extensive pathological examination, tumor tissue was reported as pancreatoblastoma. The patient was started on cisplatin (75 mg/m2 Q3W) plus doxorubicin (60 mg/m2 Q3W) regimen and the response was detected in the intermittent evaluations. After six cycles of treatment, liver metastatic lesions completely disappeared, and a partial

[OP-004]

REAL-WORLD DATA ON THE EFFICACY AND SAFETY OF RAMUCIRUMAB PLUS PACLITAXEL EITHER ALONE OR IN COMBINATION WITH IMMUNOTHERAPY IN PATIENTS WITH PREVIOUSLY TREATED ADVANCED GASTRIC ADENOCARCINOMA

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Background: The combination of ramucirumab(RAM) and paclitaxel(PTX) is the preferred second-line treatment regimen for patients with metastatic gastric cancer. However, the contribution of adding immunotherapy to this combination is unknown. In this study, we aimed to analyze the real-life data of the combination of RAM and PTX and to investigate the contribution of adding immunotherapy to this combination.

Materials-Methods: From January 2018 to September 2024, clinical and pathological data from 46 patients with advanced gastric cancer treated with RAM plus PTX, with or without immune checkpoint inhibitor(ICI), in second-line or beyond were analyzed retrospectively.

Results: Median age of the entire cohort was 50(range, 24-85) and 46.7% of them were female. A majority of the patients' tumors were characterized by diffuse histology(67.4%). HER2 status was negative in 93.5% of the patients. Mismatch repair deficiency (dMMR) was observed in only one patient(2.2%), while 30.4% of patients had a PD-L1 CPS of >=1%. The percentages of the patients with synchronous and metachronous metastases were 73.9% and 26.1%, respectively. Patients with an ECOG performance score of 0 and 1 accounted for 63.0% and 29.3% of the entire cohort, respectively. The median number of RAM and PTX cycles was 4 (range, 1-12) for both agents. There were no significant differences in response rates and survival outcomes between patients who received RAM plus PTX(n=27) and those who received RAM plus PTX plus nivolumab(n=10) as second-line treatment (ORR 18.5% vs. 30%, p=0.57; DCR 55.6% vs. 80%, p=0.17; median PFS 4.3 vs. 3.1 months, p=0.85; median OS 7.8 vs. 9.6 months, p=0.64). In the third-line treatment(n=9), seven patients received RAM plus PTX, while only two patients received RAM plus PTX plus ICI(One patient received nivolumab, and the other received pembrolizumab). ORR and DCR were 33.3% and 66.7%, respectively. The median PFS was 4.3 months (95% CI 3.4-5.1 months) and the median OS was 7.4 months (95% CI 2.0-12.7 months). Multivariate analysis revealed that age>=50 years (OR 2.1 [95% CI 0.9-4.4], p=0.04) and the presence of ascites (OR 2.5 [95% CI 1.2-5.5],

p=0.01) were associated with poorer overall survival. The most commonly (>10%) experienced grade>=3 treatment-related adverse events (TRAEs) while receiving RAM plus PTX (± ICI) were anemia (39.1%), neutropenia (32.6%), infections (19.6%), thrombocytopenia (13.0%), and alanine aminotransferase and/or aspartate aminotransferase increase (10.9%). Four patients (10.8%) in second-line treatment and two patients (22.2%) in third-line treatment discontinued therapy due to TRAEs.

Conclusion: Although the efficacy of RAM plus PTX as second-line treatment or beyond was comparable to previous studies, the incidence of grade>=3 TRAEs was notably higher than in clinical trials. In the second-line treatment, the addition of nivolumab to RAM plus PTX did not result in significantly improved response rates and survival outcomes.

Keywords: Ramucirumab, paclitaxel, immunotherapy

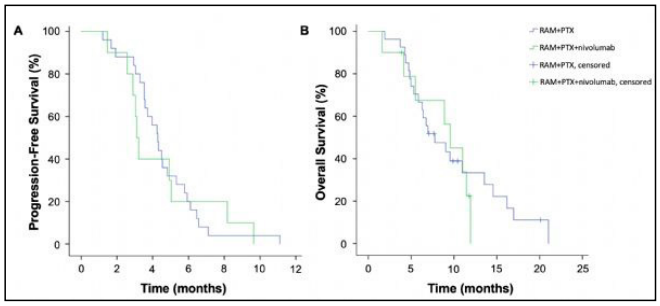

Figure 1. Progression-free survival (A) and overall survival (B) analyses of patients who received RAM plus PTX and those who received RAM plus PTX plus nivolumab as second-line treatment

Table 1. Treatment-related adverse events during ramucirumab plus paclitaxel, with or without immune checkpoint inhibitor

Adverse events	*Any grade, n(%)*	*Grade >=3, n(%)*
Anemia	42 (91.3)	18 (39.1)
Neutropenia	24 (52.2)	15 (32.6)
Thrombocytopenia	24 (52.2)	6 (13.0)
AST/ALT increased	27 (58.7)	5 (10.9)
Infection	12 (26.1)	9 (19.6)
Nausea-diarrea	3 (6.5)	2 (4.3)
Neuropathy	2 (4.3)	0
Thrombosis/bleeding	7 (15.2)	4 (8.7)
Perforation/Fistule	3 (6.5)	2 (4.3)
Others	6 (13.0)	4 (8.7)

[OP-005]

LYMPH NODE RATIO (LNR) DISCRIMINATES PROGNOSTICATION IN PN1A-B AND PN2 STAGE-III COLON CANCER

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Background: Lymph node ratio (LNR), the number of involved nodes/numbers of lymph nodes examined, is associated with survival in colon cancer. However, its prognostic role in N staging is not well known.

Methods: Patients with stage-III colon cancer who underwent surgery and adjuvant chemotherapy were included. N1c tumors (only tumor deposits without regional lymph node involvement) and rectal cancers were excluded. Clinicopathological parameters and LNR in pN1a-b and pN2 groups were univariably and multivariably evaluated for recurrence-free survival (RFS).

Results: A total of 97 patients were included [pN1a-b: n=69 (71.1%) and pN2: n=28 (28.9%)]. Median LNR in the entire study population was 0.09 (0.01-0.84) with a median lymph node examined of 22 (8-89) and involved of 2 (1-17). Mucinous component (p=0.019), lymphovascular invasion (LVI) (p=0.030), perineural invasion (PNI) (0.010), budding (p=0.005), and MSI-H tumors (p=0.025) were more common in pN2 group compared to pN1a-b, no difference was detected in adjuvant chemotherapy types and cycles (p=0.276 and p=0.288) (Table 1). Median RFS was not reached in both pN1a-b and N2 groups during a median follow-up of 20.8 months (1.13-101.03), with a significantly better survival of the pN1a-b group (p=0.004). Among the pN1a-b group, the LNR cut-off was set as 0.10. Median RFS was not reached in LNR <=0.10 and LNR>0.10 groups, however, LNR significantly discriminated RFS (p=0.001) (Figure 1). The clinicopathological factors were not different between LNR <=0.10 and LNR>0.10 groups. Among the pN2 group, the LNR cut-off was set as 0.25. Median RFS was not reached in the LNR <=0.25 group, whereas it was 11.40 months (95% CI: 10.03-12.76) in the LNR>0.25 group, significantly discriminating RFS (p=0.004) (Figure 1). The clinicopathological factors were not different between LNR <=0.25 and LNR>0.25 groups. Kaplan-Meier plots of combined pN-LNR groups revealed significant discrimination in RFS (p=0.000) (Figure 2). Moreover, the pN2-LNR<=0.25 group showed a tendency of better survival compared to the pN1-LNR>0.10 group, and RFS was not statistically different in these two subgroups (p=0.282) (Figure 2). In multivariable Cox-regression analysis including variables that were significant in univariable analysis (mucinous component, RAS mutant status, N stage, and LNR) and variables different between pN1a-b and N2 groups (LVI, PNI, budding, MSI status), only LNR was significantly associated with RFS (p=0.023), whereas the pN stage did not remain significant (p=0.637) (Table 2).

Conclusion: This study suggests that LNR may better discriminate the prognosis in lymph node-positive colon cancer. LNR adds further prognostication in pN1a-b and N2 groups despite similar adjuvant chemotherapy. Moreover, LNR may detect the subgroups of patients with similar prognoses from the pN1a-b and pN2 stages. Studies with larger sample sizes are needed.

Keywords: colon cancer, lymph node ratio, prognosis

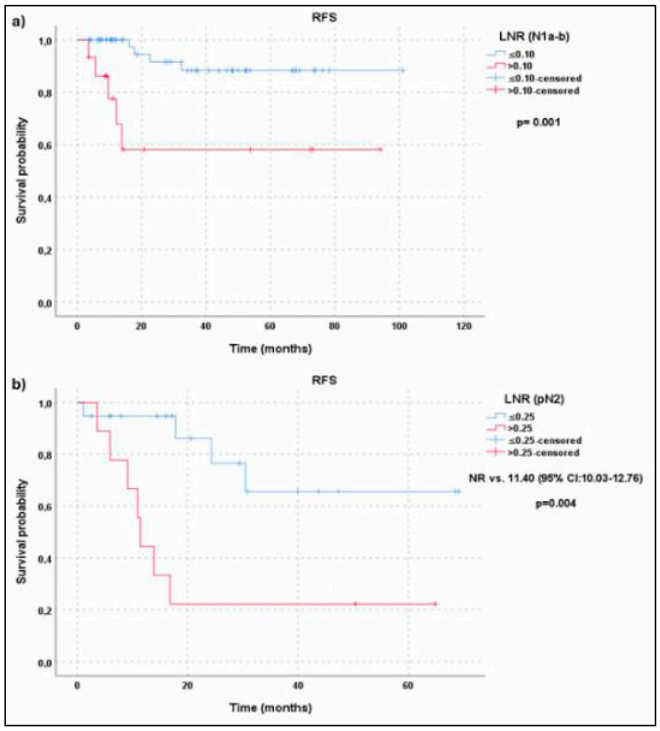

Figure 1. a) Recurrence-free survival (RFS) of pN1a-b group according to the LNR subgroups b) RFS of pN2 group according to the LNR subgroups

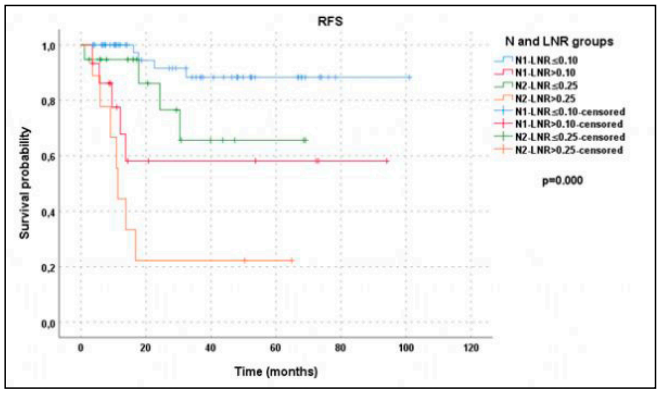

Figure 2. Recurrence-free survival (RFS) of combined pN-LNR groups

Table 1. Characteristics of the study population and N-stage subgroups

	Entire study population (n=97)	*N1a-b (n=69)*	*N2 (n=28)*	*P**
Age, median (min-max)	67 (21-94)	67 (28-94)	66.5 (21-80)	0.574
Gender, n (%) Male Female	 57 (58.8) 40 (41.2)	 40 (58) 29 (42)	 17 (60.7) 11 (39.3)	0.804
Diabetes, n (%)	19 (19.6)	13 (18.8)	6 (21.4)	0.771
Hypertension, n (%)	17 (17.5)	10 (14.5)	7 (25)	0.245
CAD, n (%)	12 (12.4)	8 (11.6)	4 (14.3)	0.740
Primary tumor location, n (%) Right Transverse Left	 40 (41.2) 4 (4.1) 53 (54.6)	 26 (37.7) 3 (4.3) 40 (58)	 14 (50) 1 (3.6) 13 (46.4)	0.536
Urgent surgery, n (%) No Obstruction Perforation	 87 (89.7) 9 (9.3) 1 (1)	 62 (89.9) 6 (8.7) 1 (1.4)	 25 (89.3) 3 (10.7) 0 (0)	0.781
pT stage, n (%) 2 3 4	 3 (3.1) 70 (72.2) 24 (24.7)	 2 (2.9) 51 (73.9) 16 (23.2)	 1 (3.6) 19 (67.9) 8 (28.5)	0.834
Tumor grade, n (%) 1 2 3 UK	 7 (7.2) 68 (70.1) 13 (13.4) 9 (9.3)	 3 (4.3) 53 (76.8) 9 (13) 4 (5.9)	 3 (10.7) 15 (53.5) 5 (17.9) 5 (17.9)	0.292
Lymph nodes examined, median (min-max)	22 (8-89)	21 (8-89)	23.5 (10-57)	0.151
Lymph nodes involved, median (min-max)	2 (1-17)	1 (1-3)	5 (4-17)	0.000
LNR, median (min-max)	0.09 (0.01-0.84)	0.07 (0.01-0.38)	0.21 (0.04-0.84)	0.000
Mucinous component, n (%)	20 (20.6)	10 (14.5)	10 (35.7)	0.019
LVI, n (%)	49 (50.5)	30 (43.5)	19 (67.9)	0.030
PNI, n (%)	33 (34)	18 (26.1)	15 (53.6)	0.010
Budding, n (%)	23 (23.7)	11 (15.9)	12 (42.9)	0.005
MSI-H, n (%)	5 (5.2)	1 (1.4)	4 (14.3)	0.025
RAS, n (%) WT Mutant UK	 28 (28.9) 9 (9.3) 60 (61.9)	 19 (27.6) 5 (7.2) 45 (65.2)	 9 (32.1) 4 (14.3) 15 (53.6)	0.691
RAF, n (%) WT Mutant UK	 36 (37.1) 1 (1) 60 (61.9)	 24 (34.8) 0 (0) 45 (65.2)	 12 (42.9) 1 (3.6) 15 (53.5)	0.351
ABO group, n (%) AB A B 0 UK	 6 (6.2) 49 (50.5) 14 (14.4) 19 (19.6) 9 (9.3)	 5 (7.2) 36 (52.2) 11 (15.9) 12 (17.4) 5 (7.3)	 1 (3.6) 13 (46.4) 3 (10.7) 7 (25) 4 (14.3)	0.689
Rh, n (%) Positive Negative UK	 80 (82.5) 8 (8.2) 9 (9.3)	 60 (87) 4 (5.8) 5 (7.2)	 20 (71.4) 4 (14.3) 4 (14.3)	0.206
Adjuvant chemotherapy, n (%) FOLFOX XELOX Capecitabine	 43 (44.3) 38 (39.2) 16 (16.4)	 30 (43.5) 25 (36.2) 14 (20.3)	 13 (46.4) 13 (46.4) 2 (7.2)	0.276
Adjuvant chemotherapy cycle, median (min-max)	8 (4-12)	10 (4-12)	8 (4-12)	0.288

Abbreviations: CAD: coronary artery disease, LNR: lymph node ratio, LVI:lymphovascular invasion, PNI: perineural invasion, WT: wild type, FOLFOX: Fluorouracil, leucovorin and oxaliplatin, MSI-H: microsatellite instability high, UK:unknown, XELOX: Capesitabine and oxaliplatin

Table 2. Multivariable Cox regression analysis for RFS

Variable	*HR (95% CI)*	*P*
LNR (continuous variable)	90.59 (2.51-326.57)	0.023
pN stage (N2 vs N1a-b)	0.50 (0.03-8.43)	0.637
Mucinous component (Present vs absent)	0.41 (0.02-6.18)	0.524
RAS (Mutant vs WT)	0.14 (0.01-1.17)	0.070
LVI (Present vs absent)	1.27 (0.10-14.79)	0.848
PNI (Present vs absent)	5.07 (0.40-63.47)	0.208
Budding (Present vs absent)	0.58 (0.04-8.62)	0.695
MSI status (High vs low)	NC	0.992

Abbreviations: LNR: lymph node ratio, LVI:lymphovascular invasion, PNI: perineural invasion, WT: wild type, MSI-H: microsatellite instability high, UK:unknown, RFS: recurrence-free survival, NC: Not calculated

[OP-006]

SINGLE CENTER EXPERIENCE WITH MEDULLARY COLON CANCER: CLINICOPATHOLOGICAL CHARACTERISTICS AND ONCOLOGICAL OUTCOMES

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Medullary colon cancer is a rare subtype of colorectal cancer, observed with a frequency of approximately 0.3% among the histopathological subtypes of colon cancer. Medullary carcinoma, which has a better prognosis compared to adenocarcinoma, exhibits microsatellite instability and poorly differentiated features.

In this study, patients diagnosed with medullary carcinoma, a histopathological subtype of colon cancer, who underwent surgery at Acıbadem University Hospitals between 2014 and 2023, were retrospectively analyzed.

A total of 31 patients were identified with medullary carcinoma. Of these, 18 (58.1%) were male, and the median age at diagnosis was 56. Two (6.5%) patients presented with metastatic disease at diagnosis, with one patient having lung metastasis and the other liver metastasis. Immunohistochemical analysis showed mismatch repair protein loss in all patients, with the most frequent loss being MLH-1 and PMS-2, observed together in 22 (71%) patients. A total of 6 (19.4%) patients experienced disease progression, with 3 (50%) progressing with locoregional recurrence and 3 (50%) with distant metastases. All distant metastases manifested as distant lymph node metastasis. Disease-free survival was 46.3 months, while overall survival was 47.6 months.

To our knowledge, this series represents the largest single-center study on medullary carcinoma in Turkey. Although it is known that medullary colon cancer has a better prognosis compared to standard adenocarcinoma, these patients should be screened for syndromes associated with MMR protein loss and closely monitored for lymph node progression during follow-up.

Keywords: medullary carcinoma, colon cancer

[OP-007]

PROGNOSTIC VALUE OF IMMUNE-INFLAMMATORY MARKERS IN LOCALLY ADVANCED GASTRIC ADENOCARCINOMA TREATED WITH PERIOPERATIVE FLOT REGIMEN

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Introduction: Perioperative FLOT chemotherapy regimen has become a standard of care in the gastric cancer treatment. FLOT promises efficacy in downstaging as well as survival benefit. It is not clear whom to benefit more from this regimen. Our study is aimed to elucidate this obscurity.

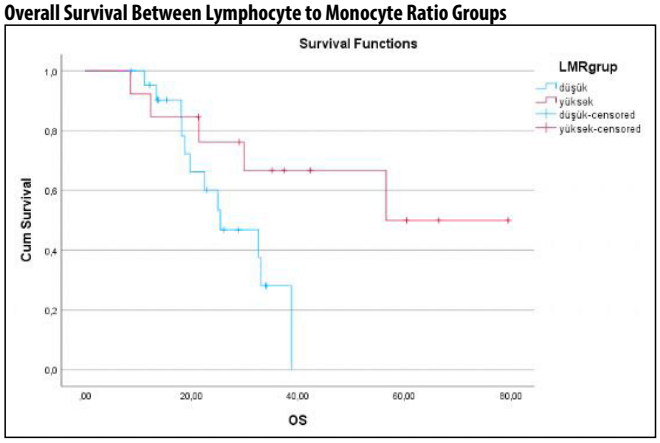
Method: This retrospective study evaluated the patients were diagnosed and treated for locally advanced gastric carcinoma between 2017 and 2024. The study included patients who received neoadjuvant chemotherapy followed by surgery, with clinicopathologic and laboratory data being analyzed. The data analyzed as immune-inflammatory markers obtained from the parameters at the time of diagnosis. Besides pathologic markers were procured from both diagnostic biopsy material or postoperative material.

Results: A total of 35 patients were included, with a mean age at diagnosis of 64.63 ± 8.62 years; of 24 (68.6%) were male. The tumor was most frequently located in the corpus (42.9%). Only 3 (8.6%) patients had HER2 amplification. All patients were treated with FLOT regimen, which includes docetaxel, oxaliplatin, leucovorin, and 5-fluorouracil. The median number of treatment cycles was 4 (min 1 – max 4). Eleven (31.4%) patients experienced toxicity leading to dose reduction and only 3 (8.6%) patients did not complete the full four cycles of FLOT. The median number of lymph nodes dissected was 29.5 (min 9 – max 61) while half of the patients underwent D2 lymph node dissection (more than 30 lymph nodes dissected). After surgery, 27 (77.1%) patients continued with adjuvant FLOT therapy, 3 patients (8.6%) received FOLFOX and 5 patients (14.3%) did not received any adjuvant treatment. Recurrence or progression occurred in 15 (42.9%) patients following adjuvant therapy, with a median time to progression (TTP) of 9.1 months. The median overall (OS) survival for the entire cohort was 33.0 months, while patients with recurrence or progression have significantly shorter OS (21.35 months vs NR, $p<0.001$). The mean prognostic nutritional index (PNI) was 49.9, and patients with a PNI of 49.9 or higher had a significantly longer OS (56,57 months vs. 24,93 months, $p= 0.022$). While the mean value of lymphocyte-to-monocyte ratio (LMR) was 3.44, patients with a higher LMR (>3.44) had longer OS (56,57 months vs 25,39 months, $p= 0.44$). Other immune inflammatory markers (NLR, PLR, BUN/creatinine ratio, De-Ritis, ALBI score) and tumor markers (CEA and Ca 19-9) as well as age, sex, tumor localization, D2 dissection status, and dose reduction during neoadjuvant therapy were not statistically significant in terms of neoadjuvant treatment completion rate, DFS, TTP, or OS ($p> 0.05$).

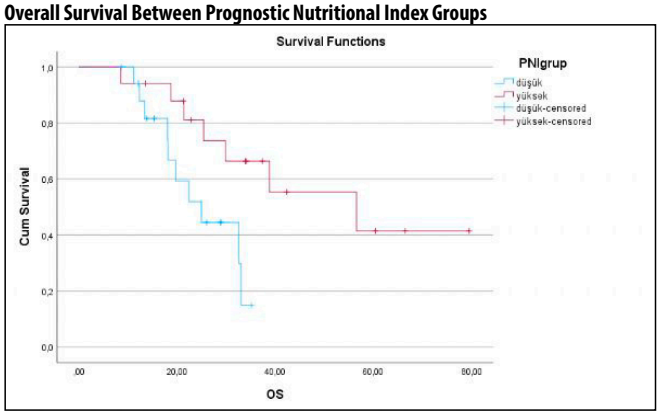
Conclusion: Although the sample size is small, higher PNI and LMR values were associated with significantly improved outcomes in patients with locally advanced gastric adenocarcinoma receiving the neoadjuvant FLOT regimen.

Keywords: Perioperative chemotherapy; gastric cancer; inflammatory parameters; prognostic biomarkers

Overall Survival Between Lymphocyte to Monocyte Ratio Groups



Overall Survival Between Prognostic Nutritional Index Groups



[OP-008]

EFFICACY OF NIVOLUMAB MONOTHERAPY IN FIRST-LINE TREATMENT-RESISTANT ADVANCED HEPATOCELLULAR CARCINOMA

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Introduction: Early symptoms of hepatocellular carcinoma (HCC) are usually subtle, and most patients are diagnosed at advanced stage, ruling out the possibility of local treatment options. Herein, we report a case with unresectable HCC who was successfully treated with nivolumab monotherapy after first-line sorafenib.

Case: A 62-year-old male patient who had Type 2 Diabetes Mellitus, chronic hepatitis B infection, and chronic liver disease was diagnosed with HCC in April 2022. At the time of diagnosis, serum AFP level was 104 ng/mL and abdominal MRI revealed a 37x44 mm subcapsular lesion in the segment 6 of the liver compatible with HCC. The Child-Pugh-Turcotte score was 6 and PET-CT showed no distant metastasis. However, patient was assessed as not a suitable candidate for liver transplantation by a multidisciplinary team. The patient underwent TARE in June 2022 and October 2022, with a partial response after the second treatment. However, AFP level progressively increased to 2300 ng/ml. Therefore, sorafenib was initiated. However, pulmonary embolism, variceal bleeding, and ascites occurred while patient was on sorafenib. Although radiologic evaluation with abdominal MRI resulted in stable disease, sorafenib was discontinued because of intolerance. Subsequently, nivolumab 240 mg Q2W was initiated as a second-line systemic treatment. Abdominal MRI performed three months after initiating nivolumab showed an increase in tumor size, but no new lesion was detected. Given the decrease in AFP levels and the significant clinical improvement of the patient, the increase in tumor size was evaluated as pseudo-progression, and nivolumab was continued. During follow-up, PET-CT was performed due to the possibility of extra-abdominal disease because of a suspicious growth in tumor size in abdominal MRI and increased AFP level. PET-CT showed metabolic progression in the primary lesion, and no distant organ metastasis. Increased metabolic activity in the primary lesion was evaluated as intratumoral inflammation due to immunotherapy, and nivolumab was continued. During follow-up, a rapid decrease in AFP level was observed. The increased metabolic activity in the primary lesion also regressed significantly in the subsequent PET-CT. The last abdominal MRI also showed a decrease in the primary tumor size. The patient finally received the 34th nivolumab treatment and the serum AFP level regressed to the normal range (AFP: 8.4 ng/ml).

Conclusions: Our case showed that nivolumab monotherapy could be an effective treatment option after first-line sorafenib in a patient with unresectable HCC. Our case also highlights the importance of keeping the possibility of pseudo-progression in mind, particularly in patients showing clinical improvement with immunotherapy. The evaluation of treatment response in HCC patients should involve not only imaging, but also clinical assessment and monitoring of serum AFP levels.

