Colon cancer
Left vs right sided treatment
How to choose

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University of Manitoba

CancerCare MANITOBA

Disclosures

Faculty: Vamsee Torri, MD

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  - **Grants/Research Support:** None
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  - **Consulting Fees:** None
  - **Patents**: None
  - **Other:** T2 system, Fate therapeutics

Mitigating Bias: use of generic drug names and level 1 evidence on recommendations from national/international guidelines.

Acknowledgement of Slides

ASCO Annual Meeting

ASCO Annual Meeting/Educational Book: Integrating Biomarkers and Targeted Therapy Into Colorectal Cancer Management by Dr. Christopher H. Lieu.

ESMO Academy

Learning Objectives

1. Explain the evidence supporting the treatment options for first line KRAS wild-type metastatic colon cancer depending on tumor location (right versus left)

2. Apply the evidence supporting the treatment options for the first line treatment of KRAS wild-type rectal cancer

3. Explain this information to patients.

Case: 1

- A 50-year-old man presents with bright blood per rectum for 1 month. Colonoscopy showed a mass in the sigmoid colon (20 cm from the anal verge). No co-morbidities. ECOG PS 0. Physical exam was unremarkable.

- Sigmoid colon mass biopsy showed invasive adenocarcinoma.

- Molecular markers: normal MMR expression by IHC. Wild-type RAS and BRAF.

- CT showed multiple metastatic lesions in the liver and multiple enlarged retroperitoneal lymph nodes.

Case:1 …….audience poll

In this patient, what are the options for palliative intent systemic therapy?

1. 5-FU or Capecitabine +/- Bevacizumab
2. FOLFRI/FOLFOX alone
3. FOLFIRI/FOLFOX + Bevacizumab
4. FOLFIRI/FOLFOX + Cetuximab or Panitumumab
5. FOLFOXIRI +/- Bevacizumab

Colorectal Cancer Epidemiology

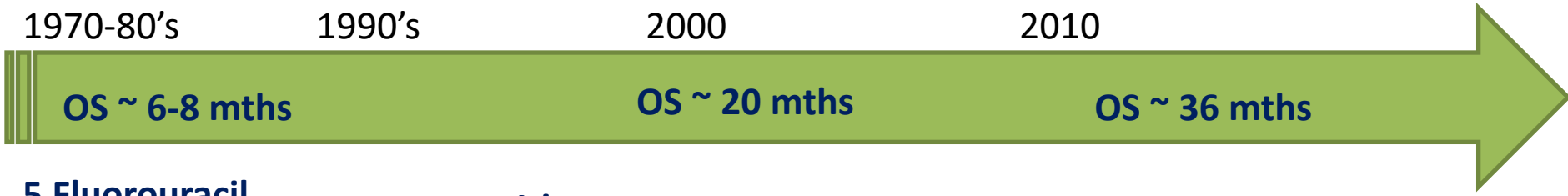
Summary of cancer statistics from *Canadian Cancer Statistics 2017*

TABLE A1 Incidence, mortality and survival statistics for selected cancers, both sexes combined, Canada

	Projected incidence			Projected mortality			5-year net survival
Both sexes combined	**Rank**	**Cases**	**ASIR***	**Rank**	**Deaths**	**ASMR***	**%**
All cancers	**—**	**206,200**	**515.9**	**—**	**80,800**	**198.1**	**60**
Lung and bronchus	1	28,600	69.9	1	21,100	51.4	17
Colorectal	2	26,800	66.3	2	9,400	23.1	64
Breast	3	26,500	68.1	3	5,000	12.6	87
Prostate	4	21,300	110.4	5	4,100	23.8	95
Bladder	5	8,900	21.8	8	2,400	5.7	73

