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MEETING SUMMARY ASCO GI, JANUARY 19-21 2017, SAN FRANCISCO, USA

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CANCERS OF THE LOWER GI TRACT

NIVOLUMAB IN PATIENTS WITH DNA MISMATCH REPAIR DEFICIENT/MICROSATELLITE INSTABILITY HIGH METASTATIC COLORECTAL CANCER: UPDATE FROM CHECKMATE 142

OVERMAN ET AL



- 74 patients with dMMR/MSI-H mCRC who progressed on or were intolerant to ≥ 1 prior line of therapy
 - 84% received ≥ 2 prior lines of therapy
- Nivolumab 3 mg/kg every 2 weeks
- Overall response rate: 27%
- Disease control rate: 62%
- Median PFS: 9.6 months
- 12 month overall survival 73.8% (median OS not reached)

Clinical benefit regardless of KRAS, BRAF status, h/o Lynch syndrome



- Nivolumab has clear activity in MSI-H mCRC
- These are more data to support the use of checkpoint inhibitors in this population

RANDOMIZED TRIAL OF IRINOTECAN AND CETUXIMAB WITH OR WITHOUT VEMURAFENIB IN BRAF-MUTANT METASTATIC COLORECTAL CANCER (SWOG 1406)

KOPETZ ET AL



- 106 patients with *BRAF*^{V600} mutated and *RAS* wild-type mCRC
 - 39% prior irinotecan, no prior EGFR inhibitor use

	ironotecan + cetuximab vemurafenib	ironotecan + cetuximab	
PFS	4.4 months	2.0 months	(HR: 0.42, P < 0.001)
RR	16%	4%	(<i>P</i> =0.09)
SD	48%	17%	
DCR	67%	22%	(P < 0.001)

- Grade 3/4 adverse events were higher, and included neutropenia (28% vs 7%), anemia (13% vs 0%), and nausea (15% vs 0%)
- Overall survival results not yet mature



• This regimen shows promise in this difficult to treat population

PERTUZUMAB + TRASTUZUMAB FOR HER2-AMPLIFIED/OVEREXPRESSED METASTATIC COLORECTAL CANCER (MCRC): INTERIM DATA FROM MYPATHWAY

HURWITZ ET AL



- 34 patients with heavily pre-treated mCRC
 - (median # prior regimens = 4)
- Overall RR 13 (38.2%), stable disease 4
- Clinical benefit rate 17 (50%)
- Median PFS 4.6 months
 - 5.7 months for KRAS wild type patients
 - 1.4 months for KRAS mutant patients
- Median OS 10.3 months
 - 14 months for KRAS wild type patients
 - 5 months for KRAS mutant patients



Active regimen in patients with heavily pretreated HER2+ mCRC

MOLECULAR VARIANCES BETWEEN RECTAL AND LEFT-SIDED COLON CANCERS

SALEM ET AL



- 1,457 primary tumors
 - 125 splenic flexure to descending colon (SFT)
 - 460 sigmoid colon (SgT)
 - 872 rectum (RT)
- Tumors evaluated with protein expression, gene amplification and NextGen sequencing, PCR for microsatellite instability (MSI)
- Somatic nonsynonymous missense mutations used to calculate tumor mutational load (TML)

RESULTS

	RT	SFT	
TP53	71%	57%	P=0.03
APC	66%	49%	P=0.01
PIK3CA	11%	22%	P=0.02
BRAF	3%	15%	P=0.0001
GNAS	0.9%	4%	P=0.04
HNF1A	0.7%	5%	P=0.01
CTNNB1	0.3%	4%	P=0.003
TOPO1	52%	31%	P=0.0001
ERCC1	29%	15%	P=0.03
MGMT	64%	53%	P=0.048

	SgT	RT	
TLE3	33%	23%	P=0.007
TOPO1	52%	35%	P<0.001
TUBB3	41%	28%	P=0.003
MGMT	64%	54%	P=0.003



No differences in

- PD-L1 expression frequency on tumor cells or tumor-infiltrating lymphocytes
- HER-2 expression and amplification

MSI was seen in 7% of SFT, 4% of SgT, and 0.7% of RT (total LT vs RT, the frequency of =0.01)

In all three cohorts, aTML > 17 mut/MB was highly concordant with MSI

SFT = splenic flexure to descending colon, SgT = sigmoid colon, RT = rectum Presented by Salem et al at ASCO GI 2017



 The rectum has biologic differences from the "left colon"; clinical trials should stratify on molecular features as well as left vs. right

THE INTERNATIONAL WATCH AND WAIT DATABASE (WWD) FOR RECTAL CANCER: AN UPDATE

Maxime van der Valk et al





- Included 679 patients who exhibited a clinical complete response to neoadjuvant chemoradiation therapy for rectal cancer
- Median follow-up time 2.6 years (range 0-24 years)
- A total of 167 patients (25%) experienced local regrowth, 84% of which occurred in the first 2 years of follow-up in 84%
 - 96% had endoluminal local regrowth (n=161)
 - 4% in the loco-regional lymph nodes (n=7)
 - 7% had distant metastasis occurred (n=49)
- The overall 3-year-survival of all patients was 91%, and 87% in those with a local regrowth

RESULTS





 This approach may be safe with strict follow up, but it is unknown if it should be routinely offered to patients with CCR to neoadjuvant therapy for rectal cancer



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