Keywords: Hepatocellular carcinoma, nivolumab

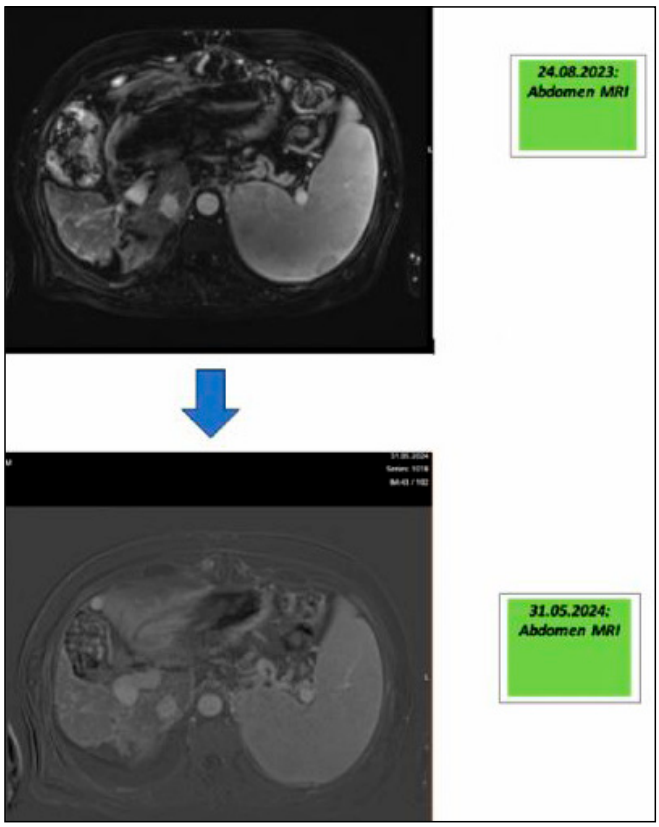

Figure 1. August 2023 - May 2024 Abdomen MRI comparison

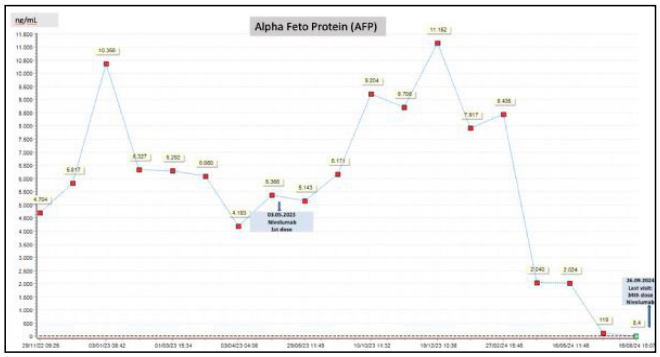

Figure 2. Serum AFP levels during the course of systemic treatment

[OP-009]

SIGNIFICANT RESULTS ASSOCIATED WITH MULTIPLE PARAMETERS IN LOCALLY ADVANCED AND METASTATIC GASTRIC CANCER

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Objectives: This study aims to assess the prognostic significance of pre-treatment biomarkers before their initial treatment with gastric cancer.

Materials-Methods: The study retrospectively examined all regardless of metastasis at diagnosis or a history of second cancer, over the age of 18 male and female patients diagnosed with gastric cancer and treated at the Medical Oncology Clinic of Dokuz Eylül University between 2010 and 2021. The study included 335 patients whose pre-treatment complete blood count and biochemical parameters were recorded in the hospital's information management system.

Results: The demographic, clinical, pathological, hematological, and biochemical parameters of the patients were examined. The study examined the association between SIRI, PIV, NLR, SII, PNI, RDW/Albumin Ratio, LNR and LODDS scores, formulated with parameters adhering to the literature, and patients' OS and DFS duration. According to the results of multivariate Cox regression analysis, in patients diagnosed with locally advanced gastric cancer, SIRI > 1.45 and PNI < 0.48, and in patients diagnosed with metastatic gastric cancer, SSII > 823.0 were found to be the most significant risk factors for mortality. In locally advanced gastric cancer patients who underwent surgery, LNR and LODDS were found to be determinative factors in both DFS duration and the risk of recurrence.

Conclusion: In the literature, there is no study that comprehensively evaluates such a diverse set of parameters together and demonstrates significant findings for many of them.

Keywords: Gastric Cancer, Overall Survival, Disease Free Survival

Tablo 1. Comparison of overall survival rates at diagnosis among all patients with locally advanced gastric cancer (Kaplan-Meier analysis) and identification of risk factors for mortality (Cox regression analysis).

	Median Overall Survival (month)	*%95 Confidence Interval*	*p value*	*Hazard Regression*	*p value*
Age					
<61 years old (92)	44,9±7,8	29,6-60,1	0,019	1,6 (1,1-2,3)	0,020
>61 years old (92)	28,4±4,2	20,1-36,7			
Gender					
Male (118)	42,8±5,9	31,3-54,3	0,868	1,0 (0,7-1,5)	0,868
Female (66)	33,0±3,3	26,6-39,5			
Histopathological type					
Adenocarcinoma (142) (1)	36,0±5,7	24,9-47,2	0,001	*1,0 (0,6-1,7)	0,002
Stone ring (28) (2)	44,0±7,1	30,1-57,8		**3,1 (1,7-5,7)	0,982
Others (14) (3)	16,7±5,7	5,2-28,2			<0,001
HER2 groups					
HER2 Low (31) (1)	61,3±13,7	34,3-88,3	0,330	*1,5 (0,7-3,1)	0,337
HER2 Overexpressed (24) (2)	42,8±4,5	34,1-51,5		**1,6 (0,8-3,2)	0,320
HER2 Negative (108) (3)	33,0±3,3	26,6-39,5			0,144
SIRI					
<1,45 (92)	44,9±19,6	6,4-83,3	0,009	1,7 (1,1-2,5)	0,010
>1,45 (92)	27,9±3,2	21,6-34,3			
PIV					
<391,9 (92)	44,0±8,0	28,4-59,6	0,048	1,5 (1,0-2,2)	0,050
>391,9 (92)	28,1±3,2	21,8-34,5			
NLR					
<2,4 (92)	44,0±7,1	30,1-57,9	0,050	1,5 (1,0-2,2)	0,051
>2,4 (92)	29,2±3,5	22,3-36,2			
SII					
<637,5 (92)	44,9±8,7	27,9-61,9	0,031	1,5 (1,0-2,2)	0,032
>637,5 (92)	28,4±2,6	23,4-33,5			
PNI					
>48,0 (92)	44,9±10,0	25,3-64,4	0,017	1,6 (1,1-2,3)	0,019
<48,0 (91)	28,0±4,5	19,1-36,7			
RDW/Albumin					
<4,0 (91)	43,0±5,5	32,2-53,9	0,369	1,2 (0,8-1,8)	0,370
>4,0 (90)	32,4±4,2	24,1-40,8			
LNR					
<0,28 (115)	103,5±---	-----	<0,001	3,7 (2,4-5,6)	<0,001
>0,28 (53)	24,4±3,3	17,9-30,8			
LODDS					
<-0,40 (116)	103,5±---	-----	<0,001	3,7 (2,4-5,6)	<0,001
>-0,40 (53)	24,4±3,3	17,9-30,8			

Tablo 2. Comparison of overall survival rates at diagnosis among all patients with metastatic gastric cancer (Kaplan-Meier analysis) and identification of risk factors for mortality (Cox regression analysis).

	Median Overall Survival (month)	*%95 Confidence Interval*	*p value*	*Hazard Regression*	*p value*
Age <62 years old (121) >62 years old (113)	 18,5±2,8 16,1±1,0	 12,9-24,1 14,1-18,1	0,073	1,3 (1,0-1,7)	0,074
Gender Male (153) Female (81)	 16,6±1,4 16,7±2,1	 13,8-19,5 12,5-20,9	0,890	1,0 (0,8-1,4)	0,891
Histopathological type Adenocarcinoma (174) (1) Stone ring (37) (2) Others (23) (3)	 18,2±1,4 13,2±4,6 14,0±2,1	 15,5-20,8 4,2-22,3 9,9-18,1	0,177	 *1,3 (0,9-1,9) **1,4 (0,9-2,1)	 0,180 0,170 0,149
HER2 groups HER2 Overexpressed(41)(1) HER2 Low (22) (2) HER2 Negative (150) (3)	 28,5±2,1 15,4±2,7 14,5±1,1	 24,3-32,6 10,1-20,7 12,3-16,7	0,004	 *1,8 (1,0-3,1) **1,8 (1,3-2,7)	 0,005 0,034 0,01
SIRI <1,84 (117) >1,84 (117)	 20,1±1,4 13,8±1,8	 17,4-22,7 10,3-17,3	<0,001	1,8 (1,3-2,3)	<0,001
PIV <472,2 (117) >472,2 (117)	 21,0±1,7 13,8±1,7	 17,8-24,3 10,5-17,2	<0,001	1,7 (1,3-2,3)	<0,001
NLR <2,93 (117) >2,93 (117)	 20,5±1,4 13,8±2,0	 17,8-23,1 10,0-17,7	<0,001	1,8 (1,4-2,4)	<0,001
SII <823,0 (117) >823,0 (117)	 21,5±1,6 12,1±1,6	 18,3-24,7 8,9-15,3	<0,001	2,0 (1,5-2,6)	<0,001
PNI >46,5 (117) <46,5 (117)	 20,2±2,0 14,8±1,4	 16,2-24,2 12,1-17,5	0,013	1,4 (1,1-1,8)	0,014
RDW/Albumin <4,1 (116) >4,1 (117)	 19,4±1,8 15,2±1,2	 15,9-22,9 12,9-17,5	0,260	1,2 (0,9-1,5)	0,261
LNR <0,36 (56) >0,36 (56)	 26,3±2,1 16,9±3,0	 22,2-30,4 10,9-22,8	0,003	1,8 (1,2-2,7)	0,003
LODDS <-0,24 (56) >-0,24 (56)	 26,3±2,1 16,9±3,0	 22,2-30,4 10,9-22,8	0,003	1,8 (1,2-2,7)	0,003

[OP-010]

SUCCESSFUL NIVOLUMAB RE-CHALLENGE TREATMENT AFTER SEVERE ACUTE NEUTROPHILIC GASTRITIS: A RARE CASE

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Background: Immune checkpoint inhibitors (ICIs) such as nivolumab are increasingly used to treat many cancers like non-small cell lung cancer and gastrointestinal tumors. Nivolumab induced gastritis is very rare and less well known than another gastrointestinal (GI) immune related adverse events (IRAEs) such as hepatitis and colitis. However, awareness of this issue is very important as it can cause a wide spectrum of symptoms, from mild gastritis to serious life-threatening GI bleeding. Currently there are no established guidelines for the management and re-challenge following gastritis induced by ICIs.

Case: A 39-year-old woman was diagnosed with advanced lung adenocarcinoma in December 2023. At the time of diagnosis, there were metastatic nodules in both lungs. The molecular genetic examination revealed the K-RAS G12C mutation. PDL-1 was negative. The patient received 4 courses of platinum-based chemotherapy, and then a newly developed dorsal vertebra metastasis was detected in the Positron emission tomography. Subsequently, nivolumab 240 mg/14 days monotheraphy treatment was started as the second-line treatment, and stereotactic body radiation therapy was performed for the bone lesions. After the 7th cycle of nivolumab treatment, the patient started experiencing symptoms such as epigastric pain, nausea and vomiting. Despite intensive symptomatic treatment, her complaints increased and occured persistent vomiting and 5-6 kg weight loss in a short time.

There was no evidence of new metastasis in the thoraco-abdominal computed tomography and no further signs of an alteration of other organ system could be detected. The patient underwent an upper GI endoscopy. An upper GI endoscopy revealed edematous and erythematous gastric mucosa consistent with erythematous pangastritis (Figure 1). Histopathological examination revealed erosive active chronic gastritis with severe activity and glandular distortion (Figure 2). Neutrophilic abscesses were observed in the antral glands, and a mixed-type inflammation was present in the lamina propria, accompanied by eosinophils. Cytomegalovirus and helicobacter pylori was not observed. With a diagnosis of immune-mediated gastritis, corticosteroids were initiated at a dose of 1 mg/kg. Remarkably, her symptoms improved significantly within a week, allowing for tapering and eventual cessation of steroid treatment after three weeks. Nivolumab treatment was restarted at a similar dose and used safely for 4 more cycles.

Discussion: In conclusion, gastritis is recognized complication of nivolumab therapy, particularly in the context of IRAEs. A multidisciplinary approach and early interventions, such as steroid treatment can help improve patient outcomes and reduce the risk of prolonged treatment interruptions. Based on our experience, rechallenging with nivolumab treatment following immune related gastritis resulted safe and may be led to sustained good clinical outcomes.

Keywords: nivolumab, gastritis, immune adverse event

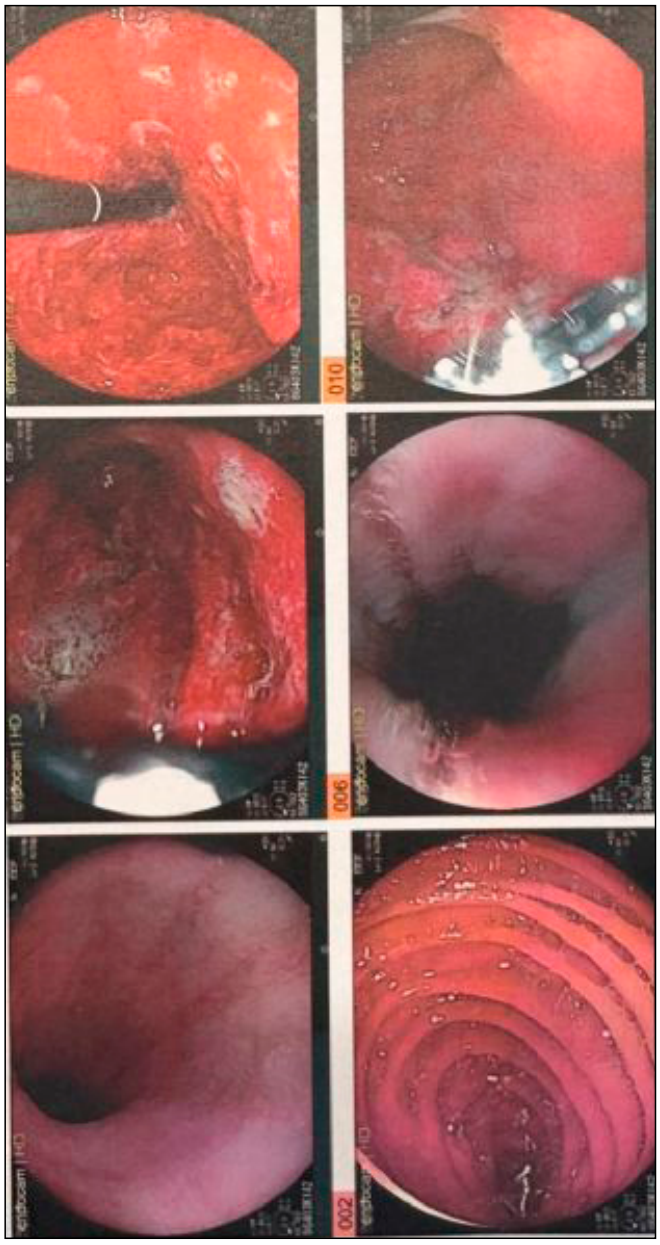

Figure 1. Upper gastrointestinal endoscopy images: Edematous and erythematous gastric mucosa consistent with erythematous pangastritis.

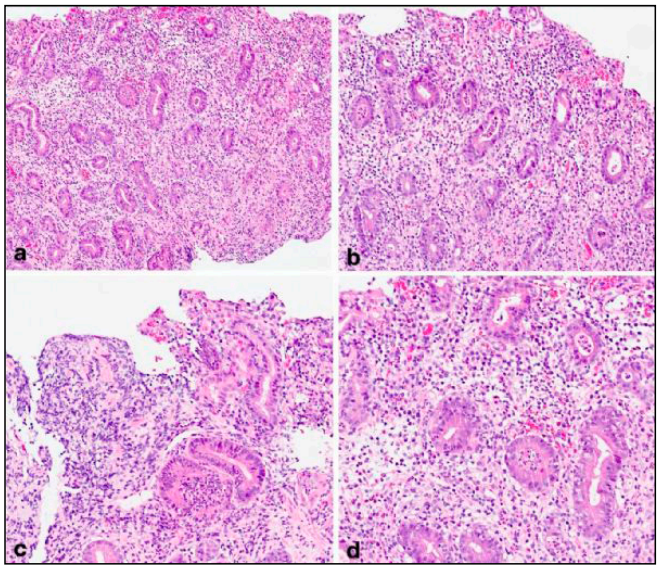

Figure 2. Pathological findings: a,b - erosive active chronic gastritis with architectural distortion of the antral glands. c,d- severe inflammation in the lamina propria rich in neutrophils and eosinophils with multiple neutrophilic glandular abscesses (a: HEx13, b: HEx20, c: HEx24, d: HEx30)

[OP-011]

EFFECTIVENESS OF NEOADJUVANT THERAPY IN PANCREATIC CANCER,DOES IT HAVE LIMITS?

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Background: Pancreatic cancer (PC) is a highly lethal malignancy, often diagnosed at an advanced stage, limiting surgical options. Neoadjuvant therapy (NT) aims to improve resectability, control micrometastases, and reduce tumor burden in borderline resectable and locally advanced cases.

Methods: Between 2014-2024, 660 PC surgeries were performed at Koç University Hospital; 124 patients received NT, with 77 complete data sets analyzed. Only pancreatic ductal adenocarcinoma cases were included. Age, sex, ASA-score, BMI, cancer/family-history, comorbidities, treatment regimens (FOLFIRINOX (5-FU, oxaliplatin, irinotecan), GA (Gemcitabine + nab-paclitaxel)), radiotherapy, diagnosis, CAP-grade, recurrence, and DFS were retrospectively assessed. SPSS-28.0 was used for analysis: Kaplan-Meier/Log-Rank tests evaluated survival, while chi-square and t-tests examined clinical variable relationships.

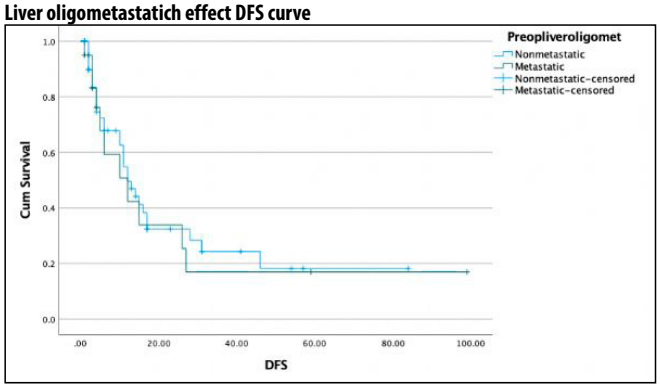
Results: NT in borderline PC patients yielded a mean DFS of 24.4 months, and a median DFS of 11.6 months. Including patients with liver oligometastases, mean DFS rose to 27.1 months, while median DFS remained 11.6 months,l ikely due to a few long-term metastatic survivors. DFS was longer with FOLFIRINOX than GA (p=0.164), though the difference was'nt statistically significant, likely due to the small GA sample size. Among borderline patients without liver oligometastases, FOLFIRINOX again showed longer DFS (p=0.295). Preoperative liver oligometastasis did'nt significantly affect DFS (p=0.727),and radiotherapy (RT) showed a trend toward improved DFS (p=0.196), though limited sample sizes reduced statistical power. Complete/near-complete responders exhibited longer DFS than partial/

poor responders in all patients (p=0.250) and in borderline patients without oligometastases (p=0.336). Oligometastatic patients (n=69) had comparable or slightly better DFS than borderline-only patients (n=50), underscoring NT's role in downstaging and controlling oligometastases, especially in complete/near-complete responders. CAP Grades 0-1 correlated with significantly longer DFS than Grade 2 which outperformed Grade 3, highlighting pathological response as a key prognostic factor. FOLFIRINOX consistently produced more favorable responses, with a higher proportion of complete/near-complete or partial responders, while GA was associated with poorer outcomes and a higher percentage of poor responders.

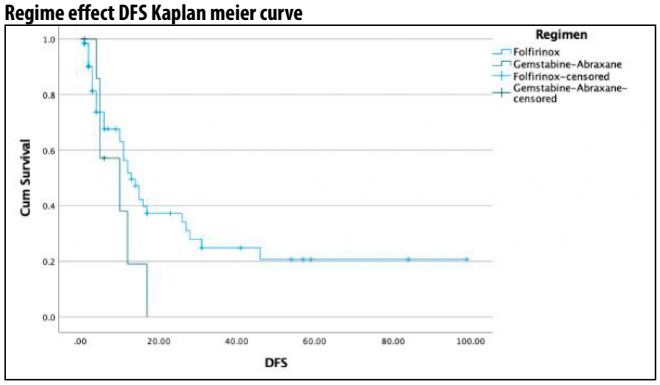
Conclusion: Although not statistically significant, NT demonstrated promising trends in DFS, with FOLFIRINOX consistently outperforming GA. Preoperative liver oligometastases did not adversely affect DFS, suggesting NT effectively downstages disease, yielding comparable outcomes for oligometastatic and non-metastatic patients. Radiotherapy showed a potential DFS benefit, though small sample sizes limited the analysis. Pathological response emerged as a critical prognostic factor for DFS, highlighting the importance of achieving optimal treatment responses, particularly with FOLFIRINOX.

Keywords: Panreatic cancer, Neoadjuvan, response

Liver oligometastatich effect DFS curve



Regime effect DFS Kaplan meier curve



Patient Characteristics			
Variable	***Category***	***n***	***Percent***
Age	Median Age	64	
Recurrence	Whith recurrence	43	55.8
Gender	Male	37	48.1
	Female	40	51.9
ASA	1	4	5.2
	2	36	46.8
	3	37	48.1
Chemotherapy	FOLFIRINOX	66	85.7
	Gemcitabine + Abraxane	10	13
RT	Received RT	10	13
Liver oligometastatic	With oligometastasis	21	27.3
CAP Grade	0	2	2.6
	1	14	18.2
	2	28	36.4
	3	27	35.1
	Pathology missing	4	5.2

Number of patient			
Category	***Total (n)***	***Recurrence (n)***	***Unfollowed (n)***
Regimen	73	42	31
FOLFIRINOX	65	36	29
Gemcitabine-Abraxane	8	6	2
Preop. Oligometastasis			
Nonmetastatic	53	31	22
Metastatic	20	11	9
RT			
No	45	28	17
Yes	8	3	5
CAP Grade			
Complete/Near-complete	16	8	8
Partial	28	13	15
Poor	25	19	6

[OP-012]

SINGLE INSTITUTE EXPERIENCE IN YOUNG COLORECTAL CANCER: CLINICOPATHOLOGICAL CHARACTERISTICS AND ONCOLOGICAL OUTCOME CHANGES IN TWO DEMI-DECADES

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Colorectal cancer is currently the second most common cause of cancer-related deaths. Screening programs today start at the age of 45, while the incidence of colon cancer in younger individuals is steadily increasing. Although 75-80% of these cases are sporadic, the most common germline variant mutations are in mismatch repair protein mutations at a frequency of 3-5%.

In our study, we retrospectively reviewed the data of colorectal cancer patients under 50 years old who underwent surgery within our health group between 2014 and 2023. Patients were

divided into two groups based on their diagnosis dates: 2014-2018 and 2019-2023.

A total of 261 patients were included in the study, with a median age of 42. Of these, 78 patients (29.9%) were diagnosed between 2014-2018, while 183 patients (70.1%) were diagnosed between 2019-2023. A total of 146 patients (55.9%) were male. Among these patients, 24.9% had metastatic disease at diagnosis, with the liver being the most common site of metastasis, occurring in 42 patients (64.6%). In the 2019-2023 group, the rate of patients diagnosed with metastatic disease decreased (19.1% vs. 38.5%, p=0.0001). Additionally, the frequency of mucinous components (30.6% vs. 46.2%) and signet ring components (3.3% vs. 11.5%) decreased, while the rate of minimally invasive surgery increased (68.3% vs. 48.7%, p=0.003). In the minimally invasive surgery group, the frequency of robotic surgery significantly decreased in the second 5-year period (17.6% vs. 42.1%, p=0.002). The progression-free survival from the time of diagnosis for the entire cohort was 33.4 months, while overall survival was 34.3 months. Although progression-free survival during the first 12 months from diagnosis was statistically similar in both groups (79.2% vs. 83.6%, p=0.361), overall survival during the first 12 months from diagnosis was statistically higher in the 2019-2023 group (98.3% vs. 91%, p=0.001).

To our knowledge, our study represents the largest patient series published from a single center in Turkey, with long-term oncological follow-up results. While the incidence of early-onset colorectal cancer is increasing over time, patients today have a higher chance of being diagnosed at an earlier stage. As a result of this and the development of treatment modalities, progression-free survival has clinically improved, and overall survival has statistically increased.