Canadian Cancer Statistics: A 2018 special report

Systemic Therapies in Metastatic Colorectal Cancer



5 Fluorouracil

Irinotecan
Capecitabine
Oxaliplatin

Bevacizumab
Cetuximab
Panitumumab

Modest benefit with newer agents:
Aflibercept
Regorafenib
Trifluridine/tipiracil

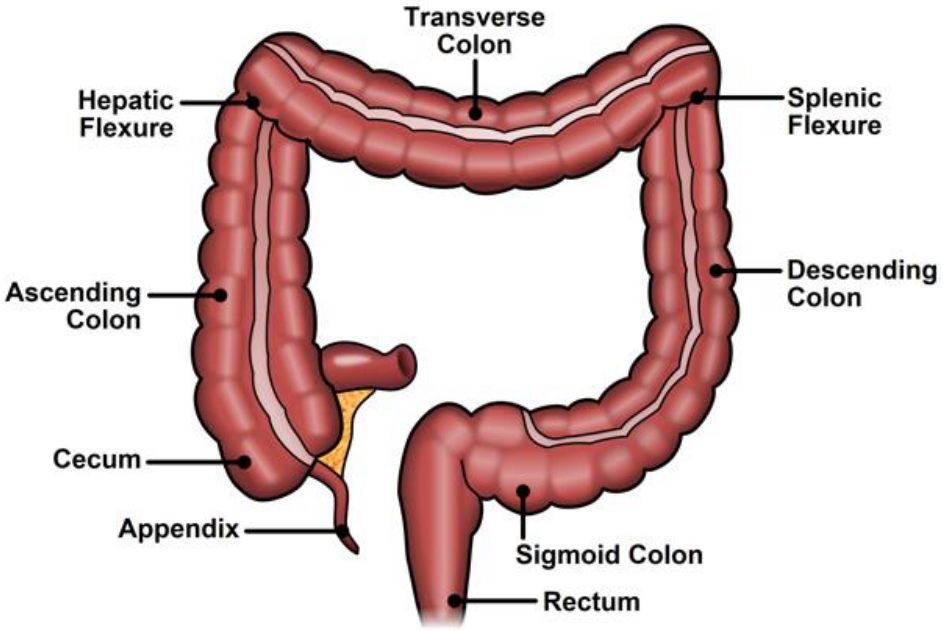
Colon/Rectum
Anatomy and Development

RIGHT

Cecum up to the proximal 2/3 of transverse colon

Derived from mid gut

Superior mesenteric artery



Modified from The American Society of Colon and Rectal Surgeons

LEFT

From distal 1/3 of transverse colon to the rectum

Derived from hind gut

Inferior mesenteric artery

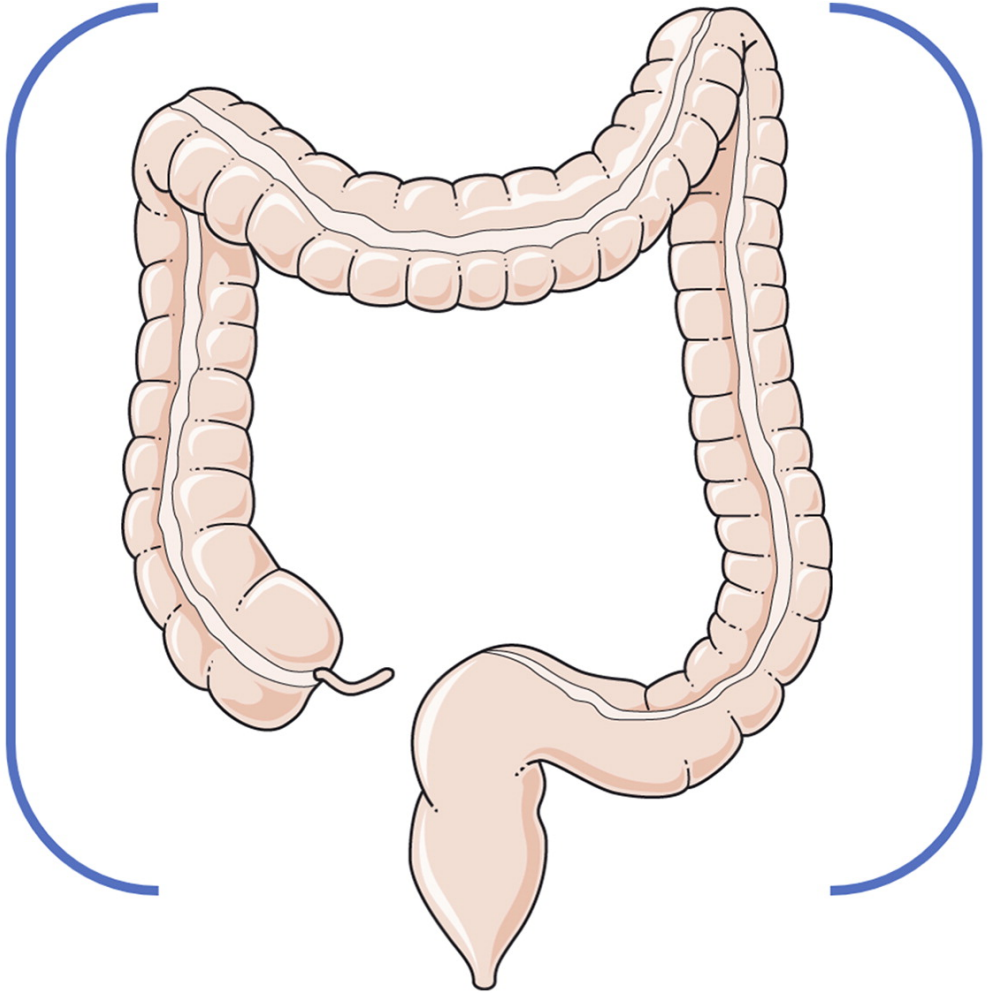
Clinical Features of Right and Left Colon Cancer

Right-Sided

Cecum to hepatic flexure

Clinical Characteristics

- *Mucinous histology*
- *Older age*
- *Worse survival*
- *More common in females*



Left-Sided

Rectum to splenic flexure

Clinical Characteristics

- *Younger age*
- *Better survival*
- *More common in males*

Modified from American Society of Clinical Oncology Educational Book 39207-215.