Keywords: early onset colon cancer

Patient Characteristics and Outcomes

		Total n (%)	*2014-2018 n (%)*	*2019-2023 n (%)*	*p*
Gender	Male	146 (55.9)	40 (51.3)	106 (57.9)	0.323
Metastatic Onset	Seen	65 (24.9)	30 (38.5)	35 (19.1)	0.0001
Tumor Location	Right Colon	91 (34.9)	31 (39.7)	60 (32.8)	0.28
MMR Status	dMMR	42 (16.9)	13 (16.7)	29 (17.1)	.939
Histopathological Subtype	Adenocarcinoma	237 (90.8)	72 (92.3)	165 (90.2)	0.583
Muscinous Component	With	92 (35.2)	36 (46.2)	56 (30.6)	0.023
Signet Ring Cell Component	With	15 (5.7)	9 (11.5)	6 (3.3)	0.016
Tumor Differentiation	Poorly Differentiated	62 (24.6)	24 (31.2)	38 (21.7)	0.108
Operation Approach	Open	98 (37.5)	40 (51.3)	58 (31.7)	0.003
Minimally Invasive	Robotic	38 (23.3)	16 (42.1)	22 (17.6)	0.002
pT Stage	T3/4	238 (91.2)	72 (92.3)	166 (91.8)	0.677
pN Stage	N0	95 (36.4)	22 (28.2)	73 (39.9)	0.073
Lymphatic Invasion	Yes	183 (70.1)	58 (74.4)	125 (68.3)	0.328
Vascular Invasion	Yes	97 (37.2)	31 (39.7)	66 (36.2)	0.574
Perineural Invasion	Yes	135 (51.7)	38 (48.7)	97 (53)	0.526
Harvested LN	Median (Range)	35 (239)	37 (154)	34 (239)	0.135
Metastatic LN	Median (Range)	1 (35)	2 (33)	1 (35)	0.016
CME Status	CME	185 (92.5)	2 (5.1)	13 (8.1)	0.740
Progression Free Survival	Months	33.4 (25.6-39.4)		0.8 (0.49-1.29)	0.361
Overall Survival	Months	34.3 (27.3-38.7)		0.24 (0.1-0.55)	0.001

[OP-013]

LONG-TERM EFFECT OF INTRAOPERATIVE ABLATION AS AN ADJUNCT TO LIVER RESECTION ON SURVIVAL AND LOCAL RECURRENCE IN COLORECTAL CANCER LIVER METASTASES: A SINGLE-CENTER RETROSPECTIVE COHORT STUDY

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Introduction: Local ablative treatment modalities may be preferred for liver metastases of colorectal cancers according to the distribution and number of lesions, functional status of the liver and location of the lesions. The aim of this study was to investigate the effect of hepatic resection combined with intraoperative microwave ablation (MWA) on overall survival and local recurrence-free survival.

Methods: Data on age, gender, surgical procedure, survival time, disease-free survival time, postoperative complications and length of hospital stay of 109 patients with colorectal cancer liver metastases operated between 01.01.2014-10.09.2024 were obtained retrospectively from the hospital data processing system. SPSS program was used for statistical analysis. Normally distributed data were expressed as mean and non-normally distributed data were expressed as median. Kaplan-Meier test and Cox regression analysis were used for survival analysis. P value less than 0.05 was considered statistically significant.

Results: Sixty-three (57.8%) of the patients were female and the median age was 60 years (IQR 13.5). Resection was performed in 67 patients (61.5%) and MWA ± resection in 42 patients (38.5%). The median survival time was 40.4 months in the resection group and 51.1 months in the MWA ± resection group with no significant difference between the two groups (p=0.7). The 1-, 3- and 5-year survival rates in the resection group were 92%, 57% and 37%, respectively. In the MWA ± resection group, the 1-, 3- and 5-year survival rates were 95%, 68% and 26%, respectively. The median local recurrence-free survival time was 21.4 months in the resection group and 10.9 months in the MWA ± resection group, with a significant difference between the two groups (p=0.025). For synchronous and metachronous metastases of colorectal carcinoma, there was no significant difference in overall survival (p=0.55) and local recurrence-free survival (p=0.28). There was no significant difference between the two groups in terms of length of hospital stay (p=0.84) and Clavien-Dindo scores (p=0.83).

Conclusions: Although local recurrence is seen earlier in patients with colorectal cancer liver metastases who underwent intraoperative microwave ablation, similar results are obtained with resection in terms of overall survival.

Keywords: colorectal cancer liver metastases, liver resection, microwave ablation

[OP-014]

ULTRASOUND-GUIDED MICROWAVE ABLATION IN THE TREATMENT OF COLORECTAL LIVER METASTASES; HACETTEPE EXPERIENCE

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Background: Microwave ablation is an alternative and minimally invasive procedure for the treatment of colorectal liver metastases (CRLM). In this study, long-term outcome and effectiveness of microwave ablation (MWA) for the treatment of CRLM, were evaluated.

Methods: This retrospective study included patients who underwent ultrasound-guided liver MWA for CRLM between January 2015 and October 2024. In all patients, liver MRI was obtained at least 2 weeks prior to MWA. A total of 99 patients were referred for treatment, and 22 patients (combined treatment protocol with transarterial chemoembolization=2, missing medical record=20) were excluded.

Results: A total of 77 patients (mean age, 61 years; 42 men) with 263 colorectal liver metastases were included to study. The mean longest diameter of metastases was 1.4 cm (range, 0.4 to 5.0 cm), and the mean number of treated metastases per patient was 2 (range, 1 to 20). The mean follow-up was 829 days (range, 70 to 2433 days). Complete ablation evaluated with liver MRI within 4 weeks following the procedure, was achieved in all patients (100%). In 163 out of 263 metastases (61.9%), MWA was performed intraoperatively. The overall survival rate was 89% at 1 year, 57% at 3 years, and 32% at 5 years. During follow-up, local recurrence was found in 28 out of 263 metastases. The rates of local recurrence at 1, 3 and 5 years of follow-up were 10%, 14%, and 17%, respectively. Recurrence rates were 27.3%, 22.4%, 9.5%, and 1.1% for metastasis measured >3cm (n=6/22), 2-3 cm (n=11/49), 1-2 cm (n=10/105), and <1 cm (n=1/87), respectively.

Conclusion: Microwave ablation for the treatment of CRLM yields satisfactory results and appears to be an alternative treatment option to surgery in selected patients.

Keywords: microwave ablation, colorectal cancer, liver metastases

[OP-015]

HEPATIC ARTERY INFUSION THERAPY IN LIVER MALIGNANCIES – COLONIC METASTASES: SINGLE TERTIARY CENTER EXPERIENCE

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Hepatic artery infusion therapy (HAIC) is a therapy method for primary and metastatic lesions of the liver. It is conducted by inserting a catheter into the tumor supplying branch of the hepatic artery or proper hepatic artery, then infusing the prepared chemotherapy regimen, with or without combining systemic regiments.

HAIC has been shown to be safe and effective for the treatment of liver malignancies.

However, its use is limited due to the lack of Phase 3 trials and studies. This study aimed to evaluate the response and mortality rate of patients who underwent HAIC in a single tertiary center.

Patients who underwent HAIC between March 2023 and September 2024 were included in the study. Radiological response to the liver tumor burden was evaluated via RECIST 1.1 criteria, radiological response was graded as regressive, stable, progressive disease. The objective response was evaluated as a sum of regressive and stable disease. Four patients without radiological follow-up were excluded from the study. The treated malignancies are liver metastases of colonic carcinomas. All of the included patients were resistant to first-line systemic treatment.

In this study, 7 patients (4 female, 3 male) underwent HAIC with a median angiography number of 3. Mortality and response rates for malignancy were presented in Table 1. Three patients (%42,8) had other forms of intraarterial therapies (TARE/TACE). Two (28.5) patients had some form of minor adverse events after treatment such as nausea, fever and abdominal pain.

HAIC has been first described in 1950 and although there were setbacks, HAIC is getting more and more attention globally and more recently with the PUMP trial which aims to show the effect of adjuvant therapy with HAIC on patients having metastatic colon cancer.

Furthermore, the combination of immunotherapy with HAIC has promising results regarding overall survival and progression-free time. Hence, some authors advocate consideration of earlier initiation of HAIC in the treatment of metastatic liver disease.

In this study, patients who were resistant to first-line systemic treatment and underwent

HAIC showed acceptable objective response rates. Therefore, HAIC can be considered more often in the treatment of hepatic malignancies.

Keywords: Colon cancer, HAIC, Liver Metastasis

Table 1. Mortality and response rates of the patients who received HAIC in our center.

Type of Tumors	Total number of cases	Mortality Rate (%)	Mean follow-up time ± SD	Mean Survival Time, months, (%95 CI)	Objective Response Rate (Regression + stable) (%)
Colon	7	28.6	7.2 ± 5.82	11.1 (6.61-15.61)	85.7

[OP-016]

INCIDENCE OF UNEXPECTED LYMPH NODE POSITIVITY AND ITS PROGNOSTIC IMPACT IN PATIENTS UNDERGOING PULMONARY METASTASECTOMY

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Objective: Pulmonary metastasectomy (PM) is a widely accepted and recognized local treatment for various histologic types of primary tumors. However, the role of routine lymph node (LN) dissection or sampling during PM procedures is still

controversial. This study aims to analyze the incidence of unexpected mediastinal LN metastasis during PM for various primary tumors and to evaluate its prognostic impact.

Methods: We retrospectively analyzed the data of 84 patients who had undergone mediastinal LN dissection concomitantly with PM procedure between 2017 and 2022. Patients with suspected positive LN on preoperative thoracic computed tomography (CT) or PET-CT were excluded from the study. The incidence of unexpected LN positivity among different primary tumor histologies was calculated, and these patients were compared with the LN negative group about mean survival.

Results: In the 84 patients who had undergone concurrent LN dissection with PM, the incidence of unexpected LN positivity was 15.5% (n=13). In the subgroup analysis, the rate of lymph node-positive was 22.2% (n=10) in the gastrointestinal group, 15.4% (n=2) in the genitourinary group, and 33.3% (n=1) in the thyroid group. Of those with positive lymph nodes, 76.9% were in the gastrointestinal group, 15.4% in the genitourinary group, and 7.7% in the thyroid group. The mean survival was significantly higher in the LN (-) group compared to the LN (+) group (44.1 and 21.2 months, respectively; p=0.013) (Fig 1).

Conclusions: Routine dissection of the mediastinal LNs during resection of lung metastases will reveal unexpected LN involvement in a relevant proportion of patients. Due to their negative prognostic impact, identifying unexpected LNs seems essential for further therapeutic decisions. Thus, we recommend routine LN dissection in patients undergoing pulmonary metastasectomy, especially in the colorectal carcinoma group, which is found to have the highest incidence of unexpected mediastinal LN metastasis.

Keywords: Metastasectomy, incidence, lymph node metastasis

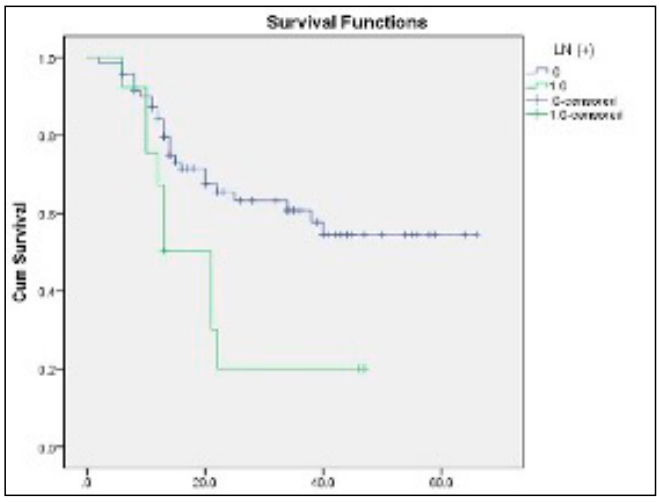

Figure 1. Kaplan-Meier survival following pulmonary metastasectomy according to the lymph node positivity.

[OP-017]

EVALUATION OF SURVIVAL OUTCOMES IN COLON CANCER PATIENTS UNDERGOING METASTASECTOMY: A FOCUS ON CLINICAL CHARACTERISTICS AND TREATMENT STRATEGIES

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Introduction: Surgical resection remains the standard of care for colorectal cancer patients with liver metastases. However, high relapse rates underscore the need for integrated treatment approaches. Combining preoperative/postoperative chemotherapy with surgery has been compared to surgery alone, yet the overall survival benefit of administering chemotherapy before versus after metastasectomy remains unclear. This study evaluates the clinical characteristics of patients undergoing metastasectomy and perioperative/postoperative treatment impact on survival outcomes.

Methods: A retrospective review of 61 colon cancer patients with liver metastases, undergoing metastasectomy with curative intent from 2013-2024 at a single institution was carried out.

Results: Of the 61 patients, 53 (86.9%) were diagnosed at the de novo metastatic stage. Sixteen (30.2%) underwent surgery without preoperative therapy, all receiving adjuvant treatment post-resection. Among them, 11 (68.8%) experienced progression (median PFS: 9.72 months), and 9 (56.3%) died (median OS: 32.32 months). Thirty-seven patients (69.8%) received preoperative therapy, with 25 (67.6%) progressing (median PFS: 10.74 months) and 17 (45.9%) dying (median OS: 27.79 months). No significant difference in OS or PFS was observed between patients undergoing induction therapy and surgery versus those operated on at diagnosis without prior therapy. Of the 61 patients undergoing metastasectomy for de novo metastatic or recurrent disease, 33 (54.1%) received first-line therapy, and 7 (11.5%) received second-line therapy in the preoperative period. Among these patients, 28 (70.0%) experiencing progression (median PFS: 10.71 months [95% CI: 9.93–11.49]) and 19 (47.5%) dying (median OS: 29.4 months [95% CI: 20.66–38.14]). Receiving first- or second-line therapy before metastasectomy showed no significant impact on PFS or OS. Additionally, 21 patients (34.4%) underwent surgery without preoperative chemotherapy. Of these, 15 (71.4%) experienced progression (median PFS: 10.21 months [95% CI: 4.74–15.69]) and 11 (52.4%) died (median OS: 32.32 months [95% CI: 17.93–46.72]). No significant difference in PFS or OS was observed between patients receiving preoperative chemotherapy and those operated on without it. In oligometastatic disease, patients receiving preoperative chemotherapy had an median OS of 39 months compared to 32.3 months for those who did not, reflecting a non-significant survival benefit of 6.7 months. In contrast, for patients with multiple metastases, OS was 22.9 months for those receiving preoperative chemotherapy versus 24.1 months for those who did not, showing no significant difference.

Conclusion: this study, conducted on a limited number of colorectal cancer patients, yielded results that are consistent with those reported in the literature regarding treatment models for liver metastases.

Keywords: liver metastasectomy, pre/postoperative chemotherapy

[OP-018]

INVESTIGATION OF THE PROGNOSTIC VALUE OF BODY COMPOSITION CHANGES IN PATIENTS WITH METASTATIC COLORECTAL CANCER RECEIVING INTRA-ARTERIAL TREATMENT

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Objective: We aimed to evaluate the effect of pre-procedure body composition values (sarcopenia, myosteatosis, subcutaneous and visceral fat tissue increase) on treatment response and survival as well as the body composition changes observed in control imaging on survival in metastatic colorectal cancer patients with liver metastasis who received intraarterial treatment.

Materials-Methods: A total of 146 colorectal cancer patients with liver metastases (mean age: 59.98±11.94, M/F: 90/56) which we were treated intra-arterial therapy between January 1, 2012 and December 31, 2022 were included in our study. We determined the patient body composition values (skeletal muscle area, skeletal muscle density, subcutaneous fat tissue area and visceral fat tissue area) by measuring at the L3 vertebra level on the patients' CT scans obtained within 30 days before the procedure. The relationship between body composition values and treatment response was analysed, and the factors affecting treatment response were investigated using the univariate and multivariate logistic regression analyses. Then, the body composition values-survival relationship and the treatment response-survival relationship were evaluated by the Kaplan-Meier survival analysis. Changes in body composition values were measured according to RECIST 1.1 guideline in follow-up imaging of the patients, and the relationship of negative or positive changes with survival was evaluated by Kaplan-Meier survival analysis. After that, factors affecting progression-free and overall survival were investigated using univariate and multivariate Cox-regression analyses.

Results: The local disease control rate is 53.1% and the objective response rate is 23.4%. The factors affecting treatment response are the presence of previous treatment and AST(aspartate aminotransferase) increase (Table 1). The survival times of both sarcopenic and myosteatotic patient groups are statistically significantly shorter than the opposite groups(Figure 1). But, there is no statistically significant relationship between increased subcutaneous or visceral adipose tissue and survival(Figure 2). While progression-free and overall survival times are statistically significantly lower in those with a decrease in skeletal muscle index in control imaging, the relationship between skeletal muscle density changes and survival is not statistically significant (Table 2). Factors affecting overall survival are ECOG score, liver function tests elevation, sarcopenia, decrease in skeletal muscle index in control and myosteatosis (Table 3) revealed in the results of multivariate Cox regression analyses.

Conclusion: Baseline sarcopenia and myosteatosis are one of the factors which negatively affect the progression-free and overall survival of patients. In addition, the decrease in skeletal muscle index in control imaging negatively affects the prognosis.

Keywords: Prognostic Factors, Colorectal Cancer, Sarcopenia

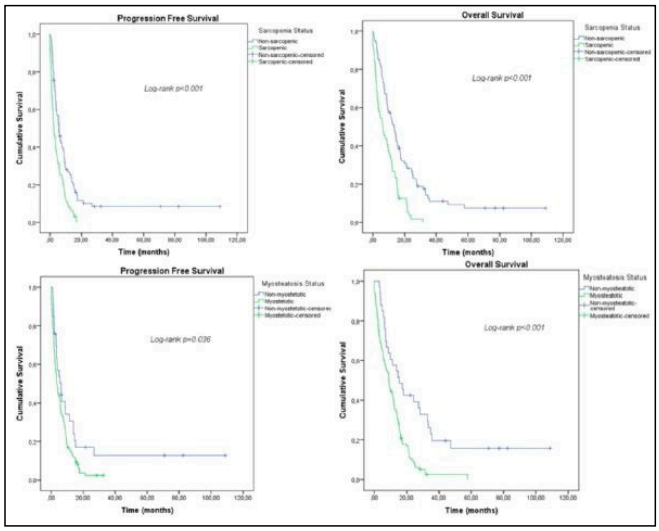

Figure 1. It is statistically significant that sarcopenic or myosteatotic groups have lower survival free and overall survival than the non-sarcopenic or non myosteatotic groups (p<0.001, p<0.001, respectively; Log-Rank (Mantel-Cox test)).

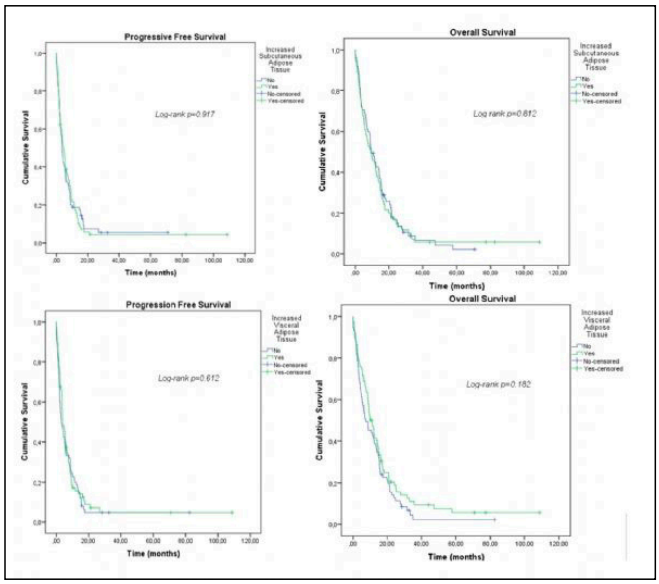

Figure 2. There is not any statistically significant relationship between subcutaneous or visceral adipose tissue and progression free or overall survival (p=0.917, p=0.812; p=0.612, p=0.182, respectively; Log-Rank (Mantel-Cox test)).

Table 1. Multivariate logistic regression analysis of factors affecting local disease control rate and objective response rate

	Local Disease Control Rate			*Objective Response Rate*		
Variables	Odds Ratio	Confidence Interval (95%)	p-value	Odds Ratio	Confidence Interval (95%)	p-value
Previous Treatment (Yes/No)	2.76	0.84-9.11	0.095	4.21	1.36-13.07	0.013
AST(>40 IU/L/<40 IU/L)	0.21	0.07-0.61	0.004	0.22	0.04-1.07	0.061

Table 2. Relationship of change in skeletal muscle index and density with progression-free and overall survival on control imaging

		Progression Free Survival			Overall Survival		
		Median Survival Time (months)	Confidence Interval (95%)	p-value	Median Survival Time (months)	Confidence Interval (95%)	p-value
Decreased Skeletal Muscle Index	No	5.33	3.64-7.01	0.028	11.77	7.62-15.91	0.016
	Yes	3.07	1.87-4.26		7.83	4.25-11.40	
Decreased Skeletal Muscle Density	No	3.77	2.61-4.92	0.608	11.47	7.97-14.96	0.125
	Yes	4.30	2.32-6.27		8.80	6.31-11.29	

Table 3. Multivariate Cox Regression Analysis Results which shows factors affecting progression free survival and overall survival

	Progression Free Survival			Overall Survival		
Variables	Hazard Ratio	Confidence Interval (95%)	p-value	Hazard Ratio	Confidence Interval (95%)	p-value
Age(>=65/<65)	1.40	0.98-2.01	0.060	-	-	-
ECOG Score (>=1/0)	1.57	1.11-2.22	0.010	2.08	1.44-2.99	<0.001
Increased Liver Function Tests (Yes/No)	-	-	-	1.84	1.19-2.84	0.006
Sarcopenia (Yes/No)	2.15	1.50-3.09	<0.001	2.96	1.68-5.21	<0.001
Decreased Skeletal Muscle Index in Control	-	-	-	2.03	1.16-3.55	0.013
Myosteatosis (Yes/No)	-	-	-	2.17	1.31-3.58	0.002
Increased NLR(Yes/No)	-	-	-	1.46	0.97-2.22	0.068

[OP-019]

PORTAL VEIN STENTING IN LOCALLY ADVANCED MALIGNANT CANCERS

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Background: Locally advanced pancreatic cancers and peri-hilar cholangiocarcinoma (PHCC) frequently involves the portal vein (PV) and superior mesenteric or splenic veins. Occlusion and high grade stenosis can be seen in severe cases. Dyspepsia, severe bloating after feeding, weight loss, ascites are most common symptoms. Splenomegaly related hypersplenism and portal hypertension induced varices create high risk of GI bleeding also thrombocytopenia cause discontuinity to the chemotheraphy. PV stenting in eliminates or prevents the portal hypertension and related symptoms also it prevents immune indulgence due to inability to proper feeding. Our aim is mainly to show benefits of PV stenting for in patients with malignant portal invasion.

Methods: We reviewed 21 cases of in malign portal vein stenosis or occlusion patients treated with stenting. Severe ascites and thrombocytopenia, GI bleeding from varices, or asymptomatic high-grade PV stenosis. İntrahepatic thrombosis in both sides of the liver were considered contraindication. All patients started anticoagulation medication after stenting.

Results: Technical success was achieved in all 21 (100 %) patients. The improvement of clinical symptoms were observed in 17 (80,9 %) patients. Anticancer therapy was administrated in 15 (71,4 %) patients. No complications were observed. 2 Stent occlusion was observed during follow up. The 1-year stent patency was 90,4 % and the median patency period was 9 months.

Conclusion: PV stenting is a safe treatment and that has significant effect of preventing portal hypertension complications. PV stenting increase patient comfort and compliance of anticancer treatment.

Keywords: Portal, vein, malignant

[OP-020]

RADIOTHERAPY SIDE EFFECTS AMONG GI CANCER PATIENT, NURSING MANAGEMENT

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Ahlam Al-Zoubi, Senior Clinical Nursing Coordinator

Background: Gastrointestinal (GI) cancer patients undergoing radiotherapy are at risk of experiencing a range of side effects that can significantly impact their quality of life. Effective nursing management is essential for addressing these side effects and improving patient outcomes.

Objective: To assess the side effects experienced by GI cancer patients undergoing radiotherapy and evaluate the nursing management strategies employed to alleviate these effects.

Methods: A systematic review of literature and analysis of clinical data were conducted to identify common side effects associated with radiotherapy in GI cancer patients. Additionally, a survey of nursing practices and interventions was performed to evaluate their effectiveness in managing these side effects.

Results: Common side effects observed include nausea, vomiting, diarrhea, fatigue, and skin irritation. Nursing management strategies, such as symptom assessment, personalized care plans, patient education, and the use of supportive therapies, have been shown to mitigate these effects. The application of evidence-based protocols improved symptom control and patient satisfaction.

Conclusion: Effective nursing management is important in addressing the side effects of radiotherapy in GI cancer patients. By employing targeted interventions and providing ongoing support, nurses can significantly enhance patient comfort and treatment adherence. Further research is needed to refine management strategies and develop standardized care protocols.

Keywords: Radiotherapy, GI cancer, side effects, nursing management, symptom control, supportive care.

[OP-021]

THE IMPACT OF MSI STATUS ON HISTOPATHOLOGICAL AND ONCOLOGICAL FEATURES IN SIGNET-RING CELL COLORECTAL CANCERS

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Colon Cancer with signet ring cell component has a low incidence among all colon cancers, and its prevalence in Asia is higher compared to that in our country and the West. While the signet ring cell component is known to be a poor prognostic factor for colon cancer, it is also known to differ from adenocarcinoma in terms of characteristics such as location, mutation burden, and metastasis behavior. In this study, we aimed to investigate the effect of mismatch repair protein loss on clinicopathological

and prognostic processes in cases of colon cancer with a signet ring cell component.

A total of 42 patients were included in our study, of which 10 (23.8%) were dMMR (deficient mismatch repair), and 32 (76.2%) were pMMR (proficient mismatch repair) based on immunohistochemistry. The average age of the entire group was 60.5 years, with no significant difference in age between the two groups. The pMMR group was diagnosed more frequently in the metastatic stage (50% vs. 10%, p=0.032), and pMMR patients had statistically higher rates of lymph node metastasis (90.6% vs. 60%, p=0.044), lymphatic invasion (93.8% vs. 50%, p=0.001), and number of metastatic lymph nodes (10 vs. 2, p=0.031). The progression-free survival for all patients was observed to be 27.5 months, and overall survival was 42.9 months. No superiority was observed in the pMMR group in terms of disease-free survival [HR=1.44 (0.47-4.4), p=0.523] or overall survival [HR= 0.93 (0.35-2.45), p=0.888] compared to dMMR patients.

Although the signet ring cell component is known to have poor prognostic factors, its rarity as a histopathological subtype limits the data available. Our study shows that microsatellite instability status in colon cancers with a signet ring cell component makes a significant difference in presenting with distant metastasis at the time of diagnosis and metastasizing through lymph nodes. However, due to the small number of patients, statistical significance could not be reached regarding progression-free survival and overall survival.

Keywords: microsatellite instability, signet ring cell component, colon cancer

[OP-022]

FACTORS AFFECTING TREATMENT IN THE LAST TWO MONTHS OF LIFE IN PATIENTS WITH METASTATIC COLORECTAL CANCER

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Introduction: The rates of systemic treatment received by patients with metastatic solid tumors in the last 30 or 60 days of life vary between centers and are influenced by the availability of palliative care services.

Materials-Methods: This study retrospectively examined the duration between the last treatment date and the date of death for 83 patients diagnosed with metastatic colorectal cancer (CRC) who were followed in our center from 2016 to 2024. Demographic data (age, gender, education level), disease history (de novo vs. metachronous), Eastern Cooperative Oncology Group (ECOG) performance status (PS) at the last visit (0-1 or 2-4), number of treatment lines (<=2 or >=3), and the status of the best supportive care (BSC) decision were evaluated.

Results: The mean age of the patients was 66.13±11.81 years. Among the patients, 50 out of 83 (60.2%) were male, and 56 out of 83 (67.5%) had de novo metastatic disease. A total of 47 out of 83 (56.6%) received <=2 lines of treatment, while 36 out of 83 (43.4%) received >=3 lines. Of the patients, 23 out of 75 (27.7%) had a PS of 0-1, and 52 out of 75 (62.7%) had a PS of 2-4. Regarding education, 59 out of 70 (84.3%) were primary school graduates or had less education, while 11 out of 70 (15.7%) were high school graduates or had higher education (Table). In the last 30 days of life, 28 out of 83 (33.7%) received treatment, while 55 out of 83 (62.7%) received treatment in the last 60 days. A BSC decision was made for 30 patients (36.1%). Among the 30 patients with a BSC decision, 11 (36.7%) died within one month. The median survival time after the BSC decision for those with BSC was 45 days (%95 CI; 38-53).

No significant differences were found in treatment received in the last 30 and 60 days based on age, gender, education level, number of treatment lines, and PS groups at the last visit. Patients who had a BSC decision received significantly less treatment in the last 30 and 60 days compared to those who did not have a BSC decision (p=0.003 and p=0.000, respectively) (Graphic). Among those with a BSC decision, 86.7% and 66.6% did not receive treatment in the last 30 and 60 days, respectively; while among those without a BSC decision, 54.7% and 20.7% did not receive treatment, respectively. In the last 60 days, 25.7% of patients under 65 years of age and 45.8% of patients over 65 years of age did not receive treatment (p=0.06).

Conclusion: Making a timely BSC decision is considered one of the indicators of quality of life in patient care. In our study, as the rate of BSC decisions decreased, the number of patients receiving treatment in the last two months of life increased. The inadequacy of palliative support services and the lack of hospice services in our country are primary reasons for this. Limitations of our study include that it was conducted in a single center and focused on a single type of cancer. There is a need for multi-center studies that include a broader range of cancer types.

Keywords: Colorectal cancer, last treatment, best supportive care

Treatment Status in the Last 60 Days Based on BSC Decision

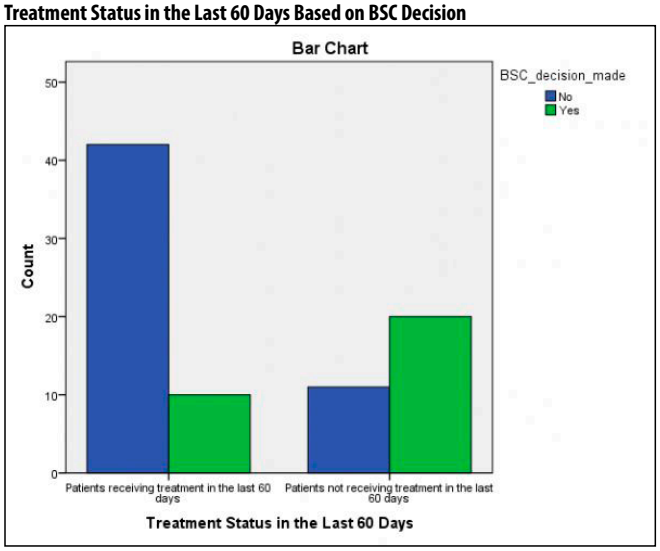

Table 1. Demographic and clinical characteristics

	n	%
Gender		
Female	33	39,8
Male	50	60,2
Age		
<=65	35	42,2
>65	48	57,8
Education status		
Primary education or less	50	60,2
High school or higher	11	13,3
Unknown	22	26,5
ECOG PS		
0-1	23	27,7
2-4	52	67,7
Unknown	8	4,6
Disease condition		
De-novo metastatic	56	67,5
Metachronous metastatic	27	32,5
Number of treatment lines		
<=2 lines	47	56,6
>=3 lines	36	43,4
Decision made for BSC		
Yes	30	36,1
No	53	63,9
Received treatment in the last 30 days		
Yes	28	33,7
No	55	66,3
Received treatment in the last 60 days		
Yes	52	62,7
No	31	37,3

[OP-023]

LYNCH SYNDROME WITH INTACT MISMATCH REPAIR GENE EXPRESSION: A RARE CASE REPORT

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Background: Colorectal cancers (CRC) with microsatellite instability (MSI) make up approximately 15% of all CRCs, with Lynch syndrome accounting for 3%. While immunohistochemistry (IHC) is routinely utilized to assess the expression levels of mismatch repair (MMR) genes to screen Lynch syndrome, occasional cases may exhibit weak or intact MMR expression. The estimated rate of microsatellite instability-high (MSI-H) tumors among mismatch repair-proficient (pMMR) CRCs ranges from 1% to 10%.

Case: A 47 year-old woman applied to the Gastroenterology department with constipation and rectal bleeding. Colonoscopic evaluation revealed a vegetative mass lesion in the sigmoid colon, and a biopsy confirmed mucinous adenocarcinoma. Imaging studies demonstrated multiple pericapsular liver implants, bilateral external iliac lymph node involvement, and peritoneal carcinomatosis. Further pathological assessment indicated intact mismatch-repair protein expression (pMMR), a PD-L1 combined positive score of 5, and a somatic mutation in the KRAS gene. Radiological evaluations following six cycles of FOLFOX plus bevacizumab and an additional five cycles of FOLFIRINOX plus bevacizumab were consistent with stable disease. Germline mutation analysis was strongly recommended to the patient due to a prominent family history of colon cancer (Her mother and sister were diagnosed with colon cancer at ages 45 and 47, respectively). A likely pathogenic heterozygous germline variant was identified in MLH1 gene. Subsequently, pembrolizumab was initiated as a second-line treatment.

Conclusion: Relying solely on IHC for Lynch syndrome screening poses a potential pitfall, as unexpected intact expression of MMR proteins may occur in certain cases. Even in the presence of pMMR, distinctive clinical features such as young age, mucinous histology, and strong family history should prompt clinicians to consider germline mutation analysis for Lynch syndrome.

Keywords: Lynch syndrome, immunohistochemistry, germline mutation analysis

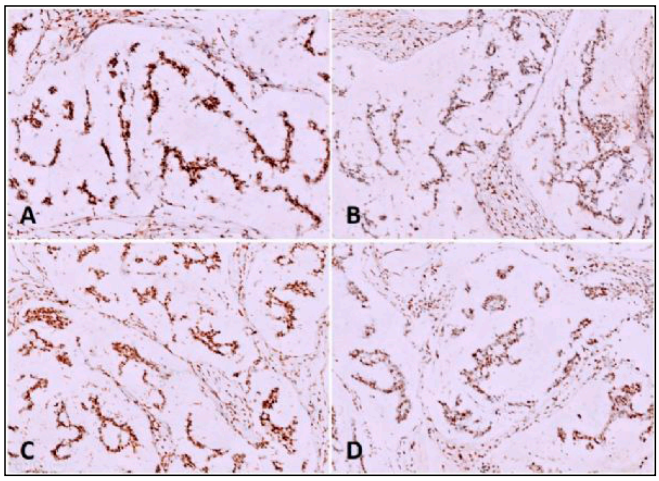

Figure 1. A) MLH-1, B) PMS-2, C) MSH-2, and D) MSH-6, all showed intact expression of respective mismatch-repair proteins by immunohistochemistry.

[OP-024]

PROGNOSTIC IMPACT OF PD-L1 COMBINED POSITIVE SCORE AND GENOMIC ALTERATIONS IN RESECTABLE COLORECTAL CANCER

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Background: In resectable CRC, MSI has an important predictive and prognostic value. However, the clinical relevance of PD-L1 and RAS/RAF mutational status is uncertain. In this study, we aimed to reveal the prognostic value of KRAS, NRAS and BRAF mutations and PD-L1 Combined Positive Score (CPS) in resectable CRC.

Methods: CRC patients in Antalya Training and Research Hospital, Department of Medical Oncology between January 2015 and December 2023 were screened retrospectively. The data of 37 patients were available for the final analysis (n=37).

Two parts of statistical analyses were performed in this study. The first analysis was performed by grouping the patients by their PD-L1 status with a cut-off point of 1. The second analysis was performed by grouping the patients by their KRAS, NRAS and BRAF mutational status (composite RAS/RAF mutational status).

Results: In the final analysis, 37 patients (n=37) were available. 13 (35.1%) were female and 15 (40.5%) were aged >=65 years. 17 patients (45.9%) had right-sided, 15 (40.5%) had left-sided colon cancer and 5 (13.5%) were diagnosed with rectal cancer. 2 patients had stage 1, 16 patients had stage 2, 16 patients had stage 3 and 5 patients had stage 4 disease. All the stage 4 patients had resectable liver metastasis at the time of diagnosis. None of the patients had received neoadjuvant and/or adjuvant immunotherapy. 3 rectal cancer patients recieved neoadjuvant long-course chemoradiotherapy, the rest of the study population did not receive any neoadjuvant treatment. 31 (83.7%) patients were managed with adjuvant chemotherapy per the best clinical practice belonging to the date. There were 19 (51.3%) CRC recurrence events among the study population.

PD-L1 CPS was negative (0) in 16 patients (n=16) while it was positive (>=1) in 21 patients (n=21). There were no significant differences in clinicopathological features between these two groups. (Table 1) Median Recurrence Free Survival (mRFS) was significantly longer in the PD-L1 positive group than the negative group [95% CI; 48.6 months (42.9-54.3) and 36.4 months (11.5-61.3), respectively (log-rank, p=0.028)]. (Figure 1A)

There were 13 KRAS mutated, 1 NRAS mutated and 1 BRAF mutated individuals, resulting in 15 patients in the Composite RAS/RAF mutated group (n=15) and 22 in the Pan-Wild group (n=22). No significant difference was observed in clinicopathological features between these groups. (Table 2) mRFS was similar between the Composite RAS/RAF mutated group and the Pan-Wild Group [95% CI; 36.7 months (18.3-55.1) and 46.0 months (36.5-55.5), respectively (log-rank, p=0.714)]. (Figure 1B)

Conclusion: We have demonstrated that positive PD-L1 CPS indicated a good prognosis while RAS/RAF mutational status did not affect RFS in resected CRC. Despite of the conflicting results, many previous studies associated overexpression of PD-L1 and poor prognosis. More comprehensive studies are needed in this topic.

Keywords: Colorectal cancer, PD-L1, Genomic alterations

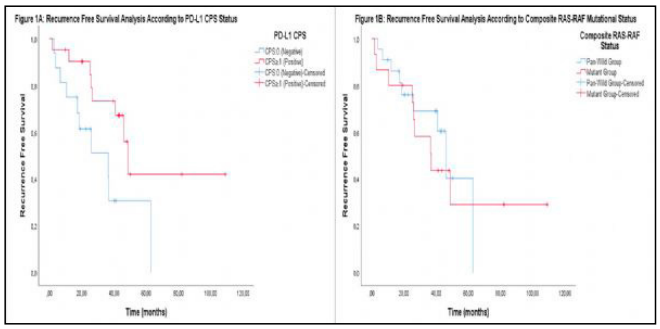

Figure 1. Recurrence Free Survival Analyses - Kaplan Meier Graphics

Table 1. Comparison of Clinicopathological Characteristics According to PD-L1 Combined Positive Score Status

	PD-L1 CPS Negative Group (n=16)	*PD-L1 CPS Positive Group (n=21)*	*P Value*
Age, n (%) <65 years >=65 years	 9 (56.3) 7 (43.8)	 13 (61.9) 8 (38.1)	0.729
Sex, n (%) Female Male	 6 (62.5) 10 (37.5)	 7 (33.3) 14 (66.7)	0.793
ECOG PS, n (%) 0-1 2	14 (87.5) 2 (12.5)	17 (81.0) 4 (19.0)	0.592
Smoking History, n (%) Smoker Non-Smoker	9 (56.3) 7 (43.8)	7 (33.3) 14 (66.7)	0.163
Tumor Location, n (%) Right Sided Left Sided Rectum	4 (25.0) 9 (56.3) 3 (18.8)	13 (61.9) 6 (28.6) 2 (9.5)	0.083
Stage, n (%) 1 2 3 4	1 (6.3) 7 (43.8) 4 (25.0) 4 (25.0)	1 (4.8) 9 (42.9) 10 (47.6) 1 (4.8)	0.259
Differentiation, n (%) Well – Moderate Poor	14 (87.5) 2 (12.5)	17 (81.0) 4 (19.0)	0.592
RAS Mutation, n (%) Wild Mutated	9 (56.3) 7 (43.8)	14 (66.7) 7 (33.3)	0.517
BRAF Mutation, n (%) Wild Mutated	16 (100.0) 0 (0.0)	20 (95.2) 1 (4.8)	0.376
MMR, n (%) pMMR dMMR	16 (100.0) 0 (0.0)	18 (85.7) 3 (14.3)	0.115

Table 2. Comparison of Clinicopathological Characteristics According to Composite RAS/RAF Mutational Status

	Composite RAS/RAF Mutated Group (n=15)	*Pan-Wild Group (n=22)*	*P Value*
Age, n (%)			
<65 years	9 (60.0)	13 (59.1)	0.614
>=65 years	6 (40.0)	9 (40.9)	
Sex, n (%)			
Female	5 (33.3)	8 (36.4)	0.850
Male	10 (66.7)	14 (63.5)	
ECOG PS, n (%)			
0-1	14 (93.3)	17 (77.3)	0.193
2	1 (6.7)	5 (22.7)	
Smoking History, n (%)			
Smoker	9 (60.0)	12 (54.5)	0.742
Non-Smoker	6 (40.0)	10 (45.5)	
Tumor Location, n (%)			
Right Sided	5 (33.3)	12(54.5)	0.388
Left Sided	8 (53.3)	7 (31.8)	
Rectum	2 (13.3)	3 (13.6)	
Stage, n (%)			
1	1 (6.7)	1 (4.5)	
2	7 (46.7)	9 (40.9)	0.254
3	7 (46.7)	7 (31.8)	
4	0 (0.0)	5 (22.7)	
Differentiation, n (%)			
Well – Moderate	14 (93.3)	17 (77.3)	0.368
Poor	1 (6.7)	5 (22.7)	
MMR, n (%)			
dMMR	1 (6.7)	2 (9.1)	0.791
pMMR	14 (93.3)	20 (90.9)	

[OP-025]

A CASE OF RECURRENT GASTRIC CARCINOMA WITH CEREBELLOPONTINE METASTASIS

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Bezmialem Vakif University

Purpose: Approximately half of patients with gastric carcinoma have lost the chance for curative treatment at the time of diagnosis.The most common sites of metastasis are the liver, peritoneum,lung,and bone.In this case,we aim to share a case of recurrent gastric cancer with a rare site of metastasis.

Case: A 49-year-old male patient underwent total gastrectomy at an external center in April 2013.Postoperative pathology revealed adenocarcinoma, grade 2, pT3N2(node 4/25) with negative surgical margins and cerbB2(HER2) positivity(score 3+). The patient received adjuvant FUFA and radiotherapy(RT).In January 2014,a mass lesion was detected in the posterior cerebellar fossa,and RT was administered.After RT, the patient received DCF(Docetaxel, Cisplatin, and 5-FU) treatment.After six cycles of DCF,in August 2014 PET/CT showed no FDG uptake,and the patient was placed under follow-up.In November 2014,the patient presented with dizziness,and cranial MRI identified two metastatic lesions in the posterolateral cerebellum and posteromedial region of the fourth ventricle.CEA was 11.13 ng/ml,and CA19-9 was 53.11 u/ml.The patient underwent mass excision by neurosurgery,and the pathology confirmed gastric adenocarcinoma metastasis.A December 2014 staging PET/CT showed no FDG uptake.The patient started on Capecitabine 2x1500 mg(14 days on, 7 days off).The treatment continued until July 2015,when capecitabine-induced hand-foot syndrome led to a dose reduction to 2x1000 mg.In March 2015, due to elevated CEA(46 ng/ml) and CA19-9(49 u/ml),thoracic and abdominal CT scans were performed,which showed no significant findings. Cranial MRI showed linear contrast enhancements consistent with postoperative changes,and follow-up was recommended.In June 2015,after the patient developed headaches and dizziness,a left cerebellar mass was excised,with pathology again confirming gastric adenocarcinoma metastasis.The cerbB2 was positive with both IHC (score 3+) and SISH.PET/CT showed newly developed FDG-avid lesions, consistent with leptomeningeal involvement in the left cerebellum.A combination of Carboplatin, Capecitabine, and Trastuzumab was initiated,but after three cycles,swallowing difficulties led to feeding issues.Palliative care was planned due to the patient's deteriorating clinical status and worsening ECOG performance score.In May 2016,a palliative left cerebellar mass excision was performed after the patient became symptomatic. The patient passed away on July 10, 2016.

Conclusion: While central nervous system metastasis is rare in gastric cancer,it should be considered,especially in HER2-positive patients.In this case,recurrence and progression occurred with isolated brain metastasis.Thus,gastric cancer patients presenting with neurological symptoms should be evaluated for potential cranial metastasis.Our case achieved nearly 30 months of survival following metastasis,highlighting the survival benefit of local treatments like surgery and RT in oligometastatic disease.

Keywords: Gastric carcinoma, Brain metastasis, HER2-positive

[OP-026]

EFFICACY AND SAFETY OF DURVALUMAB PLUS CHEMOTHERAPY IN PATIENTS WITH ADVANCED BILIARY TRACT CANCER: A MULTICENTER REAL-WORD DATA FROM TURKISH ONCOLOGY GROUP

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Background: Durvalumab in combination with gemcitabine and cisplatin was recently approved as a first-line treatment for patients with advanced biliary tract cancer (BTC), following results from the TOPAZ-1 trial.

Objective: The main objective of this study was to assess the efficacy and safety of durvalumab combined with chemotherapy as a first-line treatment for advanced BTC.

Methods: In total, 39 patients with advanced BTC from 13 institutions in Turkey, treated with durvalumab plus chemotherapy between March 2022 and August 2024, were retrospectively screened. Data on overall survival (OS), progression-free survival (PFS), response rate, and safety were analyzed. Kaplan–Meier survival analysis was conducted to assess OS and PFS.

Results: Baseline demographic and clinicopathological characteristics of the patients are shown in Table 1. The median age was 60 years (20-80) and 59% of the patients (n=23) were female. The most common primary tumor location was intrahepatic (61%, n=24) and disease status was initially unresectable (77%, n=30). The liver was the most common site of metastases, occurring in 80% of patients (n=31), followed by the peritoneum and bones, each affected in 18% of patients (n=7 for both). After a median follow-up of 14 months (95%CI 9.7-18.3), 22 patients (56%) had died, and 31 patients (79%) experienced disease progression. The median PFS was 4.8 months (95% CI 2.2-7.4) and the median OS was 10.1 months (95% CI 5.5-14.7) (figure1). The results indicated that complete response (CR) was seen in 1 case (3%), partial response (PR) in 14 cases (36%), stable disease (SD) in 8 cases (20%), and progressive disease (PD) in 16 cases (41%). The incidences of >= grade 3 advers events and >= grade 3 immunotherapy-related adverse events (IRAE) were 49% and 5%, respectively.

Conclusions: Durvalumab combined with chemotherapy is an effective and safe first-line treatment option for patients with advanced BTC.

Keywords: durvalumab, biliary tract cancer

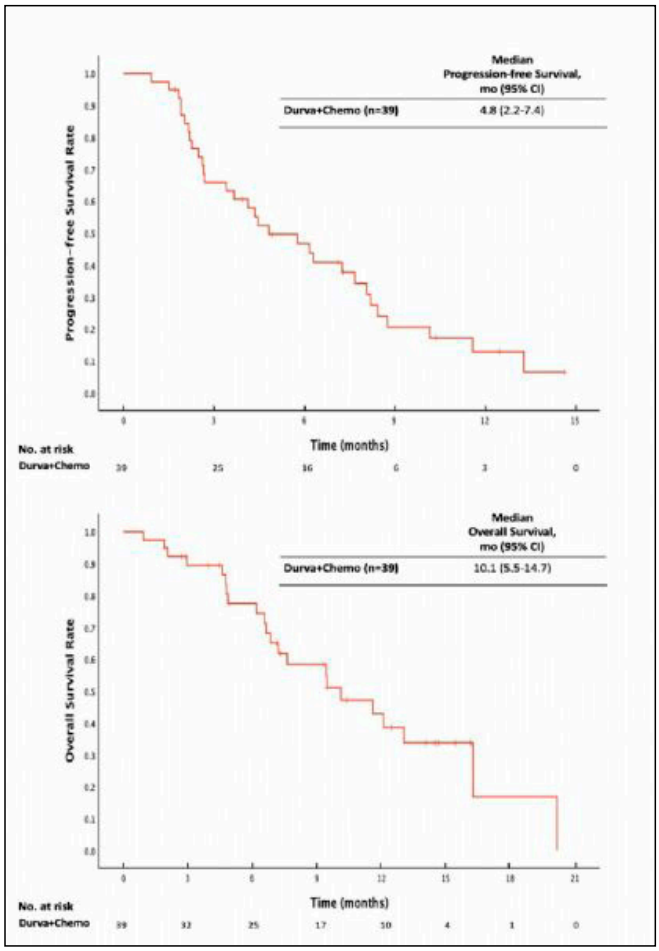

Figure 1. Kaplan–Meier curves of overall and progression-free survival

Table 1. Patients' baseline characteristics

Variable		
Age	Median (min-max)	60 (20-80)
		N (%)
Sex	Male	16 (41%)
	Female	23 (59%)
ECOG	0	13 (33%)
	1	25 (64%)
	2	1 (3%)
BMI	<18.5	4 (10%)
	18.5–24	9 (23%)
	≥24	26 (67%)
Comorbidities	DM	8 (20%)
	HT	15 (39%)
	Cirrhosis	5 (13%)
	CAD	3 (8%)
Virology status	HBV positive	5 (13%)
	HCV positive	1 (3%)
	Negative	33 (84%)
Primary tumor type	Intrahepatic	24 (61%)
	Extrahepatic	10 (26%)
	Gallbladder	5 (13%)
Disease status	Initially unresectable	30 (77%)
	Recurrent	9 (23%)
Disease classification	Locally advanced	4 (10%)
	Metastatic	35 (90%)
Metastatic sites	Liver	31 (80%)
	Lung	5 (13%)
	Peritoneal	7 (18%)
	Bone	7 (18%)
TARE, TACE, RF	Absent	30 (77%)
	Present	9 (23%)
Drainage or stent	Absent	31 (80%)
	Present	8 20%)
MMR status	dMMR	1 (3%)
	pMMR	25 (64%)
	Missing	13 (33%)
PD-L1 expression	≥ 1%	10 (26%)
	<1%	13 (33%)
	Missing	16 (41%)
Best Response Rate	CR	1 (3%)
	PR	14 (36%)
	SD	8 (20%)
	PD	16 (41%)
Adverse Events	≥ grade 3	19 (49%)
	Any grade IRAE	5 (13%)
	≥ grade 3 IRAE	2 (5%)

[OP-027]

EVALUATION OF MICROSATELLITE INSTABILITY IN LOCALLY ADVANCED RECTAL TUMORS ACCORDING TO CLINICAL DATA:

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Introduction: One-third of colorectal cancers occur in the rectum. Microsatellite instability (MSI) is a prognostic and predictive feature that plays an important role in the pathogenesis of colorectal cancers. Approximately 15% of locally advanced rectal cancers are MSI Instable. According to the current consensus, MSI-Instable patients may not benefit sufficiently from chemotherapy, which worsens their prognosis. Total neoadjuvant therapy is the most preferred method for the treatment of locally advanced rectal cancer. We aim to investigate the effect of microsatellite status on treatment response in locally advanced rectal cancer.

Materials-Methods: In our study, microsatellite status of patients diagnosed with rectal adenocarcinoma was determined by immunohistochemistry. Descriptive statistics of clinical parameters of patients classified as MSI or MSS were performed and presented in a separate table for each group.

Results: In our study, the tumor was localized among the 36 MSI-Stable patients, with 25.7% found in the proximal, 37.1% in the middle, and 37.1% in the distal rectum. In the MSI-Instable group, 75% were in the proximal and 25% in the middle rectum. While 75% of MSI-Stable patients were T3 and 25% were T4; in the MSI-Instable group, 25% of T2 & T3 and 50% of T4 tumors were detected. Lymph node involvement was 93.9% in the MSI-Stable group and 100% in the MSI-Instable group. EMVI was 78.6% in the MSI-Stable group and 75% in the MSI-Instable group. Tumor deposits were 42.9% in the MSI-Stable group and 50% in the MSI-Instable group CRM was 40% positive in the MSI-Stable group and 33.3% positive in the MSI-Instable group. Both groups received chemotherapy regimens consisting of oxaliplatin and 5-FU or capecitabine. According to the preoperative clinical response rate, 25.7% of the MSI-Stable group had a complete response, 71.4% had a partial response, and 2.9% had stable disease. All of the MSI-Instable groups had a partial response, there was no complete response in this group. Progressive disease was not detected in both groups. The recurrence rate was 40% in the MSI-Stable group and 50% in the MSI-Instable group.(Table 1)

Conclusions: In our study, the lack of pathological complete response and the higher rate of recurrence in the MSI-Instable group supported the thoughts that this patient group may benefit less from chemotherapy. However, studies with larger patient numbers are needed to clarify this idea.