Clinical Features of Right and Left Colon Cancer

Right-Sided

Cecum to hepatic flexure

Clinical Characteristics

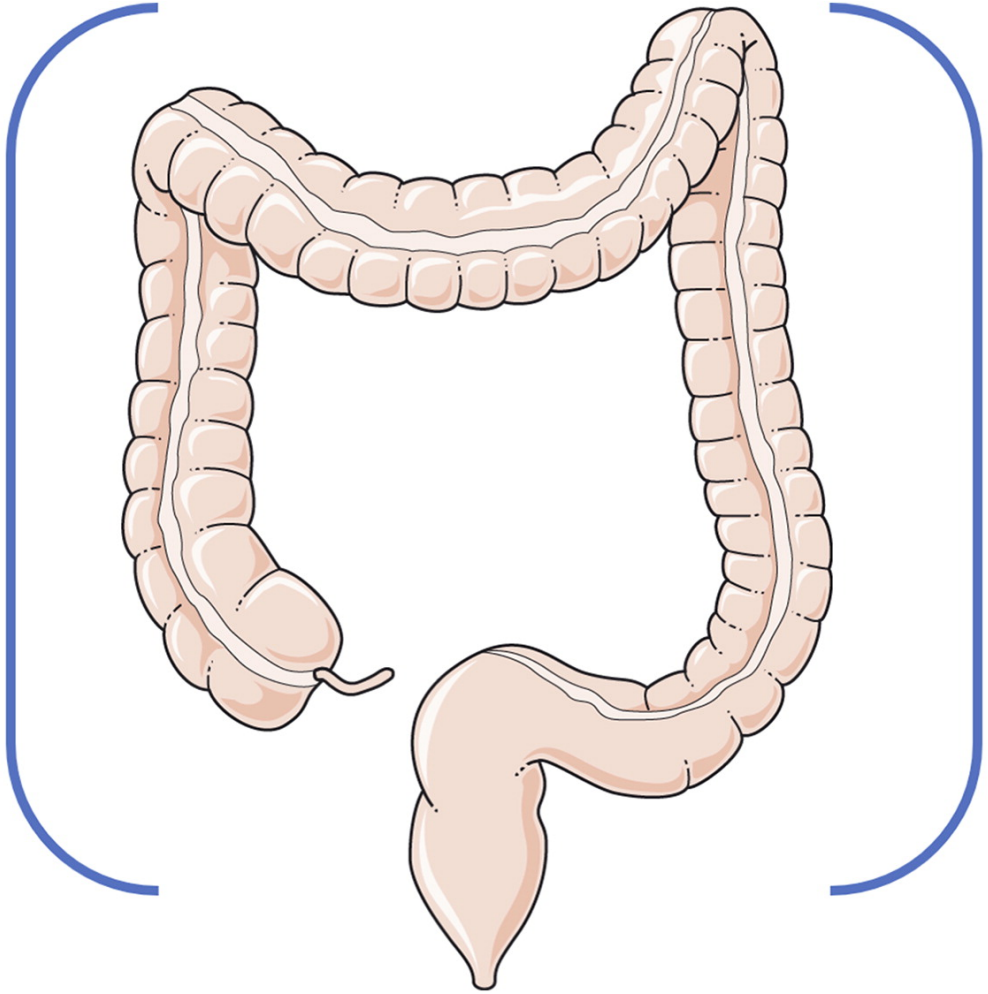
- *Mucinous histology*
- *Older age*
- *Worse survival*
- *More common in females*

Environment

- *Microbiomes that are associated with increased bacterial biofilms*
- *Increased bile acid concentration*

Diet

- *More association with western diet*



Left-Sided

Rectum to splenic flexure

Clinical Characteristics

- *Younger age*
- *Better survival*
- *More common in males*

Environment

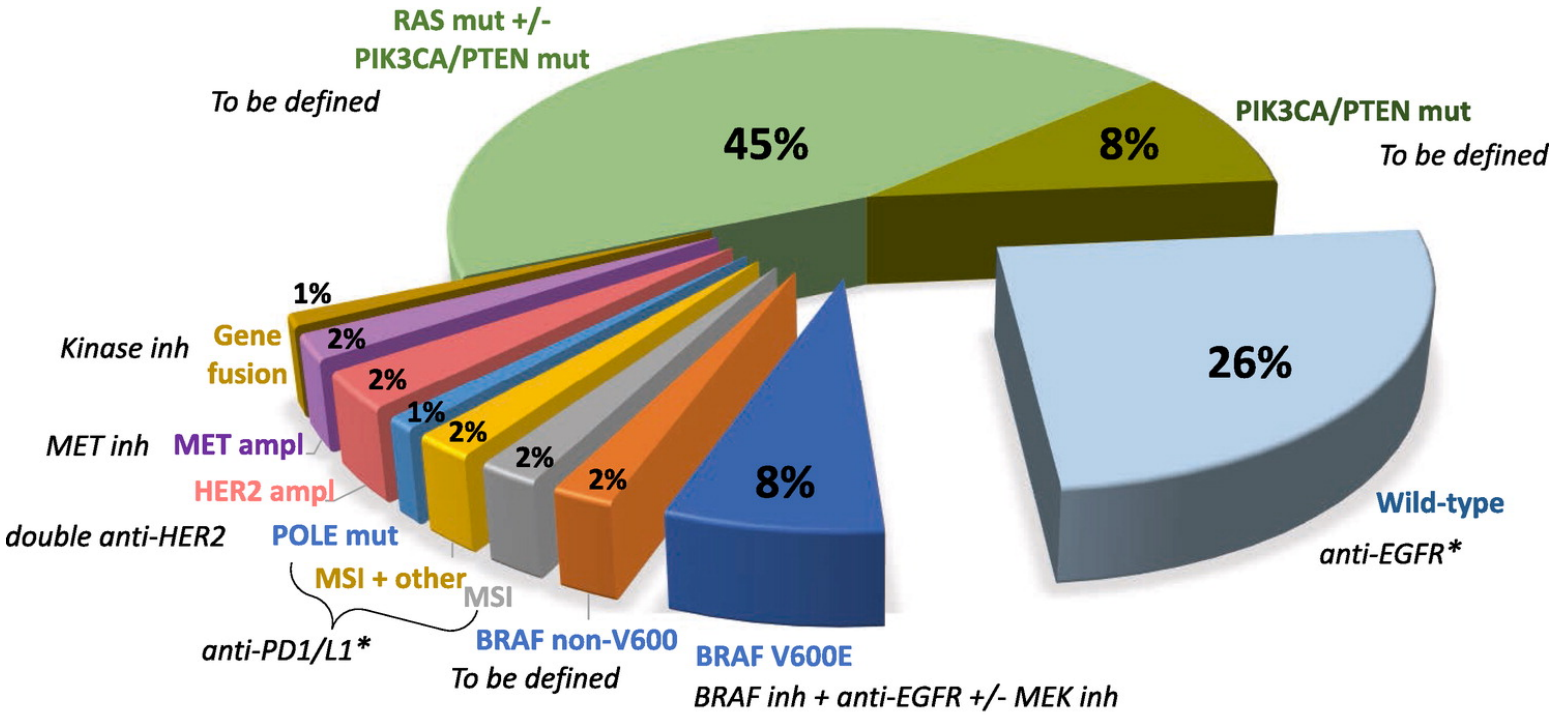
- *Microbiomes that are associated with less bacterial biofilms*
- *Lower bile acid concentration*