Keywords: Microsatellite Instability, Locally Advanced Rectal Tumors, Rectal cancer

Table 1. Evaluation of Microsatellite Instability in Locally Advanced Rectal Tumors According to Clinical Data.

MSI		MSI-Stable			MSI-Instable		
		n=36(%90)			n=4(%10)		
Tumor Localization	Rectum:	Proximal	Middle	Distal	Proximal	Middle	Distal
	n=	9	13	13	3	1	0
	%:	%25.7	%37.1	%37.1	%75	%25	%0
	n/%	n	%		n	%	
Clinical T Stage	T1	0	%0		0	%0	
	T2	0	%0		1	%25	
	T3	24	%75		1	%25	
	T4	8	%25		2	%50	
Clinical N stage	LN	n	%		n	%	
	Positive	31	%93.9		4	%100	
	Negative	2	%6.1		0	%0	
EMVI	EMVI	n	%		n	%	
	Positive	22	%78.6		3	%75	
	Negative	6	%21.4		1	%25	
Tumor Deposit	TD	n	%		n	%	
	Positive	12	%42.9		2	%50	
	Negative	16	%57.1		2	%50	
CRM	CRM	n	%		n	%	
	Positive	12	%40		1	%33.3	
	Negative	18	%60		2	%66.7	
CT-Regime	CT-Regime	n	%		n	%	
	FOLFOX	29	%80.6		4	%100	
	XELOX	7	%19.4		0	%0	
Clinical Response Rate	n/%	n	%		n	%	
	CR	9	%25.7		0	%0	
	PR	25	%71.4		4	%100	
	SD	1	%2.9		0	%0	
	PD	0	%0		0	%0	
Relapse	Relapse	n	%		n	%	
	Positive	14	%40		2	%50	
	Negative	21	%60		2	%50	

Abbreviations:
MSI: *Microsatellite instability,* ***n:*** *Number of patients,* ***%:*** *Percentage of patients,* ***LN:*** *Lymph node,* ***EMVI:*** *Extramural vascula invasion,* ***TD:*** *Tumor deposit,* ***CRM:*** *Circumferential resection margin,* ***CT:*** *Chemotherapy,* ***CR:*** *Complete response,* ***PR:*** *Partial response,* ***SD:*** *Stable disease,* ***PD:*** *Progressive disease.*

[OP-028]

STEREOTACTIC BODY RADIOTHERAPY FOR LIVER TUMORS: INSIGHTS OF A SINGLE CENTER EXPERIENCE

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Objective: This study aims to evaluate oncological outcomes of the patients treated with liver stereotactic body radiotherapy (SBRT), primarily focusing on the rate of local control (LC).

Methods: Medical records of 35 patients diagnosed with either hepatocellular carcinoma (HCC) (n=10) or liver metastasis (n=25) treated with image guided SBRT between 2007-2024 were evaluated retrospectively. Image guided radiotherapy techniques were either an internal target volume based (ITV) (62%) or a fiducial tracking approach (38%). All statistical analysis were conducted using SPSS v23

Results: Baseline patient, tumor, and treatment characteristics are summarized in Table-1 and figure-1. A total of 90 lesions were irradiated which 20 (22%) were HCC and 71 (78%) were metastatic lesions. The median dose of SBRT was 40 Gy (range: 24 – 48 Gy) delivered in 5 fractions (range: 3-5 fr). The median follow-up period after SBRT was 18.5 months (range: 2-185 months). During follow-up, 29 patients (83%) experienced a liver relapse, either progression of the irradiated lesion or newly developed foci. Among these relapses, three patients (10%) experienced isolated in-field relapse, 5 patients (17%) experienced both in- and out-field relapses, and 21 patients (73%) experienced isolated out-field relapses. When the irradiated lesions were evaluated separately, 14 (15%) of them showed progression after SBRT, during follow-up. The 1- and 2-year local recurrence free survival (LRFS) rates of patients were both 77%. Among irradiated lesions, LC rates were similar between tumors of HCC and metastases (90% vs. 72%, p=0.2). The median time to local progression of the irradiated lesions was 6 months (range: 4-12 months). In univariate regression analysis, larger tumor size and volume were significant negative predictors for LC (p<0.05 for both). However, in multivariate analysis, no significant predictors were identified. Table 2 represents the results of regression analysis. ROC analysis determined that the optimal values of the tumor size and internal gross tumour volume were 25 mm (AUC=0.5, sensitivity 66%, specificity 42%) and 14 cc (AUC=0.6, sensitivity 71%, specificity 35%), respectively. As for image guidance comparison, there was no statistically significant difference in LC rates between fiducial tracking (80%) and ITV approach (77%) (p=0.1). During follow-up, 4 patients (11%) experienced grade 2 radiation-induced liver disease (RILD) within two months after SBRT. Three of them were diagnosed with HCC and Child Pugh groups of these patients were median 7B before SBRT. After SBRT, Child Pugh scores increased to median 10C. The one patient with metastasis experienced an elevation of liver enzymes and alkaline phosphates, which managed with medication.

Conclusion: In our cohort, LC rate of SBRT was 77%, with an acceptable rate of RILD. Lesion size may influence the treatment success and intrahepatic relapses outside the treatment field remains a key challenge.

Keywords: Liver tumors, SBRT

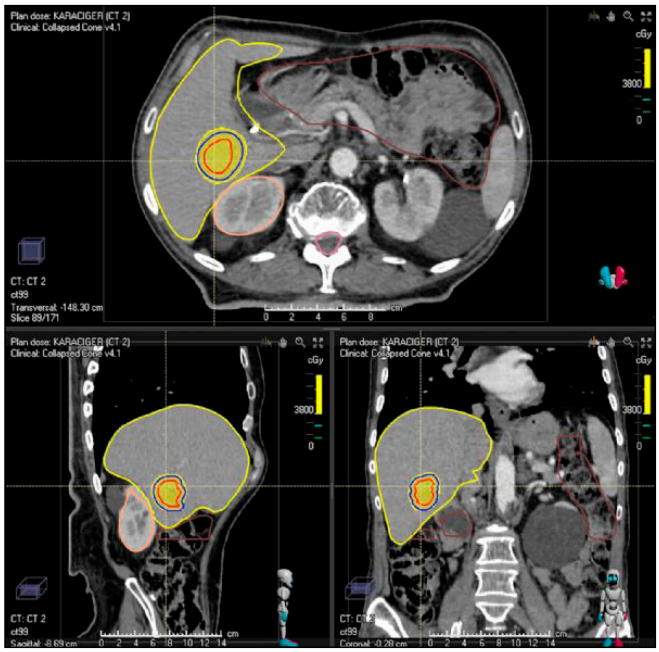

Figure 1. SBRT plan of a liver tumor
Red and blue line represent internal target volume and planning target volume respectively. The yellow color wash determines 95% of prescribed radiotherapy dose.

Table 1. Patient characteristics

Characteristics (n=35)	*N (%)*
Sex	Male: 22 (63) Female: 13 (37)
Median Age	65 (range: 27-81)
Tumor primary	HCC: 10 (29) Metastasis: 25 (71)
Median Tumor Size	25 mm (range: 7-90 mm)
Median iGTV & PTV	11.3 cc (range: 1-481 cc) & 25.7 cc (range: 2- 950 cc)
Median Uninvolved liver volume	1345.5 cc (range: 567-2124cc)
Median Uninvolved Liver Dmean	741 cGy (range: 226-1930 cGy)

Abbreviations: HCC: hepatocellular carcinoma, iGTV: internal gross tumor volume, PTV: planning target volume, Dmean: mean liver dose

Table 2. Univariate and Multivariate logistic regression analysis for local control

	UVA		MVA	
	OR (95% CI)	P	OR (95%CI)	P
Age (<64 vs >=64)	0.3 (0.8-1.31)	0.1	-	-
Sex	1 (0.3-3)	0.8	-	-
Primary tumor site for metastases	0.3 (0.03-2)	>0.05	-	-
Initial tumor number	0.9 (0.4-1.7)	0.8	-	-
Oligometastatic vs. metastatic	1 (0.1-17)	0.5	-	-
Tumor size	1 (0.9-1.1)	0.002	1 (0.9-1.05)	0.8
iGTV volume	1 (0.9-1)	0.01	1 (0.9-1.048)	0.2
PTV volume	1 (0.9-1.2)	0.01	0.9 (0.9-1.009)	0.3
BED10 (<72 Gy vs. >=72 Gy)	1.6 (0.5-5)	0.4	-	-

Abbreviations: UVA: Univariate analysis, MVA: Multivariate analysis, OR: Odds ratio, CI:confidential interval, iGTV: Internal gross tumor volume, PTV: planning target volume, BED10: Biologically effective dose when a/b ratio is 10 Gy

[OP-029]

COLORECTAL CANCER IN YOUNG ADULTS: SINGLE CENTER EXPERIENCE

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Background: Colorectal cancer incidence in patients under 50 years old has been increasing, especially during the last decade. Unfortunately, the mortality is higher in young adults. This data changed the screening programs, which now support screening at 45 if the patient has no additional risk factor. Under the influence of these data, we aimed to analyze our single-center experience.

Method: This is a retrospective single-center study. The demographic and clinical data of newly diagnosed colorectal cancer patients under 50 were collected between 2003 and 2023.

Results: A total of 453 patients were found in the electronic archive, but 375 patients were included in the study due to the available data. The number of male patients was 200(53.3%), and the number of female patients was 175 (46.7%). The number of patients diagnosed according to diagnosis years is available in Figure 1. The 136 (36.3%) patients had a family history of any malignancy, while 239 (63.7%)patients did not have a family history. 102 (27.2%) patients had a first-degree family history of any malignancy, while 67 (17.9%) patients had a family malignancy history of GIS malignancy. 8 (2.1%) patients had familial adenomatosis polyposis syndrome and 8 (2.1%) patients had lynch syndrome. 292 (77.9%) patients were symptomatic due to the tumor at the diagnosis, and 83 (22.1%) of them had a diagnosis by screening.40 (10.7%) patients needed urgent surgery. The localization of the tumors was as follows: 189 (50.4%) rectum, 117 (31.2%) left colon and 63 (16.8%) right colon cancer. Sixteen patients (4.3%) were diagnosed with stage 1, 80 (21.3%) with stage 2, 130 (34.7%) had stage 3, and 112 (29.9%) had stage 4 cancer. The median age at diagnosis was 43 (IQR 25-75: 38-46). The median overall survival of metastatic patients was 15.0 months (95%CI 11.8-18.1), and the median overall survival (mOS) of early and locally advanced patients was 155.0 months (95%CI 99.2-210.8). Family history did not affect mOS in early-stage and metastatic-stage disease (p=0.153).

Conclusion: The incidence of colorectal cancer in young adults is increasing. The symptoms related to the tumor of these patients should be evaluated carefully because most of them seek medical admission due to the symptoms. Patients with metastatic disease have worse overall survival than older adults, as in line with the literature. The presence of a family history of malignancy does not affect survival.

Keywords: colon cancer, rectal cancer, young adult

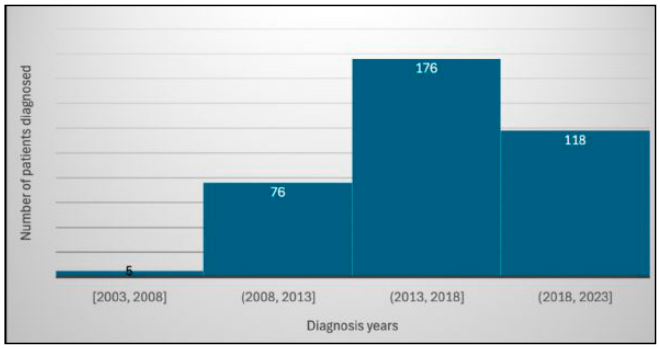

Figure 1. The number of young colorectal patients diagnosed according to years

Table 1. Basic features of patients involved in the study

Total number of patients	375
Age (median, IQR)	43 (IQR 25-75: 38-46)
Sex (%)	
Female	175 (46.7%)
Male	200(53.3%)
Family history (%)	
Present	136 (36.3%)
Absent	239 (63.7%)
Tumor localization (%)	
Right	63 (16.8%)
Left	117 (31.2%)
Rectum	189 (50.4%)
Stage (%)	
1	16 (4.3%)
2	80 (21.3%)
3	130 (34.7%)
4	112 (29.9%)

[OP-030]

EVALUATION OF THE EFFICACY AND SAFETY OF REGORAFENIB IN GERIATRIC METASTATIC COLORECTAL CANCER PATIENTS

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Introduction: Colorectal cancer (CRC) is the third most commonly diagnosed type of cancer in men and the second type of cancer in women. The standard treatment for colorectal cancer is surgery. Systemic treatment options are available in unresectable/metastatic patients. Regorafenib is an orally active inhibitor of angiogenic (including the VEGF receptors (VEGFRs) 1 to 3), stromal, and oncogenic receptor tyrosine kinases. It is used in 2nd line and later in metastatic colorectal cancer(mCRC) patients.

The aim of our study is to retrospectively evaluate the efficacy and tolerability of regorafenib in geriatric mCRC patients.

Materials and Methods: mCRC patients diagnosed between 2015 and 2022 and who were 65 years of age or older while using regorafenib were included in the study. Age, gender, Ecog performance status, date of diagnosis, location of the primary tumor, tumor mutation status, Regorafenib start and discontinuation dates, Regorafenib starting dose, maximum tolerated dose and average used dose were noted. Regorafenib-related toxicities and their grades, and whether treatment was terminated due to toxicity or not were recorded.

Statistical Analysis: All analyzes were performed using the SPSS 23.0 program.In the descriptive statistics of the study, continuous variables were used as mean (standard deviation), and median (range); categorical variables were presented as frequency (percentage).Progression free survival (PFS) was estimated by the Kaplan-Meier method.

Results: The median age of the patients was 71 years. 12 of them were located in the right colon, 22 in the left colon, and 16 in the rectum. 3 of the patients received regorafenib in the 2nd line, 39 in the 3rd line, and 8 in the 4th line.

22 patients started with 80 mg, 17 patients started with 120 mg, and 9 patients started with 160 mg. The median tolerated dose was 120 mg. Treatment was discontinued in 17 patients due

to intolerance. The basic characteristics of the patients are shown in Table-1. Median PFS was 3.1(%95 CI 2.73-3.51) months.

The most common side effect was fatigue (94%). Grade 3-4 fatigue was observed in 10 patients. Grade 3-4 anorexia was observed in 10 patients. Grade 3-4 hand-foot syndrome was observed in 3 patients, grade 3-4 hypertension was observed in 3 patients. Grade 4 proteinuria was observed with treatment in one patient with basal proteinuria. Grade 2 proteinuria developed in 1 patient who did not initially have proteinuria. Grade 3 thrombocytopenia was observed in 3 patients. It is shown in Table-2.

Conclusion: As a result, regorafenib is widely used in second-line and beyond in mCRC patients. It is a treatment that is difficult to tolerate and has a wide side effect profile, and it should be used with caution in the geriatric population. It is important to start with a low dose and increase the dose weekly for tolerability.

Keywords: regorafenib tolerability, regorafenib in geriatric patients, colorectal cancer

Table 1. The basic characteristics of the patients

	N (%):50(100)
Age(median) (min-max)	71(65-83)
Sex	
Female	21(42.0)
Male	29(58.0)
ECOG PS	
0-1	38(76.0)
2	12 (14.0)
Primary Tumor Location	
Right Colon	12(24.0)
Left Colon	22(44.0)
Rectum	16(32.0)
Ras	
Wild	26(52.0)
Mutant	24(48.0)
Line of the Regorafenib	
2	3(6.0)
3	39(78.0)
4	8(16.0)
Regorafenib Initiate dose	
40	2(4.0)
80	22(44.0)
120	17(34.0)
160	9(18.0)
Regorafenib tolerabl dose(median) (min-max)	120(40-160)
Treatment discontinuation due to intolerance	17(34)

ECOG PS: Eastern Cooperative Oncology Group Performans Status

Table 2. Regorafenib related side effects

	Yes	No
Nausea	10(%20)	40(%80)
Grade 1-2	8	
Grade 3-4	2	
Anorexia	30(%60)	20(%40)
Grade 1-2	20	
Grade 3-4	10	
Fatigue	47 (%94)	3(%6)
Grade 1-2	37	
Grade 3-4	10	
Hand foot syndrome	12 (%24)	38(%76)
Grade 1-2	9	
Grade 3-4	3	
Hypertension	8(%16)	42(%84)
Grade 1-2	6	
Grade 3-4	2	
Mucositis	3(%6)	47(%94)
Grade 1-2	2	
Grade 3-4	1	
Proteinuria	2(%4)	48(%96)
Grade 1-2	1	
Grade 3-4	1	
Thrombocytopenia	3(%6)	47(%94)
Grade 1-2	0	
Grade 3-4	3	

[OP-031]

CHARACTERISTICS AND PROGNOSTIC FACTORS OF HEPATITIS B VIRUS ASSOCIATED HEPATOCELLULAR CARCINOMA IN PATIENTS WITH AND WITHOUT CIRRHOSIS

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Objective: This study was aimed to evaluate and compare the factors affecting survival in patients with and without cirrhosis who developed hepatocellular carcinoma (HCC) on the background of hepatitis b virus (HBV).

Materials-Methods: In our retrospective, single-center study, the data of 114 patients who were admitted to our center between January 2012 and January 2021 and who met the inclusion criteria were collected. Factors affecting survival were identified by log-rank and Cox regression analysis. Data of patients with and without cirrhosis were compared.

Results: Patients with and without cirrhosis were compared; 64 (%56,1) patients had cirrhosis and it was associated with reduced survival (17 vs. 34 months, p=0,02). Better survival was observed with increased BMI level in non-cirrhotic HCC (Hazard Ratio: 0,84; p; 0,005) whereas no effect on patients with cirrhotic HCC (Hazard Ratio 0,97, p=0,51). Hypertension rate was high-

er in the non-cirrhotic patient group (%48 vs %20,3, p=0,002) but it was not associated with survival in either group.

Conclusion: Prolonged survival was observed with increased BMI levels in patients with non-cirrhotic HCC, even it was not differ in both groups (p=0,39). Considering the absence of cirrhosis in ~30-50% of HBV-associated HCC cases, further studies are needed for the survival effects of metabolic factors in patients with non-cirrhotic HCC.

Keywords: Hepatitis B virus, Hepatocellular carcinoma, Survival

Table 1. Comparison of clinical features and treatment types between cirrhotic and non-cirrhotic patient and their effects of survival in univariate analysis

Demographics, baseline laboratory parameters, tumor characteristics and treatments	*Cirrhotic group (n=64)*	*Cirrhotic group (n=64)*	*Non-cirrhotic group (n=50)*	*Non-cirrhotic group (n=50)*	*P, distribution*
		P, survival		*P, survival*	
Age (years), median (min-max)	60 (34-70)	0,10	62 (18-79)	0,43	0,47
Gender, male, n (%)	53 (82,8)	0,7	44 (88)	0,27	0,44
Median survival (months), median (min-max)	17 (1-132)		34 (1-131)		0,02
BMI (kg/m2), median (min-max)	25 (16,6-40,4)	0,51	25,7 (17,5-37)	0,005	0,39
BMI (kg/m2), Hazard Ratio	0,9763		0,8441		
Smoking history, n (%)	27 (42,2)	0,71	23 (46)	0,22	0,68
Alcohol history, n (%)	12 (18,8)	0,82	8 (16)	0,89	0,80
Diabetes mellitus, n (%)	19 (29,7)	0,93	19 (38)	0,33	0,35
Hypertension, n (%)	13 (20,3)	0,47	24 (48)	0,15	0,002
Coronary artery disease, n (%)	8 (12,5)	0,48	12 (24)	0,33	0,10
NAFLD, n (%)	5 (7,8)	0,4	5 (10)	0,18	0,74
AFP (ng/mL), median (min-max)	24,8 (2,1-3x105)	<0,001	45,03 (1,9-136.222)	0,01	0,64
Albumin (g/dl), mean (±SD)	3,52 (±0,63)	<0,001	3,86 (±0,48)	0,01	0,002
INR, median (min-max)	1,1 (0,8-9,6)	0,26	1 (0,9-1,9)	0,01	0,001
Total bilirubin (mg/dL), median (min-max)	1,1 (0,3-39)	<0,001	0,8 (0,2-2,7)	0,002	<0,001
ALT (U/L), median (min-max)	47,5 (9-299)	0,51	39,5 (7-179)	0,14	0,14
AST (U/L), median (min-max)	65 (18-533)	<0,001	39,5 (11-203)	0,01	0,005
AST/ALT, median (min-max)	1,3 (0,5-8,4)	<0,001	1,12 (0,36-5,1)	0,17	0,005
GGT (U/L), median (min-max)	133 (23-1164)	0,001	89 (20-668)	<0,001	0,20
ALP (U/L), median (min-max)	163 (49-612)	<0,001	127 (24-892)	<0,001	0,08
Sodium (mEq/L), median (min-max)	137 (120-142)	0,19	137 (125-148)	0,87	0,47
Neutrophil (x103/µL), median (min-max)	Neutrophil (x103/µL), median (min-max)	<0,001	4,9 (1,2-9,8)	0,22	0,001
Lymphocyte (x103/µL), median (min-max)	1,2 (0,5-4,4)	0,82	1,8 (0,5-3,2)	0,94	<0,001
Thrombocyte (x103/µL), median (min-max)	124 (38-388)	0,003	202 (62-501)	0,02	<0,001
Portal vein thrombosis, n (%)	23 (35,9)	<0,001	15 (30)	<0,001	0,50
Number of lesions, median (min-max)	1 (1-21)	0,65	1 (1-19)	0,052	0,26
Largest tumor diameter (cm), median (min-max)	5 (0,9-20,2)	<0,001	6,3 (0,4-28)	0,001	0,6
Infiltrative tumor, n (%)	8 (12,5)	0,02	4 (8)	0,05	0,43
Blurred liver edge, n (%)	54 (84,4)	0,4	24 (48)	0,03	<0,001
Splenomegaly, n (%)	31 (48,4)	0,92	5 (10)	0,73	<0,001
Ascites, n (%)	39 (60,9)	0,005			<0,001
Varices, n (%)	14 (21,9)	0,8			<0,001
Encephalopathy, n (%)	10 (16,7)	0,7			0,002
Child-Pugh Stage, n (%)		<0,001		0,02	0,01
A	40 (62,5)		52 (96,3)		
B	15 (23,4)		2 (3,7)		
C	9 (14,1)				
BCLC Stage, n (%)		<0,001		<0,001	0,03
0	7 (10,9)		6 (12)		
A	5 (7,8)		14 (28)		
B	23 (35,9)		14 (28)		
C	2 (31,3)		13 (26)		
D	9 (14,1)		3 (6)		
Meeting Milan criteria, n (%)	25 (39,1)	0,002	21 (42)	0,009	0,75
Treatment type, n (%)		<0,001		<0,001	0,54
Supportive	12 (18,8)		6 (12)		
Palliative	33 (51,6)		20 (40)		
Curative	19 (29,7)		24 (48)		

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[OP-032]

DUAL INHIBITION OF CXCR4 AND CLAUDIN-18 ISOFORM X1 IN GASTRIC ADENOCARCINOMA: AN IN SILICO STUDY

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Objective: Gastric cancer remains the fourth leading cause of cancer-related mortality worldwide, with adenocarcinomas accounting for over 90% of cases. Despite a global decline in gastric cancer mortality, it persists as a significant public health concern. The high mortality rate, notwithstanding current chemotherapy, immunotherapy, and targeted treatment modalities, necessitates the development of novel therapeutic strategies. This study aims to characterize potential therapeutic agents that simultaneously target two transmembrane proteins critical in tumor progression and metastasis: CXCR4 (CXC Chemokine Receptor 4) and Claudin-18 isoform X1, utilizing in silico methodologies.

Method: The effects of four selective CXCR4 antagonists (IT1t, MSX-122, Burixafor, and Mavorixafor (also known as X4P-001)) on CXCR4 and Claudin-18 isoform X1 were evaluated using high-resolution molecular docking simulations and comprehensive ADMET analyses. Utilizing the X-ray crystallographic structure of CXCR4 (PDB ID: 3ODU, resolution: 2.5 Å) and a homology model of Claudin-18 isoform X1 generated via the I-TASSER algorithm (C-score: 0.68), 100 iterative docking simulations were performed for each ligand. The thermodynamic stability of ligand-protein complexes was quantified by calculating the Gibbs free energy change (ΔG).

Results: Molecular docking analyses revealed that Burixafor exhibited the highest affinity for CXCR4 (ΔG = -9.3 kcal/mol). Burixafor also demonstrated the strongest interaction with Claudin-18 isoform X1 (ΔG = -9.1 kcal/mol). Mavorixafor displayed robust interactions with both CXCR4 (ΔG = -7.3 kcal/mol) and Claudin-18 isoform X1 (ΔG = -8.4 kcal/mol).

In silico ADMET analyses were conducted using physiology-based pharmacokinetic (PBPK) modeling and machine learning-assisted toxicity prediction algorithms. Mavorixafor exhibited an optimal pharmacokinetic profile (cLogP: 2.26, Solubility: -2.26) and low toxicity potential. Its Druglikeness score was determined to be 0.56, with a Drug-Score of 0.72.

Conclusion: This study represents a comprehensive in silico investigation into the simultaneous targeting of CXCR4 and Claudin-18 isoform X1. The data obtained underscore the potential of multimodal targeting strategies in the treatment of gastric adenocarcinoma and demonstrate the efficacy of in silico methods in rational drug design processes. The identification of Burixafor and Mavorixafor as dual-targeted agents establishes a robust molecular foundation for preclinical and clinical studies.

Our research contributes to the development of next-generation therapeutic approaches in the treatment of gastric adenocarcinoma and emphasizes the importance of multimodal targeting strategies in managing complex neoplastic diseases. Future investigations should focus on validating the pharmacodynamic properties and anti-tumoral efficacy of these compounds in in vitro and in vivo models.

Keywords: Gastric Adenocarcinoma, Molecular Docking, In Silico Drug Discovery

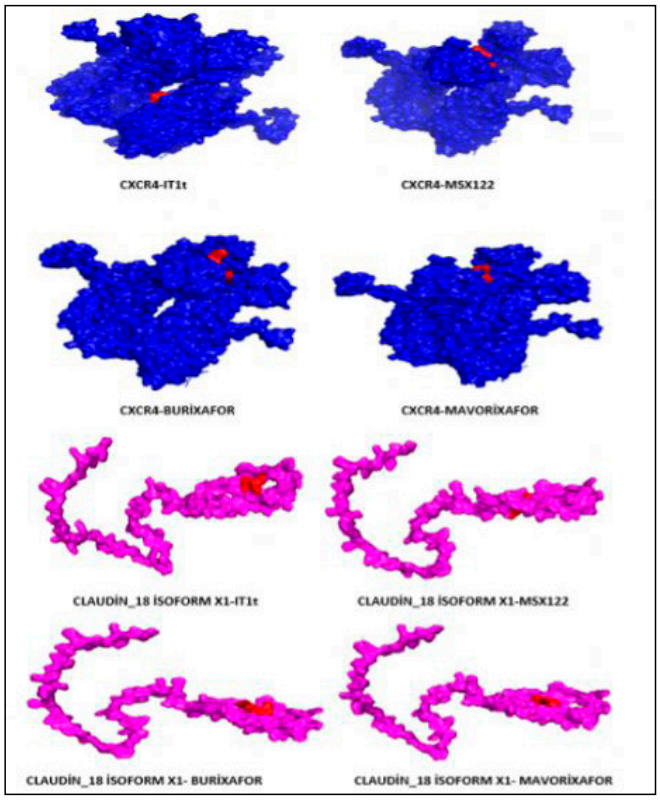

Figure 1. This image presents three-dimensional molecular surface representations showing the interactions of CXCR4 (blue) and Claudin-18 isoform X1 (pink) proteins with four different compounds (IT1t, MSX122, Burixafor, and Mavorixafor). The potential binding sites for each variant are highlighted with small red areas.

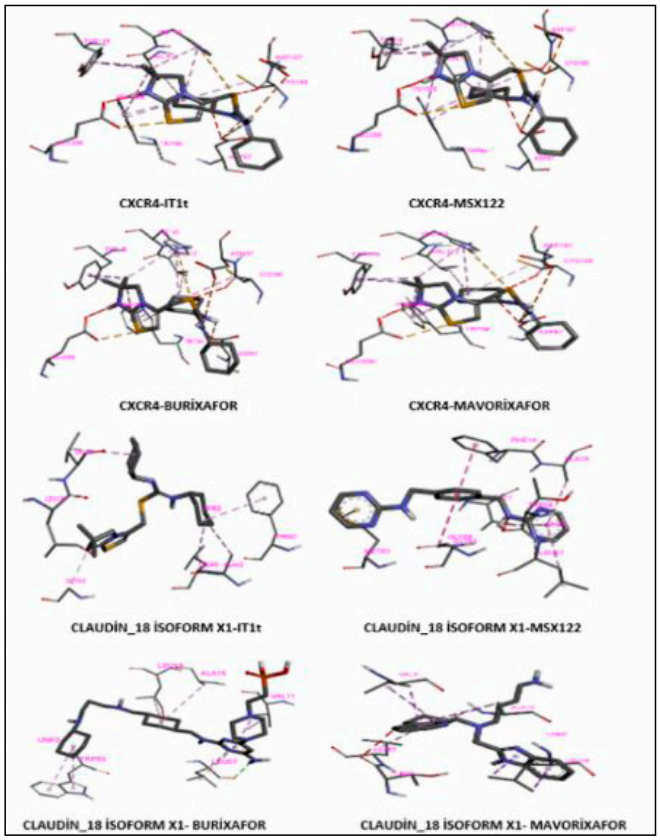

Figure 2. This image presents two-dimensional structural diagrams of the same protein-compound complexes shown in Figure 1. It displays atoms as colored spheres and bonds as lines, while indicating potential hydrogen bonds with dashed lines. The image provides a detailed view of the specific molecular interactions between the proteins and compounds, highlighting key amino acid residues involved in these interactions.

Table 1. Comparison of properties and toxicity risks for IT1t, MSX122, Burixafor, and Mavorixafor compounds.

Compound	*cLogP*	*Solubility*	*Mol. Weight*	*TPSA*	*Druglikeness*	*Drug-Score*
IT1t	4.6	-6.03	406.0	90.59	-3.07	0.23
MSX-122	1.4	-2.92	292.0	75.62	1.73	0.83
BURIXAFOR	-5.09	-3.72	566.0	161.7	-11.3	0.29
MAVORIXAFOR	2.26	-2.26	349.0	70.83	0.56	0.72

[OP-033]

SECOND LINE IRINOTECAN EFFICACY IN PATIENTS WITH EXTENDED STAGE SCLC: OVER 65 YEAR-OLD SINGLE CENTER RETROSPECTIVE DATA

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Background: Small cell lung cancer (SCLC) represents approximately 13–15% of all lung cancer diagnoses and is characterized by rapid proliferation and early metastatic spread. Despite advancements in systemic therapies, the prognosis for SCLC remains poor, with a five-year survival rate of less than 7%. Platinum-etoposide is widely accepted as the first-line treatment, but there is limited data on second-line options, particularly for elderly patients. These patients, who often have comorbidities and reduced functional reserves, are underrepresented in clinical trials, leaving a critical gap in evidence for effective and tolerable therapies. Therefore, we aimed to evaluate the efficacy of second-line irinotecan in elderly patients over 65 years with advanced-stage small cell lung cancer (SCLC).

Material and Methods: This study retrospectively analyzed data from 11 elderly patients (≥65 years) with extensive-stage SCLC treated at Hacettepe University Oncology Institute between 2011 and 2019. Patient records included baseline characteristics, comorbidities, ECOG performance status, metastatic sites, and treatment outcomes.

Results: The median age of the patients was 68 years (range: 67–72), and the majority (10 out of 11) were male. Most patients (83%) had at least one comorbidity, including hypertension, type 2 diabetes mellitus, chronic kidney disease, or chronic obstructive pulmonary disease. ECOG performance status was distributed as follows: three patients had a status of 0, four had 1, and four had 2. All patients had previously received platinum-etoposide as first-line therapy, with a median of 5 cycles (range: 4–6). Median progression-free survival (PFS) was 2.5 months (95% CI: 1.6–3.4) (Figure 1). The median overall survival (OS) from diagnosis was 12.5 months (95% CI: 5.9–18.9) (Figure 2), and OS from the initiation of second-line irinotecan was 4.5 months (95% CI: 0.0–9.2) (Figure 3). Adverse events included grade 2 neutropenia in one patient, grade 2 diarrhea in three patients, and fatigue in six patients (four grade 2 and two grade 1).

Conclusion: Second-line irinotecan showed modest efficacy and an acceptable safety profile in elderly patients with extensive-stage SCLC. While survival outcomes were limited in this small patient cohort, the findings support the feasibility of irinotecan as a second-line therapy in this underrepresented group. Prophylactic use of G-CSF and other supportive care measures could enhance treatment tolerance and outcomes. This study

highlights the need for larger, prospective, randomized trials to validate these findings and improve treatment strategies for elderly SCLC patients.

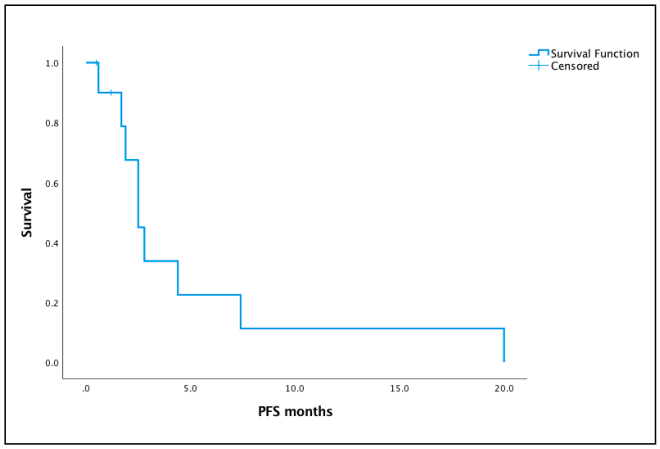

Figure 1. mPFS of the patients received irinotecan as second line.

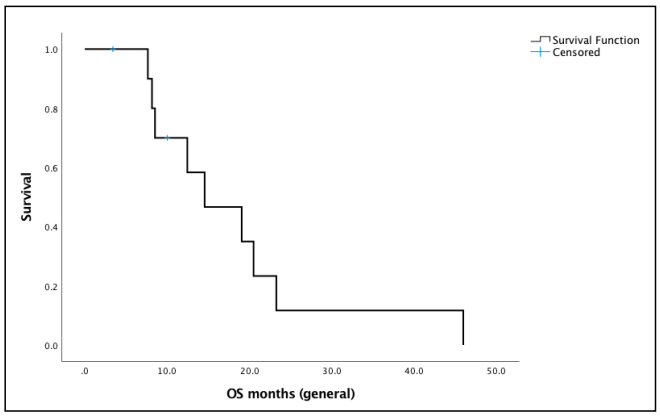

Figure 2. General OS of the patients received irinotecan as second line.

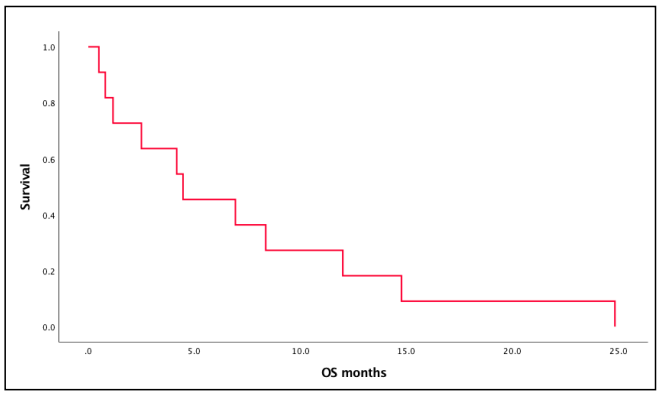

Figure 3. mOS of the patients received irinotecan as second line.

[OP-034]

YOUNG ONSET COLORECTAL CANCER: SINGLE-CENTER EXPERIENCE

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Background: The incidence of young-onset colorectal cancer (yoCRC) is increasing in developed countries. Patients with yoCRC are reported to have more aggressive disease, an advanced stage at diagnosis, and conflicting survival outcomes. This study aimed to analyze the demographics, clinicopathological features, and prognosis of yoCRC.

Methods: The data presented here represent a retrospective analysis of all patients diagnosed with colorectal cancer at the Hacettepe University Cancer Institute between January 2014 and December 2022. Patients below the age of 50 were classified as having a young onset.

Results: A total of 119 patients were identified as having a diagnosis of yoCRC. The median age was 39 years. 61 (51.3%) were male, while 58 (48.7%) were female. 45 patients (37.8%) had rectum cancer. 74 (62.2%) had been diagnosed with colon cancer. Of the patients, 32 (26.8%) were diagnosed at stages 1-2, 41 (34.5%) at stage 3, and 46 (38.7%) at stage 4. Among patients diagnosed at stages 1-2, 96.9% were alive (median not reached; only one patient died), and among those diagnosed at stage 3, 87.8% were alive (median not reached; only five patients died). 3 years of disease-free survival was %25. The median overall survival for patients diagnosed with stage 4 cancer was 28 months.

Conclusions: The prevalence of yoCRC is on the rise, with significant consequences for patients and their families. Introducing early screening programs may help clinicians diagnose patients at an early stage. Further prospective trials are required to identify high-risk patients who may require closer follow-up or protective measures.

Keywords: young onset, colorectal cancer

[OP-035]

OUTCOMES OF CHEMORADIOTHERAPY WITH AND WITHOUT SURGERY IN LOCALLY ADVANCED ESOPHAGEAL CANCER: A RETROSPECTIVE ANALYSIS

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King Hussein Cancer Center, Amman, Jordan

Background: Esophageal cancer is an aggressive malignancy, ranked sixth in mortality worldwide. Treatment involves a multimodal approach, including surgery, chemotherapy, and radiotherapy. For patients with locally advanced disease, neoadjuvant chemoradiotherapy followed by surgery is often the standard of care, supported by the CROSS trial.

However, definitive chemoradiotherapy has emerged as a well-established alternative treatment. Moreover, recent advancements have increased interest in organ preservation strate-

gies, which have been widely successful in rectal cancer and are now being explored in esophageal cancer.

Our retrospective study aims to assess the outcomes of chemoradiotherapy, with or without surgery, in esophageal cancer patients. The primary outcomes include overall survival, progression-free survival, distant-metastasis-free survival, and local control.

Methods: This is a retrospective study that included adult patients (18 years or older) with esophageal cancer and treated with chemoradiotherapy. Patients with metastatic disease or insufficient follow up data after the end of radiotherapy were excluded. OS, PFS, DMFS and LC were estimated from the date of last radiotherapy fraction using Kaplan-Meier curves, and bivariate analysis utilized logrank test. GraphPad Prism version 10.2.2 was used for analysis.

Results: A total of 33 patients with locally advanced esophageal cancer were analyzed, with a median age of 57 years (range 32-83). 25 patients (75.8%) had adenocarcinoma, 7 (21.2%) had squamous cell carcinoma, and 1 (3.0%) had signet ring cell carcinoma. Most tumors were in the lower esophagus (26 patients, 78.8%). 19 patients (57.6%) were node-positive (N+) upon initial staging.

All patients received chemotherapy, concurrently with radiotherapy. Grade 2 or higher toxicity was observed in 13 patients (39.4%). Surgery was performed in 17 patients (51.5%), 3 patients (17.6%) achieved a complete pathological response (pT0N0). Among the 16 patients (48.5%) who did not undergo surgery, 9 (56.3%) were initially planned for definitive non-surgical treatment, 4 (25%) refused surgery, 2 (12.5%) were unfit for surgery after neoadjuvant treatment, and 1 (6.3%) experienced early disease progression.

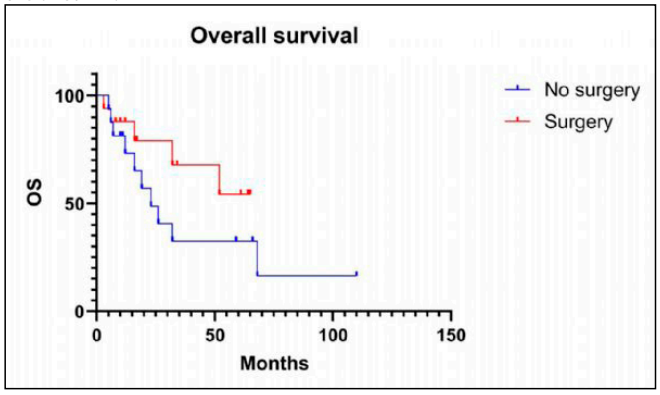
At a median follow-up of 61 months, the 2- and 4-year OS rates were 62.3% and 42.9%, respectively. The 2- and 4-year PFS rates were 45.3% and 30.2%, while the 2- and 4-year DMFS rates were 44.5% and 29.7%. Local control at 2 and 4 years was 79.3% and 70.5%, respectively.

No significant differences were observed in OS, PFS, DMFS, or LC between the surgical and non-surgical groups ($p > 0.05$).

Conclusion: A careful selection of nonsurgical paradigm of treatment seems not to confer detrimental effects on treatment outcomes. These findings suggest that an organ preservation approach may be a viable option for selected patients, though further studies are needed to define patient selection criteria and optimize treatment strategies.

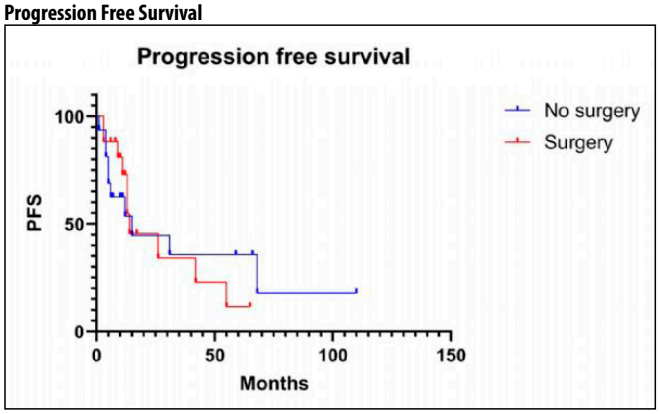
Keywords: Chemoradiotherapy, Neoadjuvant, esophageal cancer

Overall Survival



No significant difference was observed in OS between the two paradigm approach

Progression Free Survival



No significant differences were observed between the surgical and non-surgical groups ($p > 0.05$).

[OP-036]

OPTIMIZING BOWEL PREPARATION AND RADIOTHERAPY IN GASTROINTESTINAL TUMORS

Shatha Mahmoud Elayan

King Hussien Cancer center

Bowel preparation is crucial for the efficacy and safety of radiotherapy in gastrointestinal tumors. Proper preparation reduces radiotherapy-related toxicities and enhances tumor visibility, contributing to improved patient outcomes. Neoadjuvant chemoradiotherapy is frequently employed for rectal cancer, where adequate bowel preparation prior to surgery, coupled with advanced techniques such as intensity-modulated radiotherapy (IMRT), facilitates effective pelvic disease management and minimizes late gastrointestinal toxicity. An important advancement in this field, Total Neoadjuvant Treatment (TNT), integrates chemotherapy and radiotherapy to enhance pathologic complete response rates, potentially allowing for avoidance of surgery.

Despite these advancements, significant risks of bowel dysfunction persist, including chronic diarrhea, fecal incontinence, rectal bleeding, and bowel obstruction. Recent studies underscore the necessity for individualized treatment plans to mitigate radiation toxicity, particularly in the elderly, who are at higher risk for complications.

Effective bowel preparation is essential for reducing radiation exposure to healthy tissues. Research into optimal preparation protocols—dietary modifications, laxatives, and enemas—focuses on achieving effective tumor targeting while minimizing acute and long-term toxicities. For instance, preoperative IMRT combined with bowel preparation has demonstrated reduced gastrointestinal toxicity without compromising efficacy. Furthermore, studies indicate that incorporating bowel preparation into chemoradiation protocols enhances local control and overall survival.

Individual patient factors, including tumor location, bowel function, and age, are critical for minimizing adverse effects associated with bowel preparation, particularly in older adults. Emerging research on non-invasive imaging techniques may enable real-time monitoring of bowel conditions, facilitating more adaptive preparation strategies during treatment.

This review identifies and evaluates interventions that enhance bowel preparation during radiotherapy for gastrointestinal tumors. It analyzes recent studies on various methodologies—dietary changes, laxatives, and enemas—and their implications for

treatment outcomes. Key factors such as tumor location, bowel function, and patient age will be examined for their relevance to the effectiveness of bowel preparation. Only studies from the past decade will be included, sourced from databases like PubMed, MEDLINE, and the Cochrane Library.

Nurses play a pivotal role in educating patients about bowel preparation and implementing tailored protocols. By remaining informed about recent advancements, nurses can help reduce radiation toxicity, optimize patient outcomes, and improve the quality of life for individuals undergoing radiotherapy for gastrointestinal tumors.

Keywords: Bowel preparation, radiotherapy, gastrointestinal tumors

[OP-037]

ASSESSING THE IMPACT OF REGORAFENIB MONOTHERAPY ON METASTATIC COLORECTAL CARCINOMA PATIENTS: A SINGLE-CENTER STUDY

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Bakırköy Dr. Sadi Konuk Training and Research Hospital, Medical Oncology

Aim: Single-agent regorafenib treatment can be given to patients diagnosed with metastatic colorectal carcinoma (mCRC) when chemotherapy (CTx) options have been exhausted. Regorafenib is an oral multitarget kinase inhibitor with single-agent activity on mCRC. The main issue in regorafenib use is the higher frequency of adverse events and intolerance due to treatment. In this study, we aimed to evaluate our patients' regorafenib use and drug tolerance, efficacy, and safety.

Results: Among the patients who were followed up in our clinic with the diagnosis of mCRC and received two series of CTx and targeted therapy appropriate for cancer biology, 24 patients planned to receive regorafenib treatment as the third series of treatment. The median age of the patients was 57 (42-74), 16 (67%) were male and 8 (33%) were female. At the end of the average follow-up of 30 months, 6 (25%) of the patients were alive, and 18 (75%) were dead. In 11 (46%) of the patients, the primary tumor was located in the right colon, and in 13 (54%), the primary tumor was located in the left colon. Nine patients were KRAS mutants, and one patient was a BRAF mutant. In the first series of treatment of metastatic patients, all patients received oxaliplatin-based CTx, while 10 (42%) patients received anti-VEGFR (bevacizumab), and 11 (46%) patients received anti-EGFR (cetuximab or panitumumab). Upon progression, 12 patients received bevacizumab, and three received aflibercept (anti-VEGFR) in addition to irinotecan-based CTx in the second series of CTx. All patients were started on regorafenib in the 3rd line of treatment. The dose was started at 80 mg/day, and the dose was escalated to 160 mg/day. While no patients could tolerate 160 mg/day regorafenib, 6 (25%) of the patients received 80 mg/day, and 18 (75%) received 120 mg/day regorafenib. The mean survival time of the patients was 36.2 months, and the median survival time was 31 (9-125) months. Regorafenib showed a median overall survival of 4.1 months. The most common side effects were fatigue and loss of appetite (n: 15, 63%). Anemia was detected in 10, widespread skin reactions in 8, diarrhea in 8, hypertension in 6, gastrointestinal bleeding in 4, hand-foot syndrome in 7, and increased liver enzymes and bilirubin levels in 6 patients.

Conclusion: After two series of chemotherapy, treatment options for mCRC patients are limited. Regorafenib, an oral tyrosine cherry inhibitor, has shown benefits in studies, with a median 6.4 months survival benefit. However, there was little objective antitumor response. Our study's findings on regorafenib's overall survival contribution were consistent with the literature (4.1 months). Multicenter studies are needed to strengthen treatment options and manage the side effect profile in this patient group.

Keywords: regorafenib, colorectal cancer, overall survival

Table 1. General characteristic of patients

Variables	*n(%)*
Median age	57(range 42-74)
Gender	
Male	16(67%)
Female	8(33%)
Tumour side	
Left side	13(54%)
Right side	11(46%)
Mutation analyses	
RAS mutant	9 (38%)
BRAF mutant	1 (4%)
MSI status	
MSI-S	21 (87%)
MSI-H	3 (13%)
TNM staging at diagnosis	
2	5 (21%)
3	7 (29%)
4	12 (50%)
Metastatic first Line Treatment	
FOLFOX/XELOX	3 (13%)
FOLFOX/XELOX+ bevacizumab	10 (41%)
FOLFOX/XELOX+ cetuksimab	8 (33%)
FOLFOX/XELOX+ panitumumab	3 (13%)
Metastatic Second Line Treatment	
FOLFİRİ	9 (39%)
FOLFİRİ+bevacizumab	12 (48%)
FOLFİRİ+aflibercept	3 (13%)
Regorafenib dose	
80 mg/day	6 (25%)
120 mg/day	18 (75%)
160 mg/day	0

Table 2. Toxicities with regorafenib treatment

	Grade 1-2(n)	*Grade 3-4(n)*
Fatique	10	5
Loss of appetite	12	3
Anemia	8	2
Neutropenia	4	2
Thrombocytopenia	5	3
Diarrhea	7	1
Skin reaction	4	4
Hand foot syndrome	6	1
Gastrointestinal bleeding	3	1
Increased liver enzymes or bilirubin	3	3

[OP-038]

MORPHOLOGICAL SUBTYPES TEND NOT TO BE REPRESENTED IN REPORTS OF NEEDLE BIOPSIES WITH HEPATOCELLULAR CARCINOMA

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As many cases of hepatocellular carcinoma (HCC) can be diagnosed, treated and followed up without histological diagnostic confirmation, the spectrum of the needle biopsies of HCC the pathology departments receive may not represent the full spectrum of the disease. Personalized/targeted therapies and relevant biomarkers for HCC are lacking; archival needle biopsy tissues need to be utilized.

The present study aimed to compare the distribution of HCC subtypes seen in a set of consecutive HCC needle biopsies to the generally known distribution of HCC subtypes to decide whether needle biopsies were informative and whether they were enriched for a specific subtype or not. Between 01.01.2020 and 23.04.2024, 39 liver biopsy reports of adult patients with HCC in a tertiary health center (university hospital) were assessed.

Mean age was 65,69 (26-78), the background liver status was available in 4 cases (2 with developing cirrhosis-incomplete nodulation, one with HBV-related chronic hepatitis, one with sinusoidal dilatation). Six cases (15,4%) were well differentiated, 2 cases (%5,1) were fibrolamellar carcinoma, 2 cases (%5,1) displayed treatment related changes (ablation and Yttrium spherules), 1 was steatohepatitic and 1 was high-grade (III / IV) (%2,6 each). The rest of the cases (n=27, 69,2%) had no specific subtype or distinguishing feature.