Diet

- *Less association with western diet*

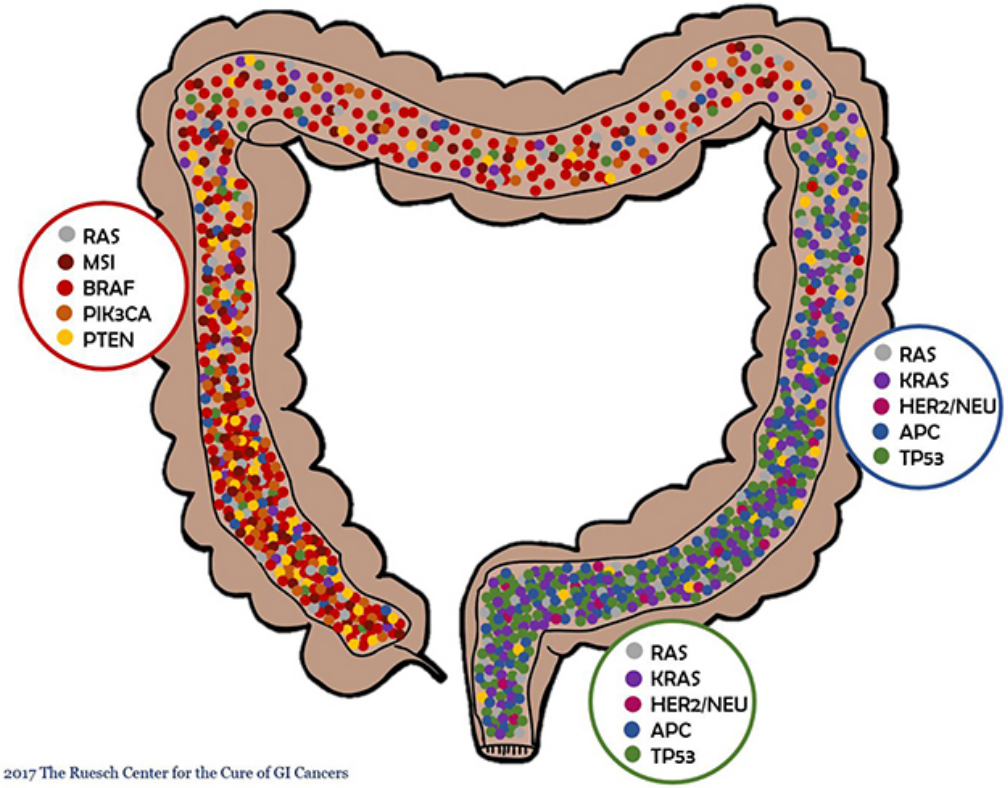
Modified from American Society of Clinical Oncology Educational Book 39207-215.

Heterogenous Disease
Genomic Factors in Colorectal Cancer



ASCO Educational Book 38231-238

Continuum of Genomic Alterations



Oncotarget. 2017 Sep 21;8(49):86356-86368

Colorectal cancer carry a continuum of molecular alterations from right to left, rather than having a sharp, clear-cut distinction

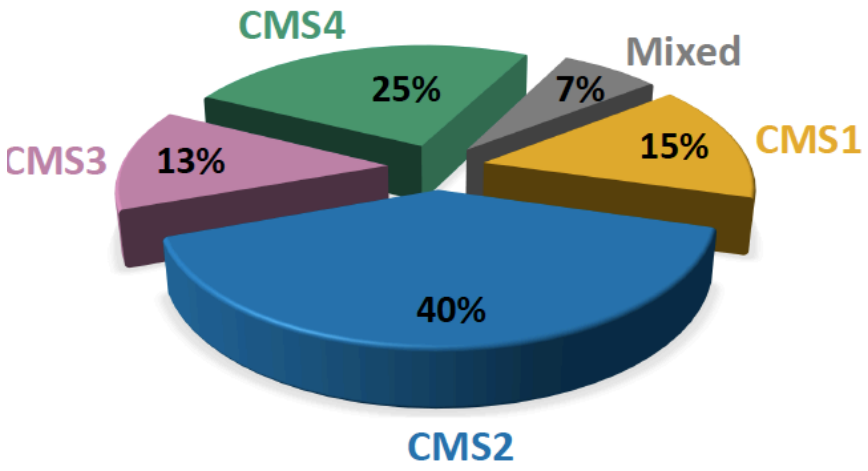
Right-sided colon cancers when compared to left-sided colon cancer are associated with increased

- Microsatellite instability
- Mutational burden
- Aberrant activation of the EGFR pathway
- *BRAF* and *PIK3CA* mutation rates