Majority of HCC diagnoses in needle biopsies had no specific subtype or grade (n=27, 69,2%). HCCs in needle biopsies tended to be enriched for fibrolamellar carcinoma (5% in the needle biopsy group vs 1% in the general population). The steatohepatitic subtype may be underrepresented (5% in the needle biopsy group vs 5-20% in the general population). Tissue biomarker studies need to be arranged in a way that covers the discrepancies. Pathologists may need to provide more detailed information for prognostication as the value of morphomolecular entities increase.

Keywords: hepatocellular carcinoma, morphological subtype

[OP-039]

EVALUATING THE EFFICACY OF SBRT FOR OLIGOMETASTATIC AND OLIGOPROGRESSIVE GASTROINTESTINAL CANCERS: A RETROSPECTIVE STUDY

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Background: Gastrointestinal (GI) cancers are prevalent worldwide, significantly impacting healthcare systems due to the extensive need for systemic treatments, especially as disease progression necessitates advanced therapeutic lines. In developing countries with limited resources, assessing the ability of Stereotactic Body Radiation Therapy (SBRT) to delay changes in systemic treatments is crucial.

Methods: This retrospective study includes all patients with GI cancers treated with SBRT for oligometastatic or oligoprogressive disease. Primary endpoints are overall survival (OS), progression-free survival (PFS), local control (LC), and freedom from introduction or switching of systemic treatment (FISST), defined as the duration from the last SBRT fraction to the initiation or alteration of systemic treatment. Patients deemed unfit for subsequent treatment lines were also considered as "events".

Results: From 2019 to 2023, 67 patients with oligometastatic or oligoprogressive GI cancers were treated with SBRT to 82 lesions. Median age was 61 (22 to 86). 37 patients (55.2%) were males, and 30 (44.8%) were females. 61 patients (91.0%) had colorectal cancer, 3 patients (4.5%) had gastric cancer, and 3 patients (4.5%) had pancreatic cancer. All were adenocarcinomas, except for two patients who had neuroendocrine histology. 18 patients (26.9%) had de novo metastatic oligometastatic cancers.

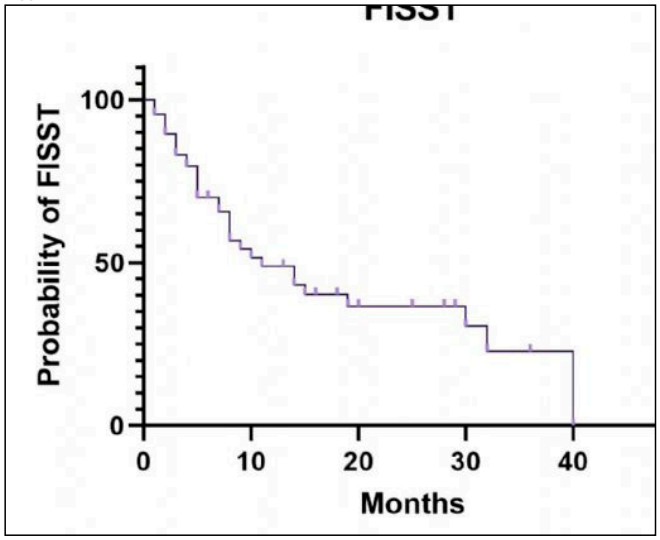
Median number of treated lesions per patient was one. A single lesion was treated in 56 patients (83.6%), two lesions in 9 patients (13.4%), 3 lesions in 1 patient (1.5%), and 4 lesions in 1 patient (1.5%). Lesions treated with SBRT were in liver (37 lesions, 45.1%), lung (20 lesions, 24.4%), lymph nodes (12 lesions, 14.6%), bone (11 lesions, 13.4%), adrenal gland (one lesion, 1.2%), and as an abdominal mass (one lesion, 1.2%). SBRT dose ranged from 18 Gy to 60 Gy, over a number of fractions ranging from 2 to 8. The mean biologically effective dose (BED10) was 90.23 Gy, with a standard deviation of 28.84 Gy.

After a median follow-up of 16 months, a complete response was observed in 30 lesions (36.6%), partial response in 46 lesions (56.1%), and no response in six lesions (7.3%). 15 lesions (18.3%) in 12 patients (17.9%) progressed locally. LC at one year was 84.7%. FISST at one year was 48.9%. PFS was 47.1%, and OS was 79.7%. The log-rank test for BED10 and local control yielded a p-value of 0.7529, indicating no significant difference between patients treated with BED10 <=100 Gy and those with BED10 >100 Gy. Two patients developed CTCAE grade 2 toxicity (duodenitis and nausea), with no grade 3 or higher toxicity recorded.

Conclusion: These findings suggest SBRT may delay the need for systemic treatment changes with an excellent toxicity profile, providing critical benefits for patients and healthcare systems, especially in resource-limited settings.

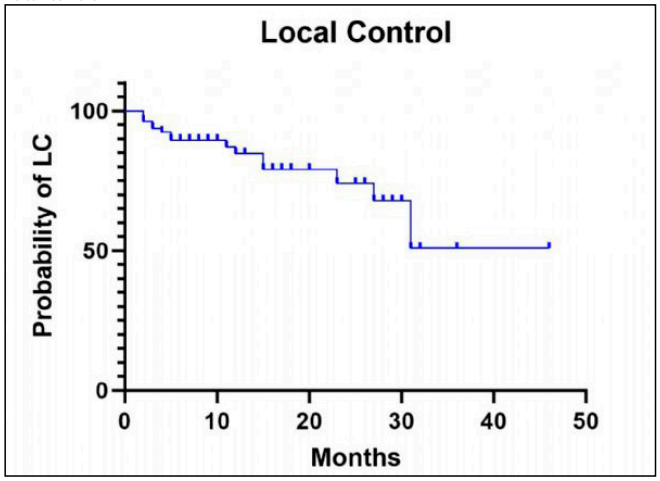
Keywords: Stereotactic Body Radiation Therapy (SBRT), Oligometastatic disease, Oligoprogressive disease

FISST



Kaplan-Meier curve showing FISST. FISST at one year was 48.9%.

Local control



Kaplan-Meier curve showing LC of lesions treated with SBRT. LC at one year was 84.7%.

OP-040

SEXUAL DYSFUNCTION AND QUALITY OF LIFE IN RECTAL CANCER: A COMPREHENSIVE COHORT STUDY

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Background: Rectal cancer, a prevalent malignancy worldwide, has seen significant advancements in treatment over the past two decades, leading to improved survival rates. However, the long-term effects of treatment on quality of life (QoL), particularly sexual dysfunction, remain underexplored. Addressing these concerns is essential for improving survivorship care.

Objective: This study aimed to evaluate QoL and sexual dysfunction in rectal cancer patients using validated assessment tools, including the EORTC QLQ-C30, EORTC QLQ-CR29, and the Golombok-Rust Inventory of Sexual Satisfaction (GRISS).

Methods: A retrospective cohort study was conducted at Hacettepe Oncology Institute, involving 83 patients with non-metastatic and metastatic rectal cancer. Participants completed QoL and sexual satisfaction questionnaires at least one month post-treatment. Statistical analyses included correlation studies, Mann-Whitney U tests, and descriptive evaluations.

Results: The mean age of participants was 55.95 years, with 79.5% under 65 years and 54.2% male. Significant correlations were observed between physical symptoms such as fatigue, appetite loss, and constipation with reduced sexual satisfaction scores. Stoma presence was associated with lower emotional and role function, poor body image, and increased sexual dysfunction. Metastatic patients exhibited worse general health and higher symptom burdens. Gender-specific variations highlighted distinct sexual health challenges for males and females.

Conclusion: This study underscores the profound impact of rectal cancer treatment on QoL and sexual health, particularly in patients with stomas and metastatic disease. Comprehensive survivorship care strategies, including tailored psychosocial support and sexual health interventions, are essential to enhance patient outcomes. Future research should focus on developing innovative diagnostic and rehabilitation tools to address these unmet needs.

POSTER PRESENTATIONS

[PP-001]

IMPACT OF ETHNICITY ON MOLECULAR MARKERS AND PROGNOSIS IN GASTRIC CANCER: A RETROSPECTIVE STUDY FROM A SINGLE ONCOLOGY CENTER

Majd Aldwairi, Ahmed Abdalhadi, Mohamed Sir Elkhatim, Mai Mostafa, Allhan Jama, Hind Habish, Kakil Rasul, Salha Bujassoum, Alaaeldin Shablak and regarding her affiliation its the same as the rest of the authors

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Background: gastric cancer remains one of the most common and deadly neoplasms worldwide, According to GLOBOCAN 2022 data, Gastric cancer has the 5th highest incidence among cancers, and it is the 5th leading cause of cancer deaths worldwide(1). It was found that Ethnicity is associated with differences in clinical presentation and outcome of patients with gastric cancer(2) many factors impacts management and prognosis of gastric cancer patients include MSI, HER2 and PDL1. MSI high status is estimated to be at 5-22% of gastric cancer cases(3), the frequency of HER2 in gastric and gastroesophageal cancer ranges from 4.4% to 53.4%, with a mean of 17.9 %(4) PD-L1 expression, is reported to be elevated in up to 40% to 65% of gastric cancer(5,6).

Data concerning possible correlation between ethnicity and the forementioned molecular markers among various ethnic groups in the middle east is limited, the aim of this study is to identify the presence of these markers in these ethnic groups and highlight the differences between them

Objectives: Compare prevalence of Her2, PDL1, MMR def among various ethnic groups in Qatar -demonstrate characteristics of gastric cancer patients in Qatar -explore overall survival rates among the different ethnic groups

Methods: Data of patients who were diagnosed with gastric cancer between 2014 and 2022 and treated at the National center for cancer care and research (NCCCR), Doha, Qatar were retrospectively retrieved form the hospital's electronic medical records and analyzed, patients had assessment of MSI, PD-L1, and HER2 status by IHC method

Results: 223 patients with gastric cancer were reviewed, median age was 53 (27-89), 70 % were males, 59% had poorly differentiated adenocarcinoma, stage 4 patients constituted 60% and stage 3 were 22% (Table1), largest ethnic group was Arab at 45% (n=101) followed by south east Asian group 38% (n=85), remainder were of various ethnic backgrounds.

Among Arabs MSI-H status was found to be at 17% compared to 0% in south east Asians (figure-1), PD-L1 CPS >/= 1 was noted in 78% of the Arab patients, while in south east asians 70% (figure-2), HER2 overexpression in Arab population was 11% and slightly higher frequency was noted in south east Asian population (15%)

Median overall survival (mOS) was 21 months for Arabs, 20 months for South east Asians, and 12 months for other ethnicities, however was not statistically (P=0.32) significant, mOS was calculated for stage 4 patients as follows: 12 months for Arabs, 9 months for South east Asians, and for other ethnicities was 7 months with P value of 0.4

Conclusion: MSI-H status in Arab population was within the known reported rate, however no MSI-H seen among south east Asian population, HER2 status was comparable among the 2 major groups, PD-L1 was higher in the Arabs. MOS was numerically higher in the Arab patients but not statistically significant, more studies are required to further delineate the differences between ethnic groups.

Keywords: Gastric cancer, ethnicity

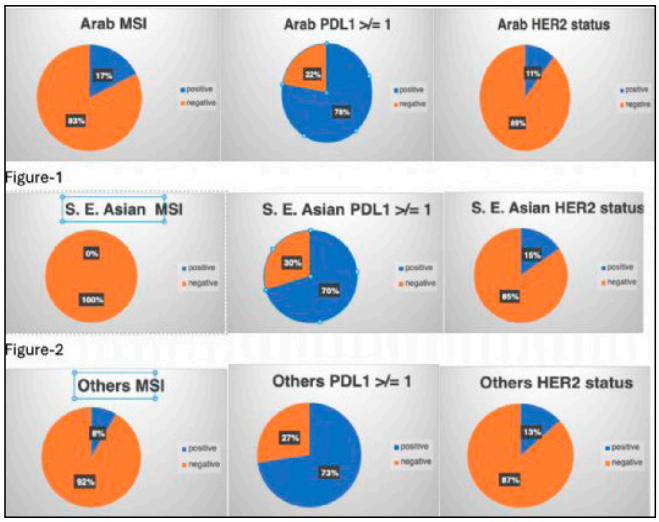

Figure 1. Prevalence of molecular markers among ethnic groups

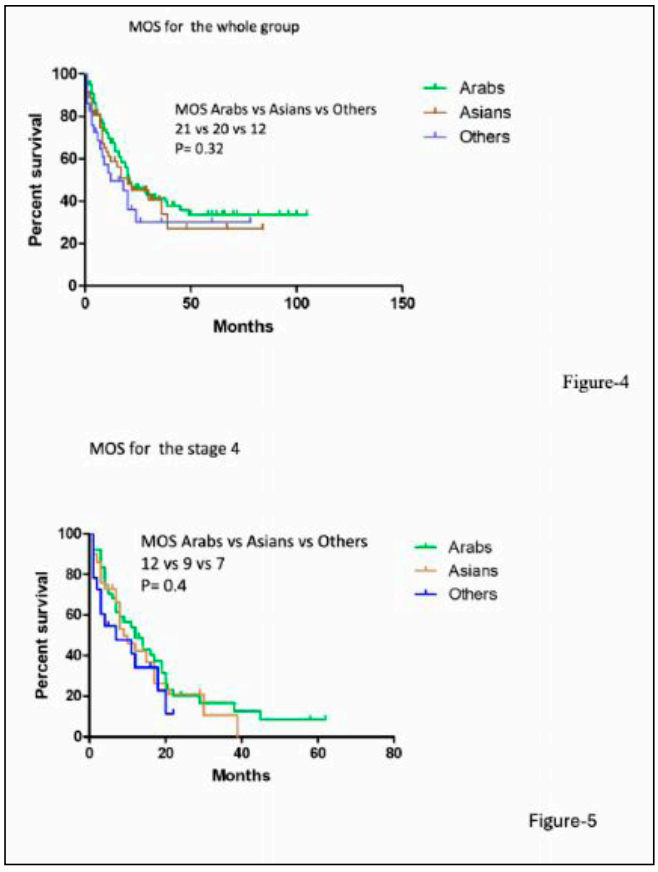

Figure 2. Median overall survival

[PP-002]

ALBUMIN-BILIRUBIN (ALBI) AND PLATELET-ALBI (PALBI) SCORES: DO THEY HAVE ANY PROGNOSTIC ROLES IN CHOLANGIOCELLULAR CARCINOMA?

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Background: Cholangiocellular carcinoma (CCA) is the second most common liver malignancy with poor prognosis. Prognostic factors are not well-documented in CCA. Prognostic value of Albumin-Bilirubin (ALBI) and Platelet-ALBI (PALBI) grading scores were evaluated in HCC previously, however it is not so clear in CCA. Therefore, we aimed to evaluate the prognostic significance of ALBI & PALBI scores in CCA.

Methods: 184 CCA patients followed-up at our center between 2007 & 2024 were evaluated retrospectively. Formulas were as (log10 bilirubin [μmol/L] x 0.66) + (albumin [g/L] x-0.0852) % for ALBI score and (2.02 x log10 bilirubin – 0.37 x (log10 bilirubin)2-0.04 x albumin -3.48 x log10 platelets (1000/μL) + 1.01 x (log10 plateletes) for PALBI score. ALBI scores were graded as ALBI grade 1 (<-2.60), grade 2 [>-2.6 to <-1.39)] & grade 3 (> -1.39). PALBI was graded as grade A1 (< -2.53), A2 (> -2.53 to <-2.09) & A3 (> -2.09).

Results: Male-to-female ratio was 0.8 (82/102). Median age was 64 years. Tumor localizations were as follows: gall bladder (GB, 47.3%), extrahepatic bile duct (EBD, 24.5%) & intrahepatic bile duct (IBD, 28.3%). Median follow-up was 10 months. Median OS were as 34.9 months for GB, 22.3 months for EBD & 12,1 months for IBD CCA. Patients with IBD CCA had significantly shorter OS (p = 0.001). There was no difference for OS between EBD & GB CCA (p = 0.662).Patients with lower score grades (i.e. ALBI grade 1 & PALBI grade A1) had significantly better OS (p= 0.001, p= 0.037). Median OS were as 17, 8 & 2 months for ALBI grade 1, 2 & 3, respectively. It was 13, 11 & 8 months for PALBI grades A1, A2 & A3, as well.

Conclusion: We consider that ALBI and PALBI grading systems have prognostic significance in CCA. However, we need prospective trials to clear their prognostic, almost predictive roles in CCA.

Keywords: ALBİ, PALBİ, Cholangiocellular Carcinoma

Correlation Between ALBI/PALBI Scores and Overall Survival

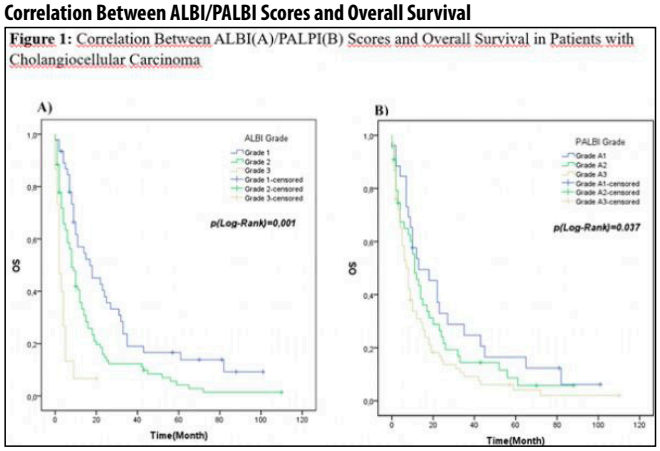

Figure 1: Correlation Between ALBI(A)/PALPI(B) Scores and Overall Survival in Patients with Cholangiocellular Carcinoma

[PP-003]

IMMUNOTHERAPY MAY IMPROVE THE OVERALL SURVIVAL OF METASTATIC HER2-LOW GASTRIC ADENOCARCINOMA PATIENTS. A RETROSPECTIVE ANALYSIS FROM A SINGLE INSTITUTE

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National Center for Cancer Care and Research (NCCCR), Hamad medical corporation (HMC), Doha, Qatar

Introduction: Gastric cancer (GC) represents one of the most frequent and major causes of cancer-related death worldwide. Human epidermal growth factor receptor 2 (HER2) has been implicated in several cancers, including GC. Currently, target therapies against HER2 receptor are well established in HRE2 positive GC. Yet, the role and treatment implications of the HER2/neu low receptor status, detected by immunohistochemistry (IHC), remain undefined.

Aim of the study: This study aims to synthesize available knowledge on HER2/neu low receptor status in GC, its prevalence, and its impact on prognosis and treatment.

Materials-Methods: We analyzed 191 GC patients treated at the National Center for Cancer Care and Research in Qatar between November 2014 and December 2021 and divided them into HER2 positive, HER2 low, and HER2 negative. Assessment of HER2 expression by IHC and FISH was done. Extracted clinical characteristics included age, gender, ECOG performance status, tumor differentiation, TNM stage, PDL1 status, and MMR deficiency. Overall survival was established as the primary objective, with follow-up up to January 2024.

Results: The median age was 52 years for the HER2-positive and HER2-negative groups, while it was 51 years for the HER2-low group. All groups had a male predominance: HER2-positive, 75%; HER2-low, 79%; HER2-negative, 63%. Adenocarcinoma was the predominant type in HER2-positive, 93%; HER2-low, 95%; and HER2-negative, 91%. Diffuse and signet ring cell were more common in HER2-low, 60%, and HER2-negative, 68%, groups compared to HER2-positive, 32%. HER2-positive had the highest stage IV diagnosis at 79%, followed by HER2-negative at 58%, and HER2-low at 21%. PDL1 positivity was highest in the HER2-low group at 40%. MMR deficiency was low across all groups: it was highest in HER2-negative at 7%. Immunotherapy was given to 23% of HER2-low and 26% of HER2-negative patients but only 7% of HER2-positive patients. There were no significant differences in survival rates between groups: HER2-positive, 20 months; HER2-low, 22 months; and HER2-negative, 17 months. In the HER2-low patients who have had prior immunotherapy, there is improved survival at 17 months versus 8 months, p = 0.04, while for HER2-negative patients, no survival advantage has been seen with immunotherapy.

Conclusion: Our findings on the clinical pathologic differences among patients with GC are compared in the context of HER2 status. However, low HER2 expression in these patients is an indicator of promising immunotherapy strategies and calls for personalized therapeutic plans in GC management.

Keywords: Gastric cancer, HER2 low, Immunotherapy

[PP-004]

UNLOCKING INSIGHTS INTO PANCREATIC CANCER: A LONGITUDINAL OBSERVATIONAL CLINICAL STUDY

Mohammad Awad[1], Ofer Purim[1], Amir Dagan[2], Menaham Ben Haim[2], Michael Neomann[2], Frida Argaman[1], Lea Taieb[2], Nir Peled[1], Laila Roisman[1]

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Introduction: Pancreatic ductal adenocarcinoma (PDAC) presents a significant clinical challenge, characterized by its aggressive nature and poor prognosis. Despite advances in surgical techniques and systemic therapies, the 5-year survival rate remains below 10%, with high recurrence rates even following curative-intent resection. Exosomes, nanoscale extracellular vesicles comprising a lipid bilayer encapsulating proteins and nucleic acids, have emerged as potential biomarkers for various malignancies. This longitudinal study aims to elucidate the temporal dynamics of exosomal protein profiles in PDAC patients from initial diagnosis through treatment and follow-up. By employing high-resolution mass spectrometry and advanced bioinformatics, we seek to develop a non-invasive, exosome-based liquid biopsy platform for real-time monitoring of disease progression and early detection of recurrence in PDAC.

Trial design: This pilot observational, longitudinal, prospective study aims to enrol 40 patients with confirmed potentially resectable pancreatic ductal adenocarcinoma (PDAC), divided into two cohorts of 20 patients each. Cohort A will undergo upfront surgery followed by adjuvant therapy, while Cohort B will receive neoadjuvant therapy prior to surgery. The study will span 60 months, with a primary focus on exosomal analysis. To date, 9 patients have been enrolled in Cohort A and 3 patients in Cohort B.

Blood samples will be collected at multiple time points: baseline (pre-treatment), during treatment, and at specified follow-up intervals (Figure 1). Exosomes will be isolated from plasma using established protocols. Exosomal protein profiles will be analyzed using high-resolution mass spectrometry.

The primary objective is to evaluate the longitudinal correlation between exosomal protein profiles and clinical outcomes, including overall survival, disease-free survival, and treatment response. Statistical techniques, such as Cox regression and Kaplan-Meier analysis, will be employed to assess these correlations.

Exosomal proteomics data will be analyzed using bioinformatics approaches to identify potential biomarkers and signature patterns associated with disease progression and treatment response. Temporal changes in exosomal protein composition will be mapped against clinical milestones to elucidate the dynamic nature of PDAC progression and potential mechanisms of treatment resistance or recurrence.

This pilot study aims to provide preliminary insights into the utility of exosomal protein profiling as a non-invasive, real-time monitoring tool for PDAC patients, potentially informing personalized treatment strategies and improving early detection of recurrence. Results will be used to refine protocols and power calculations for a larger, definitive study.

Clinical trial identification: 0285-23-SZMC Legal entity responsible for the study: Shaare Zedek Medical Center

Keywords: pancreatic duct adenocarcinoma, exosomes, biomarker

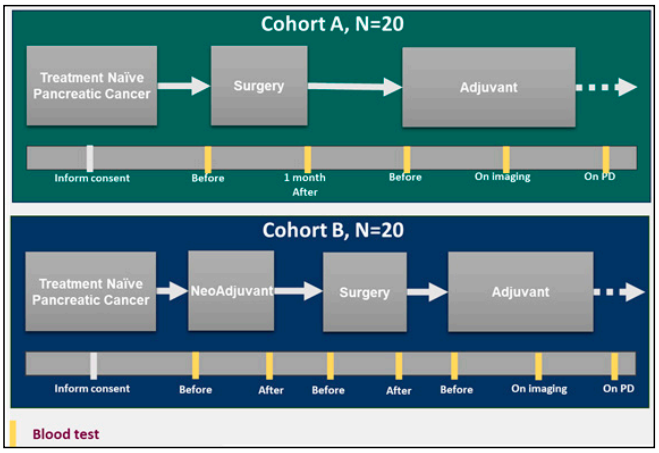


Figure 1. Trial design

[PP-005]

ARE NLR AND ALBUMIN COMBINATION SCORES ASSOCIATED WITH SURVIVAL IN STAGE II COLORECTAL CANCER?

Baris Koksal, Hasan Cagrı Yildirim, Suayib Yalcin

Hacettepe University

Background: Neutrophil lymphocyte ratio (NLR) and albumin are well-known for their prognostic factors in several cancer types. This study will evaluate whether NLR and albumin combination scores affect early colorectal cancer survival.

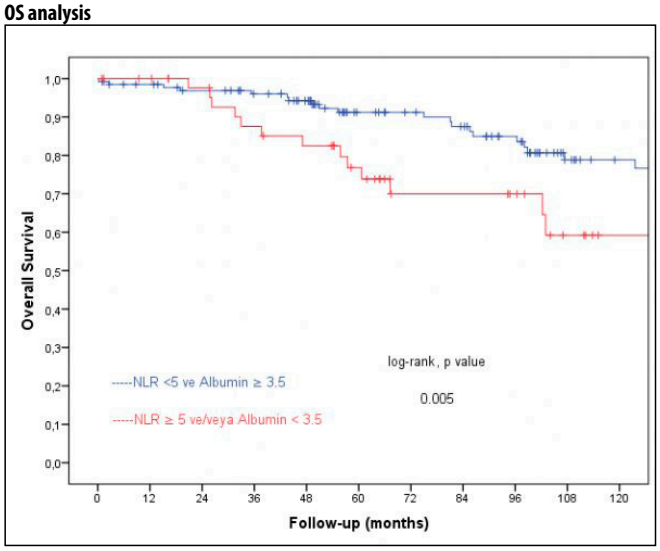
Method: The study included 179 adults with stage II colorectal cancer. Based on past research, the NLR limit was determined at 5, and the albumin limit was 3.5 mg/dl. Patients were classified into two groups based on their NLR and Albumin values: the first group: NLR<5 and Albumin>=3.5 mg/dl, and the second group: NLR>=5 and/or Albumin<3.5 mg/dl. The association between NLR and Albumin combined score and survival was evaluated with univariate and multivariate analysis. Subgroup analyses were conducted according to receipt of adjuvant chemotherapy (chemotherapy or no chemotherapy).

Results: The patients' mean age was 60.97 ± 11.53, and 67% were male. The first group (NLR<5 and Albumin>=3.5 mg/dl) includes 73.5 percent of the patients. In univariate Cox regression analysis, a statistically significant difference was found between NLR and Albumin combined score and OS (mOS: NR vs. 159.80 m, HR:0.38 (CI 95%: 0.19-0.75), p=0.005, first and second group, respectively) and PFS (mPFS:168.76 m vs. 102.30 m, HR:0.38 (CI 95%:0.20-0.72), p=0.003, first and second, respectively). The combined score of NLR and albumin was associated with survival in patients who did not receive chemotherapy (mOS: NR vs. NR, HR:0.35 (CI95%: 0.12-0.96), p=0.042; mPFS:119.70 m vs. 37.63 m, HR:0.27 (CI 95%:0.09-0.76), p=0.013, first and second group, respectively) but there was no statistically significant difference in patients who did.

Conclusion: We demonstrated that the combined NLR and albumin score predict the prognosis of individuals with early colorectal cancer. We think that more extensive research will show the predictive significance of NLR and albumin score in this group of non-treated patients.

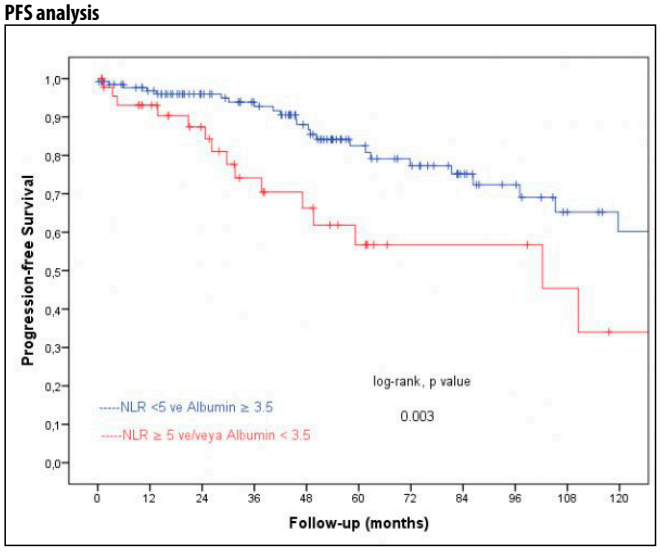
Keywords: NLR and albumin combination score, colorectal cancer

OS analysis



2- OS analysis

PFS analysis



1. PFS analysis

[PP-006]

COMPLETE RESPONSE TO ENTRECTINIB IN A PATIENT WITH MALIGNANT MESENCHYMAL TUMOR PROGRESSING AFTER CONVENTIONAL CHEMOTHERAPY: CASE REPORT

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Introduction: Fusions involving NTRK (Neurotrophic Tyrosine Receptor Kinase) 1, NTRK 2, or NTRK 3 are the most common mechanisms of oncogenic TRK activation[1]. NTRK fusions have recently been described in rare mesenchymal tumors observed in a number of soft tissue and visceral sites in adults and children[2, 3]. Here, we present our case in which we observed a complete response following treatment with the NTRK inhibitor entrectinib.

Case Presentation: A 17-year-old male patient presented with abdominal pain and changes in bowel habits to an external center. He had no known comorbidities and, during a rectosigmoidoscopy performed in September 2019, rectal hemorrhoidal packs were detected. An excisional biopsy of these lesions reported malignant mesenchymal tumor. The patient underwent transanal resection of the rectal tumor in January 2020. Subsequently, radiotherapy (total dose 50 Gy) was administered, and on September 14, 2020, IMA (ifosfamide, mesna, and adriamycin) treatment was initiated. After the fouth cycle of treatment, imaging revealed disease progression. Consequently, NGS (Next Generation Sequencing) was requested from the patient's existing tumor blocks and revealed an NTRK mutation, and the patient began treatment with entrectinib. Approximately two months after the start of treatment (May 2021), imaging showed near-complete response (Figure 1). A dramatic improvement was noted in the clinical and radiological condition of the patient, who had previously presented with progressive disease and cachexia. The patient continued treatment at 600 mg/day, and subsequent FDG/PET-CT (Fluorodeoxyglucose Positron Emission Tomography-Computed Tomography) imaging showed no active metabolic uptake (October 2021) and was evaluated as a complete response when compared to the PET-CT images taken at the time of diagnosis (Figure 2).

Discussion: Mesenchymal tumors with NTRK fusions represent a heterogeneous group. This situation necessitates further research to ensure proper management of the patient and correct treatment choices. Molecular analyses conducted on eight cases of gastrointestinal system origin in a series emphasized that NTRK gene rearrangements may not be of GIST (Gastrointestinal Stromal Tumor) origin and highlighted the importance of distinguishing these tumors[4].

Conclusion: In general, the histological identification of mesenchymal tumors associated with NTRK is challenging. Other data obtained may lead to misdiagnosis or failure to establish a definitive diagnosis. As a result, we aimed to raise awareness that NTRK gene rearrangements can occur in a subset of soft tissue tumors and highlight the increasing significance of this issue in clinical evaluation and treatment management in recent years.

Keywords: malignant mesenchymal tumor, entrectinib, NTRK

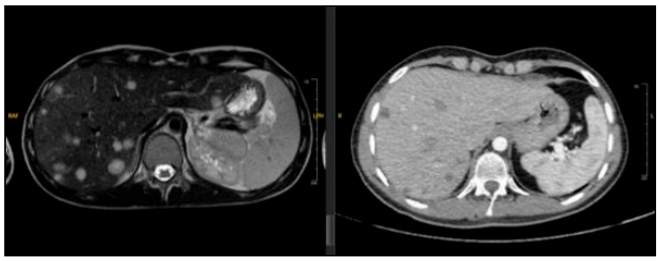

Figure 1. Comparison of tomography taken during the first two months of treatment with the initial MR (Magnetic Resonance) images (The left panel shows the pre-treatment MR images, and the right panel shows the CT images taken two months after the start of treatment.)

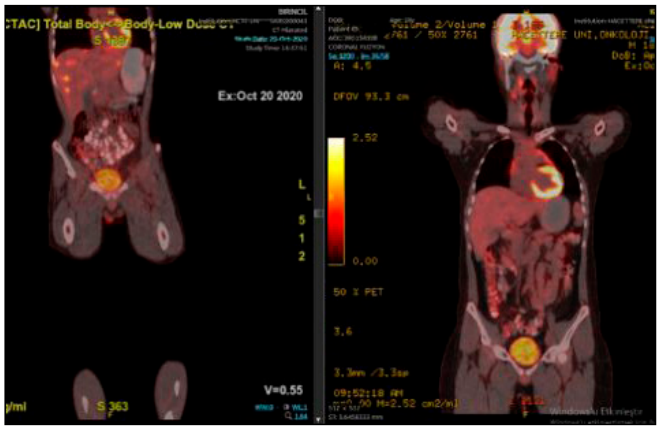

Figure 2. The left panel shows pre-treatment, and the right panel shows the FDG-PET images taken in the seventh month of treatment.

[PP-007]

MISMATCH REPAIR PROTEIN DEFICIENCY IN GASTRIC CANCER PATIENTS; CLINIC-PATHOLOGICAL CHARACTERISTICS AND SURVIVAL OUTCOMES

Ahmed M. Abdalhadi[1], Mohamed Sir Elkhatim[1], Mai Mostafa[1], Muhammed Hajmusa[1], Reem Al Sulaiman[1], Hind Habish[1], Mahir Petkar[2], Kakil Rasul[1], Salha Bujassoum[1], Alaaeldin Shablak[1]

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Gastric cancer (GC) is a significant health concern globally. Different molecular subtypes of GC can impact treatment and prognosis. Mismatch repair deficiency (dMMR) GC is associated with a better prognosis. Data on this subtype in the Middle East is limited.

Objective: This study aimed to explore the characteristics, significance, and treatment considerations for dMMR in GC patients at a Qatari cancer center.

Methods: Data of patients diagnosed with GC between 2015 and 2023 who underwent immunohistochemistry (IHC) testing for MMR proteins in the National Center for Cancer Care and Research (NCCCR) were retrospectively analyzed.

Results: We reviewed records of 179 gastric patients tested for MMR status, finding 9 cases (5.02%) with the dMMR phenotype. Most dMMR cases showed PMS2 and MLH1 loss, except one case with MSH2 and MSH6 loss.

Patients had a median age of 67 (47-89 years), with 55.56% male and 37.5% female. Nearly all cases were adenocarcinomas, except one neuroendocrine tumor.

Tumors were mainly in the proximal stomach (cardia and fundus) and the body, with one case in the antrum. Twenty-two percent were metastatic, and about two-thirds were stage III. No stage I cases were found.

Out of the seven patients in the early stages (stages II and III) group, three received neoadjuvant chemotherapy and one received neoadjuvant immune-chemotherapy but only three underwent surgery. Furthermore, two patients underwent upfront surgery and those had, surprisingly, the longest survival. All surgically treated patients showed good treatment responses and survived. Two received adjuvant pembrolizumab without relapse. Two elderly patients with locally advanced disease were not operated on; both relapsed and died after various treatments. The two patients with metastatic disease received first-line chemotherapy followed by pembrolizumab, but both patients died.

Our study found that 59% of our patients were non-Arabic, while 41% were Arabic. Interestingly, 11% of the Arabic patients exhibited deficient mismatch repair (dMMR), compared to only 2% of the non-Arabic patients.

Conclusions: This study emphasizes the rarity of the MSI-H phenotype in gastric cancers (5.02%) and its correlation with the loss of PMS2 and MLH1 proteins. Notably, Arab ethnicity appears to be associated with a higher frequency of dMMR compared to other ethnic groups within the studied patient cohort. Despite its low prevalence, the research offers valuable insights into the clinical and pathological features, treatment responses, and outcomes of dMMR GC patients in Qatar. While non-metastatic cases showed favorable treatment responses, elderly and metastatic patients had poorer outcomes. We would like to highlight the importance of surgery in early cases, as patients who died in the non-metastatic group had not undergone surgery. This emphasizes the need for continued research and suggests that the early use of immunotherapy might benefit these subgroups.

Keywords: Gastric cancer, Mismatch repair deficiency, Immunotherapy

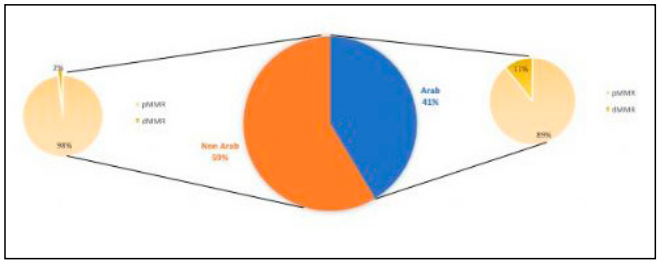

Figure 1

Table 1.	
Age (yr)	
Median	67
Range	89-47
Gender	
Male (%)	55.56
Female (%)	44.44
Ethnicity	
Arabic	66.67
Non-Arabic	33.33
Histological type	
Adenocarcinoma	88.89
Neuroendocine	11.11
Stage (%)	
I	0
II	11.11
III	66.75
IV	22.22
Location of tumor (%)	
Proximal	55.56
Body	33.33
Distal	11.11
MMR proteins	
MSH 2/6	11.11
PMS2 MLH 1	88.89

[PP-008]

HEPATIC ARTERY INFUSION THERAPY IN LIVER MALIGNANCIES - BREAST CARCINOMA METASTASES: SINGLE TERTIARY CENTER EXPERIENCE

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[2]Hacettepe University Medical School, Medical Oncology Department, Ankara, Turkey

Hepatic artery infusion therapy (HAIC) is a therapy method for primary and metastatic lesions of the liver. It is conducted by inserting a catheter into the tumor supplying branch of the hepatic artery or proper hepatic artery, then infusing the prepared chemotherapy regimen, with or without combining systemic regiments.

HAIC has been shown to be safe and effective for the treatment of liver malignancies. However, its use is limited due to the lack of Phase 3 trials and studies. This study aimed to evaluate the response and mortality rate of patients who underwent HAIC in a single tertiary center.

Patients who underwent HAIC between March 2023 and September 2024 were included in the study. Radiological response to the liver tumor burden was evaluated via RECIST 1.1 criteria, radiological response was graded as regressive, stable, progressive disease. The objective response was evaluated as a sum of regressive and stable disease. The treated malignancies are liver metastases of breast carcinomas. All of the included patients were resistant to first-line systemic treatment.

In this study, 2 patients underwent HAIC with a median angiography number of 1. The mortality and response rates were presented in Table 1. No patients (%28.6) had other forms of intraarterial therapies (TARE/TACE) or had some form of minor adverse events after treatment such as nausea, fever and abdominal pain. One of the patients received HAIC to right hepatic lobe metastases, during follow-up, metastases to right lobe regressed but the metastases to left lobe progressed.

HAIC has been first described in 1950 and although there were setbacks, HAIC is getting more and more attention globally and more recently with the PUMP trial which aims to sshow the effect of adjuvant therapy with HAIC on patients having metastatic colon cancer.

Furthermore, the combination of immunotherapy with HAIC has promising results regarding overall survival and progression-free time. Hence, some authors advocate consideration of earlier initiation of HAIC in the treatment of metastatic liver disease.

In this study, patients who were resistant to first-line systemic treatment and underwent HAIC showed acceptable objective response rates. Therefore, HAIC can be considered more often in the treatment of hepatic malignancies.

Keywords: Breast cancer, HAIC, Chemotherapy

Table 1. Mortality and response rates of the patients who received HAIC in our center.

Type of Tumors	Total number of cases	Mortality Rate (%)	Mean follow-up time ± SD	Mean Survival Time, months, (%95 CI)	Objective Response Rate (Regression + stable) (%)
Breast	2	50	3	2 (0.6 -3.38)	100

[PP-009]

"DEFINITIVE CHEMORADIOTHERAPY FOR ELDERLY ESOPHAGEAL CANCER PATIENTS: TOXICITY AND OUTCOME ANALYSIS"

Lika Chkhaidze[1], Ivane Kiladze[1], Aleksandre Iovashvili[1], Besik Sokurashvili[2], Eter Natelauri[4], Nikoloz Kacheishvili[3]

[1]Caucasus Medical Centre, Clinical Oncology Department, Tbilisi, Georgia
[2]K.Eristavi Experimental and Clinical Surgery, Radiation Oncology Department, Tbilisi, Georgia
[3]Mardaleishvili Medical Centre, Radiation Oncology Department, Tbilisi, Georgia
[4]Krystyna Kiel Oncology Center, Radiation Oncology Department, Tbilisi, Georgia

Background: The effectiveness and safety of definitive chemoradiotherapy (dCRT) for elderly patients with unresectable esophageal cancer (EC) remain incompletely understood. This study aimed to assess the outcomes and toxicity in elderly patients (aged 65 and above) with unresectable EC who underwent dCRT.

Methods: We identified 44 elderly patients with esophageal cancer (EC) who met the study criteria from four Georgian cancer centers with radiation oncology departments. Overall survival was calculated from the start of treatment, and toxicity was assessed using the CTCAE 5.0 criteria.

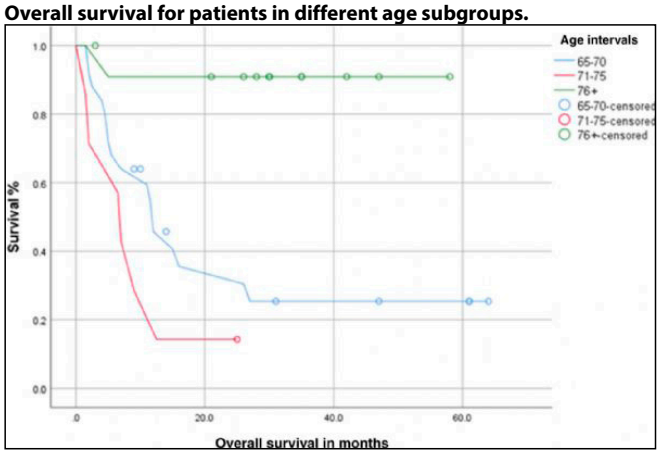
Results: The median age of the patients was 70.0 years (range, 65-83 years), with a male predominance (77.3%), and 59% of patients had a performance status of ECOG 1. Due to significant dysphagia (Grade 3-4), 9 patients underwent interventions (stenting or gastrostomy) before dCRT. More than two-thirds of the patients had squamous cell carcinoma (77.3%). Tumor localization was equally distributed between the middle and lower parts of the esophagus (38.6%), and in 26 patients (59.1%), the tumor length exceeded 5 cm. The majority of patients had stage III disease (61.4%).

The median survival was 16.0 months (95% CI, 0-35.9). Overall survival at 12 months and 24 months was 53.7% and 43.6%, respectively. Fifteen patients (34%) are alive from 2.1 to 5.4 years after treatment. A statistically significant difference ($p = 0.011$) in median overall survival was found between patients who received the full dose of RT (not reached) versus those who did not (9.0 months; 95% CI, 2.79-15.2). Additional analysis between age subgroups revealed that the oldest subgroup (>75 years) had the highest overall survival compared to the younger (65-70 years) and intermediate (71-75 years) groups ($p = 0.001$). The most common adverse events were Grade 3-4 leukopenia (43.2%), anemia (29.5%), and esophagitis (27.3%).

Conclusion: The results of our study support the feasibility and efficacy of dCRT for unresectable esophageal cancer in carefully selected elderly patients. Survival was correlated with the receipt of the full dose of RT, underscoring the importance of accurate patient selection for better long-term survival. There is an emerging need to characterize the "functional age" of older patients with cancer to tailor treatment decisions and stratify outcomes based on factors beyond chronological age.

Keywords: Elderly patients, Esophageal cancer, Definitive chemoradiotherapy (dCRT)

Overall survival for patients in different age subgroups.



Treatment-related toxicity according to CTCAE 5.0 Criteria

Grade 3–4 (number of patients)		%
Hematologic toxicity		
Leukopenia	19	43.2
Anemia	13	29.5
Thrombocytopenia	10	22.8
Febrile neutropenia	5	11.4
Nonhematologic toxicity		
Mucositis	4	9.1
Esophagitis	12	27.3
Cardiovascular	1	2.3
Nausea/vomiting (grade ≥2)	8	18.2

[PP-010]

HEPATIC ARTERY INFUSION THERAPY IN LIVER MALIGNANCIES – CHOLANGIOCARCINOMA: SINGLE TERTIARY CENTER EXPERIENCE

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Hepatic artery infusion therapy (HAIC) is a therapy method for primary and metastatic lesions of the liver. It is conducted by inserting a catheter into the tumor supplying branch of the hepatic artery or proper hepatic artery, then infusing the prepared chemotherapy regimen, with or without combining systemic regiments.

HAIC has been shown to be safe and effective for the treatment of liver malignancies. However, its use is limited due to the lack of Phase 3 trials and studies. This study aimed to evaluate the response and mortality rate of patients who underwent HAIC in a single tertiary center.

Patients who underwent HAIC between March 2023 and September 2024 were included in the study. Radiological response to the liver tumor burden was evaluated via RECIST 1.1 criteria, radiological response was graded as regressive, stable, progressive disease. The objective response was evaluated as a sum of regressive and stable disease. The treated malignancies are cholangiocarcinomas. All of the included patients were resistant to first-line systemic treatment.

In this study, 2 patients (2 female, 3 male) underwent HAIC with a median angiography number of 2. The mortality and response rates were presented in Table 1. One patients had other forms of intraarterial therapies (TARE/TACE), no patient had adverse events after treatment.

HAIC has been first described in 1950 and although there were setbacks, HAIC is getting more and more attention globally and more recently with the PUMP trial which aims to sshow the effect of adjuvant therapy with HAIC on patients having metastatic colon cancer. Furthermore, the combination of immunotherapy with HAIC has promising results regarding overall survival and progression-free time. Hence, some authors advocate consideration of earlier initiation of HAIC in the treatment of metastatic liver disease.

In this study, patients who were resistant to first-line systemic treatment and underwent HAIC showed acceptable objective response rates. Therefore, HAIC can be considered more often in the treatment of hepatic malignancies.

Keywords: Cholangiocarcinoma, HAIC, Chemotherapy

Table 1. Primary malignancies, mortality and response rates of the patients who received HAIC in our center.

Type of Tumors	Total number of cases	Mortality Rate (%)	Mean follow-up time ± SD	Mean Survival Time, months, (%95 CI)	Objective Response Rate (Regression + stable) (%)
CCC	2	0	9.5 ± 9.19	.	50

[PP-011]

HEPATIC ARTERY INFUSION THERAPY IN LIVER MALIGNANCIES – PANCREATIC METASTASES: SINGLE TERTIARY CENTER EXPERIENCE

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Hepatic artery infusion therapy (HAIC) is a therapy method for primary and metastatic lesions of the liver. It is conducted by inserting a catheter into the tumor supplying branch of the hepatic artery or proper hepatic artery, then infusing the prepared chemotherapy regimen, with or without combining systemic regiments.

HAIC has been shown to be safe and effective for the treatment of liver malignancies. However, its use is limited due to the lack of Phase 3 trials and studies. This study aimed to evaluate the response and mortality rate of patients who underwent HAIC in a single tertiary center.

Patients who underwent HAIC between March 2023 and September 2024 were included in the study. Radiological response to the liver tumor burden was evaluated via RECIST 1.1 criteria, radiological response was graded as regressive, stable, progressive disease. The objective response was evaluated as a

sum of regressive and stable disease. The treated malignancies are liver metastases of pancreatic carcinomas. All of the included patients were resistant to first-line systemic treatment.

In this study, 5 patients (2 female, 3 male) underwent HAIC with a median angiography number of 4. The mortality and response rates for each malignancy were presented in Table 1. No patients had other forms of intraarterial therapies (TARE/TACE) or had adverse events after treatment.

HAIC has been first described in 1950 and although there were setbacks, HAIC is getting more and more attention globally and more recently with the PUMP trial which aims to show the effect of adjuvant therapy with HAIC on patients having metastatic colon cancer. Furthermore, the combination of immunotherapy with HAIC has promising results regarding overall survival and progression-free time. Hence, some authors advocate consideration of earlier initiation of HAIC in the treatment of metastatic liver disease.

In this study, patients who were resistant to first-line systemic treatment and underwent HAIC showed acceptable objective response rates. Therefore, HAIC can be considered more often in the treatment of hepatic malignancies.

Keywords: Pancreas Cancer, HAIC, Chemotherapy

Table 1. Primary malignancies, mortality and response rates of the patients who received HAIC in our center.

Type of Tumors	Total number of cases	Mortality Rate (%)	Mean follow-up time ± SD	Mean Survival Time, months, (%95 CI)	Objective Response Rate (Regression + stable) (%)
Pancreas	5	40	7.2 ± 5.63	9.6 (4.50-14.74)	40

[PP-012]

HEPATIC ARTERY INFUSION THERAPY IN LIVER MALIGNANCIES – HEPATOCELLULAR CARCINOMA: SINGLE TERTIARY CENTER EXPERIENCE

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Hepatic artery infusion therapy (HAIC) is a therapy method for primary and metastatic lesions of the liver. It is conducted by inserting a catheter into the tumor supplying branch of the hepatic artery or proper hepatic artery, then infusing the prepared chemotherapy regimen, with or without combining systemic regiments.

HAIC has been shown to be safe and effective for the treatment of liver malignancies. However, its use is limited due to the lack of Phase 3 trials and studies. This study aimed to evaluate the response and mortality rate of patients who underwent HAIC in a single tertiary center.

Patients who underwent HAIC between March 2023 and September 2024 were included in the study. Radiological response to the liver tumor burden was evaluated via RECIST 1.1 criteria, radiological response was graded as regressive, stable, progressive disease. The objective response was evaluated as a sum of regressive and stable disease. Four patients without radiological follow-up were excluded from the study. The treated malignancies are hepatocellular carcinoma (HCC). All of the included patients were resistant to first-line systemic treatment.

In this study, 5 patients (1 female, 4 male) underwent HAIC with a median angiography number of 3. The mortality and response rates for each malignancy were presented in Table 1. Three patients (%60) had other forms of intraarterial therapies (TARE/TACE). One (%20) patient had some form of minor adverse events after treatment such as nausea, fever and abdominal pain.

HAIC has been first described in 1950 and although there were setbacks, HAIC is getting more and more attention globally and more recently with the PUMP trial which aims to show the effect of adjuvant therapy with HAIC on patients having metastatic colon cancer.

Furthermore, the combination of immunotherapy with HAIC has promising results regarding overall survival and progression-free time. Hence, some authors advocate consideration of earlier initiation of HAIC in the treatment of metastatic liver disease.

In this study, patients who were resistant to first-line systemic treatment and underwent HAIC showed acceptable objective response rates. Therefore, HAIC can be considered more often in the treatment of hepatic malignancies.

Keywords: HCC, HAIC, Chemotherapy

Table 1. Mortality and response rates of the patients who received HAIC in our center.

Type of Tumors	Total number of cases	Mortality Rate (%)	Mean follow-up time ± SD	Mean Survival Time, months, (%95 CI)	Objective Response Rate (Regression + stable) (%)
HCC	5	20	3.3 ± 3.07	7 (4.37-9.63)	75

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