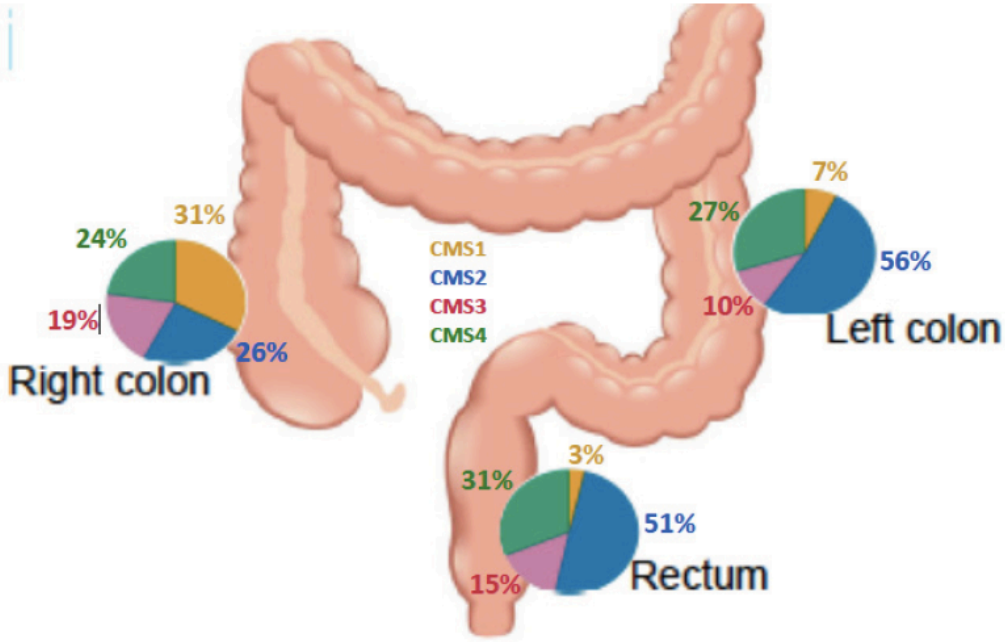
Rectal cancers when compared to both left- and right-sided colon cancers are associated with increased

- TOPO1 expression
- Her2/neu amplification

Molecular Subtypes of Colorectal Cancer by Gene Expression



ASCO Educational Book 38231-238

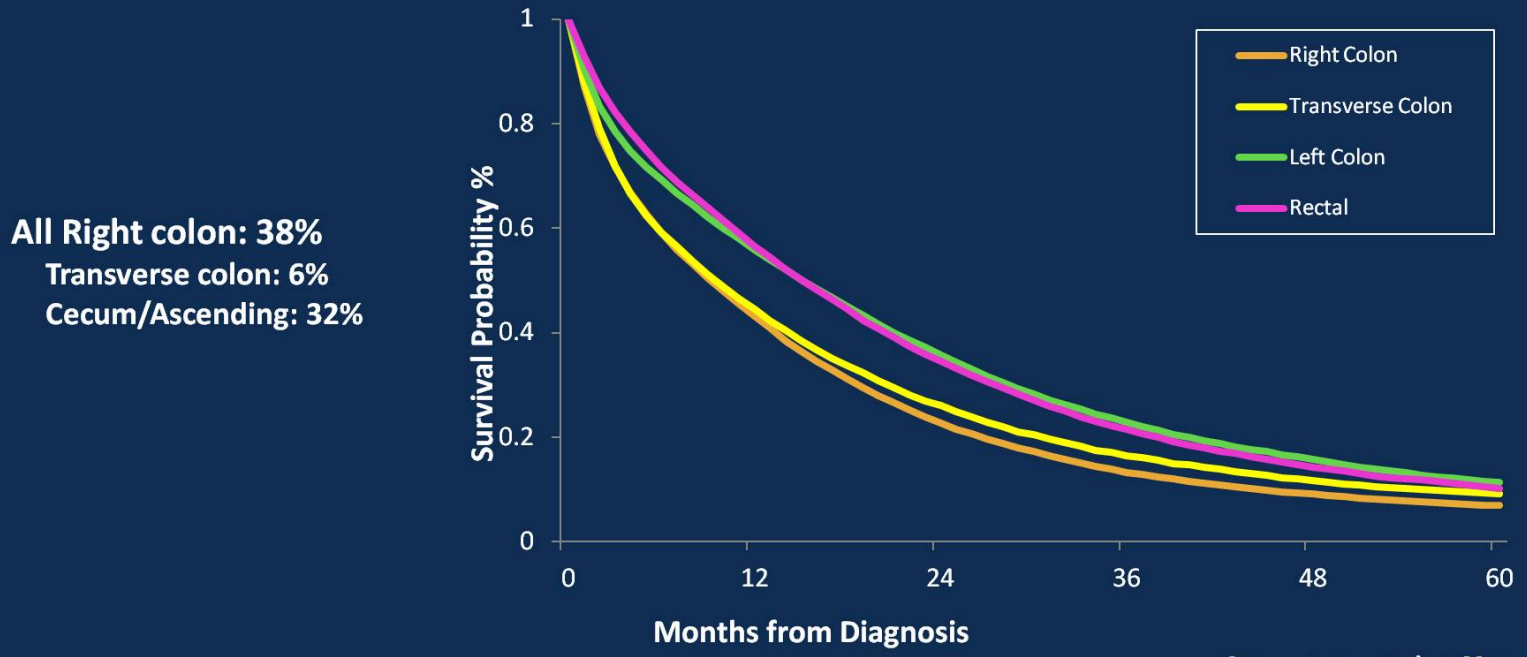


Nature Medicine volume 21, pages 1350–1356 (2015)

CMS1 MSI immune	CMS2 Canonical	CMS3 Metabolic	CMS4 Mesenchymal
Poor Prognosis	Better Prognosis		Poor Prognosis

Right vs. Left Colon Cancer as a Prognostic Factor

Overall Survival for Stage IV CRC in SEER
by Primary Tumor Location, 2000-2012 Diagnoses



PRESENTED AT: ASCO ANNUAL MEETING '16
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Presented by: D Schrag, MD

Presented By Deborah Schrag at 2016 ASCO Annual Meeting

Right vs. Left Colon Cancer as a Prognostic Factor

- A metaanalysis of 66 studies (~ 1.4 million patients) showed **left-sided primary tumor location was associated with a significantly reduced risk of death** (HR, 0.82; 95% CI, 0.79-0.84; *P* < .001).

- This was independent of stage, race, adjuvant chemotherapy, year of study, number of participants, and quality of included studies.

JAMA Oncology, vol. 3, no. 2, pp. 211–219, 2017.

TAKE HOME

- There is a variation in the embryonic origins and the underlying carcinogenic/genomic alterations between the right and left sided colon cancer.

- Studies are ongoing to demarcate the biology between right and left-sided colon cancers. Until then the primary tumor site is
  - A prognostic factor
  - Serves as a surrogate marker

Right vs. Left Colon Cancer: Predictive Factor

Chemotherapy

- Possible clinical benefit on retrospective analysis of TRIBE trial: FOLFOXIRI + Bevacizumab versus FOLFRI +Bevacizumab
  - For the right-sided tumors PFS (HR = 0.59 versus 0.89, *P* for interaction = 0.099) and OS (HR = 0.56 versus 0.99, *P* for interaction = 0.030) and this advantage was independent of their *RAS* and *BRAF* status.

Annals of Oncology, Volume 29, Issue 7, July 2018, Pages 1528–1534

Bevacizumab

- There is no clear published evidence to suggest tumor site is a predictor factor for bevacizumab.

Right vs. Left Colon Cancer
Predictive Factor

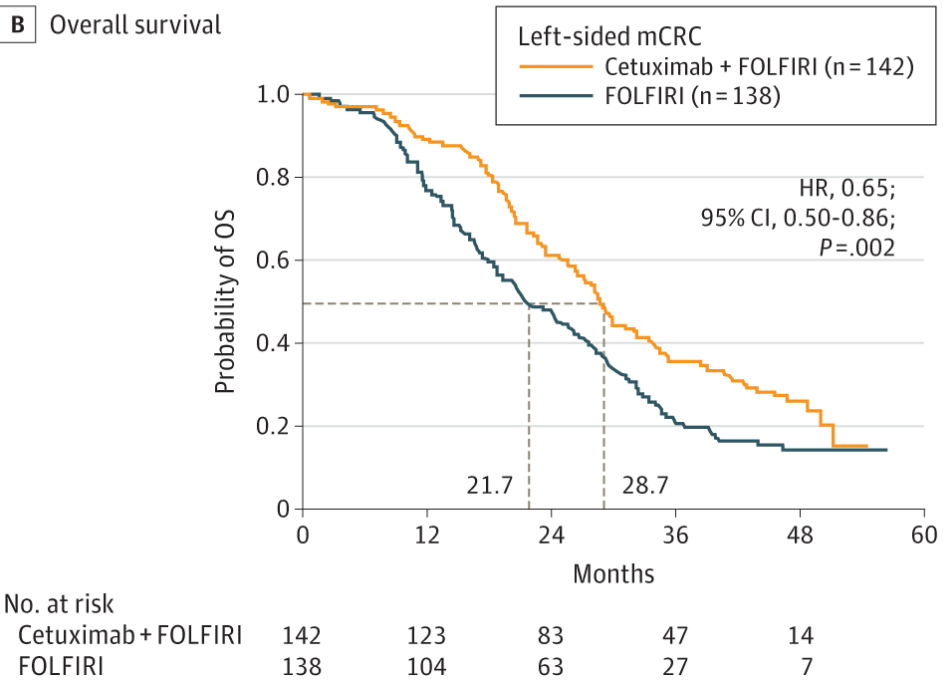
Selected first line trials with an anti-EGFR monoclonal antibodies

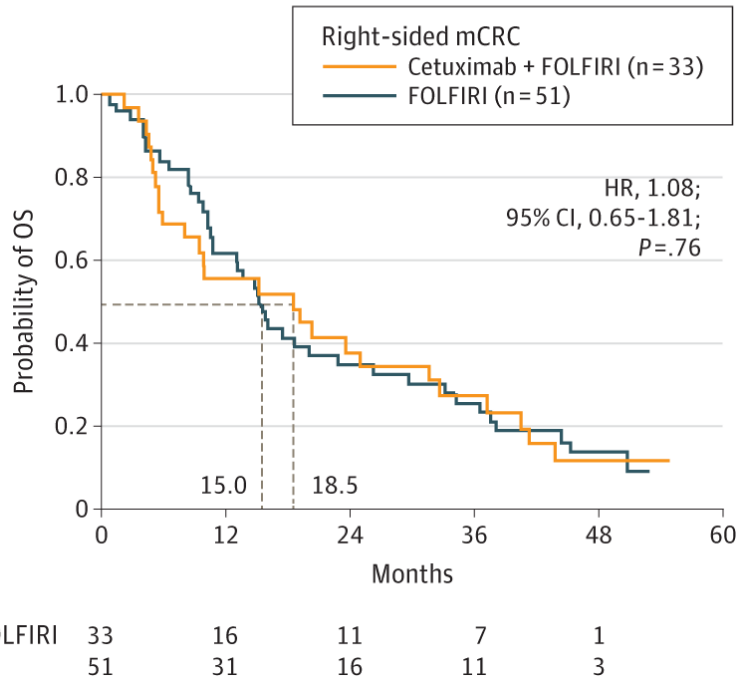
Trial	Therapy
CRYSTAL	FOLFIRI + Cetuximab or FOLFIRI
PRIME	FOLFOX + Panitumumab or FOLFOX
TAILOR	FOLFOX + Cetuximab or FOLFOX
CALGB/SWOG 80405	FOLFOX/FOLFIRI + Cetuximab or Bevacizumab
FIRE-3	FOLFIRI + Cetuximab or Bevacizumab
PEAK	FOLFOX + Panitumumab or Bevacizumab

CRYSTAL Trial

First line: FOLFIRI + Cetuximab or FOLFIRI

Benefit of Cetuximab is limited to wild type RAS LEFT side colon cancer



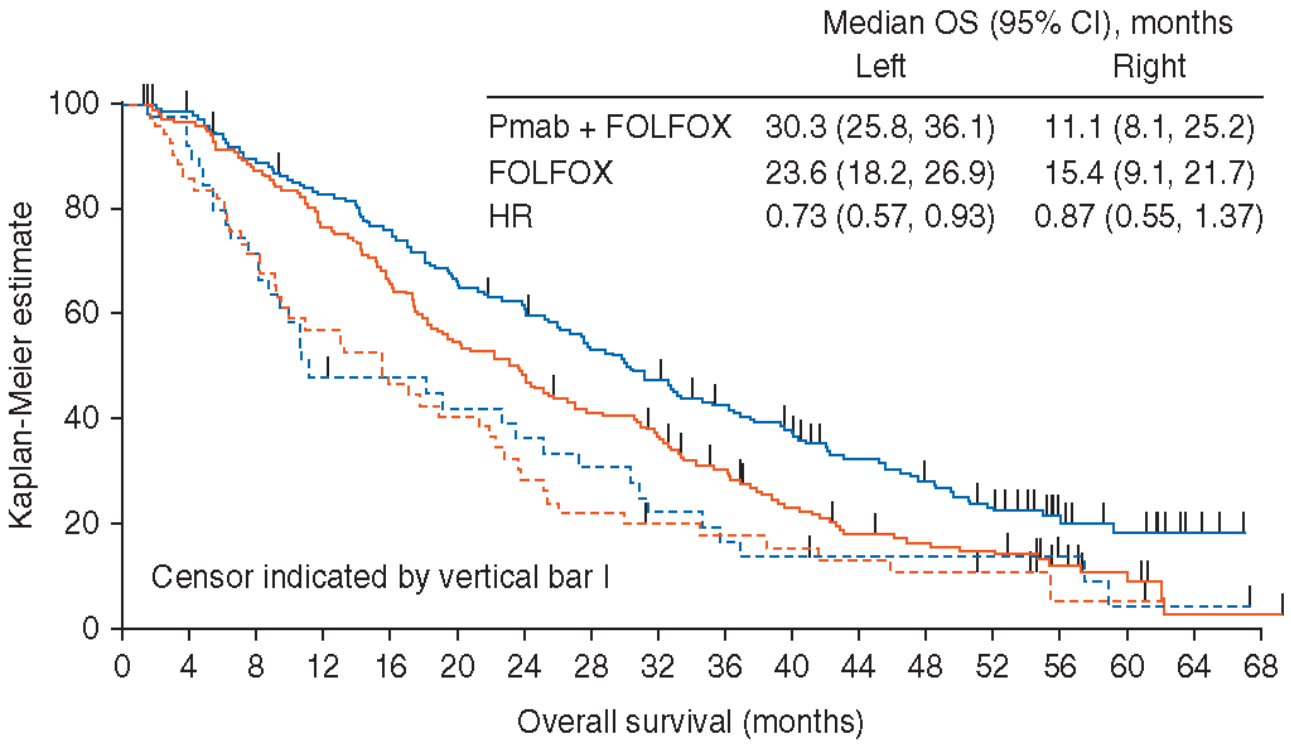


JAMA Oncol. 2017;3(2):194-201

PRIME Trial

First line, FOLFOX + Panitumumab or FOLFOX

Benefit of Panitumumab is limited to wild type RAS LEFT side colon cancer



No. of subjects:

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2:	159	151	137	120	103	86	76	64	56	44	32	24	21	19	11	6	1	1
3:	39	36	26	18	17	15	13	11	8	6	5	4	4	4	3	1	1	0
4:	49	42	34	28	23	20	14	11	9	8	7	6	5	4	1	1	0	

Annals of Oncology, Volume 28, Issue 8, August 2017, Pages 1862–1868,

TAYLOR Trial

First line: FOLFOX + Cetuximab or FOLFOX

Benefit of Cetuximab is limited to wild type RAS LEFT side colon cancer

Table 2. Effect of Primary Tumor Location on Efficacy in the *RAS* Wild-Type mITT Population

		PFS (primary end point)			OS			ORR		
Population and Treatment Arm	No. of Patients	HR (95% CI)	*P* for HR (log-rank test)	Median (months)	HR (95% CI)	*P* for HR (log-rank test)	Median (months)	OR (95% CI)	*P* for OR (Fisher's exact test)	%
mITT*		0.69 (0.54 to 0.89)	.004		0.76 (0.61 to 0.96)	.020		2.41 (1.61 to 3.61)	< .001	
Cetuximab + FOLFOX-4	193			9.2			20.7			61.1
FOLFOX-4	200			7.4			17.8			39.5
Left sided		0.68 (0.50 to 0.91)	.009		0.69 (0.53 to 0.90)	.006		2.60 (1.64 to 4.14)	< .001	
Cetuximab + FOLFOX-4	146			9.2			22.0			66.4
FOLFOX-4	162			7.6			18.7			43.2
Right sided (transverse colon included)		0.67 (0.40 to 1.11)	.117		0.94 (0.58 to 1.51)	.787		2.58 (1.00 to 6.67)	.065	
Cetuximab + FOLFOX-4	45			7.4			11.3			44.4
FOLFOX-4	38			4.5			9.3			23.7
Right sided (transverse colon excluded)		0.77 (0.42 to 1.39)	.377		0.99 (0.56 to 1.76)	.975		2.44 (0.81 to 7.35)	.177	
Cetuximab + FOLFOX-4	32			7.4			11.3			43.8
FOLFOX-4	29			4.5			9.5			24.1

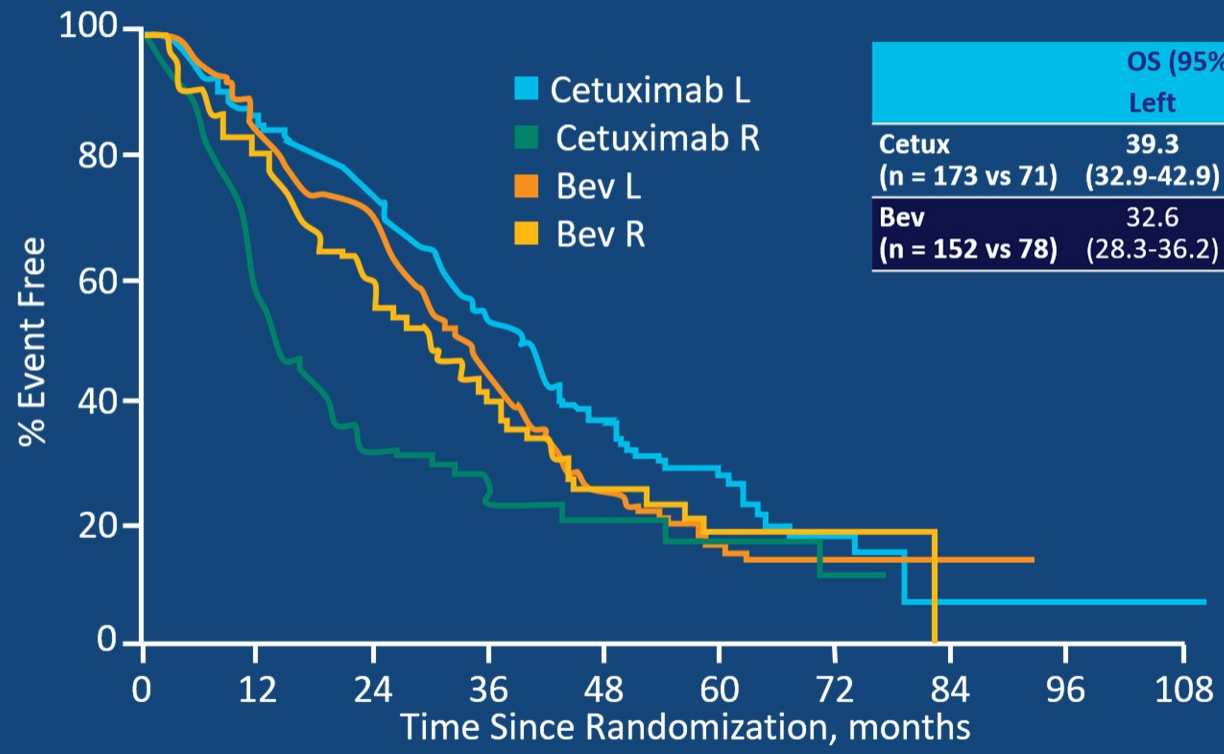
Abbreviations: FOLFOX-4, leucovorin, fluorouracil, and oxaliplatin; HR, hazard ratio; mITT, modified intent to treat; OR, odds ratio; ORR, overall response rate; OS, overall survival; PFS, progression-free survival.
*Two patients in the cetuximab plus FOLFOX-4 arm were not evaluable for tumor location.

J Clin Oncol. 2018;**36**(30):3031-3039.

CALBG/SWOG80405 Trial

First line: FOLFOX/FOLFIRI + Bevacizumab/Cetuximab

Benefit of Cetuximab is limited to wild type RAS LEFT side colon cancer



	OS (95% CI), mos		HR	
	Left	Right	(95% CI)	*P* Value[a]
Cetux (n = 173 vs 71)	**39.3 (32.9-42.9)**	**13.6 (11.3-19.0)**	0.55 (0.39-0.79)	.001
Bev (n = 152 vs 78)	32.6 (28.3-36.2)	29.2 (22.4-36.9)	0.88 (0.62-1.25)	.50

Tx	ΔR vs L, mos
Cetux	25.7
BEV	3.4

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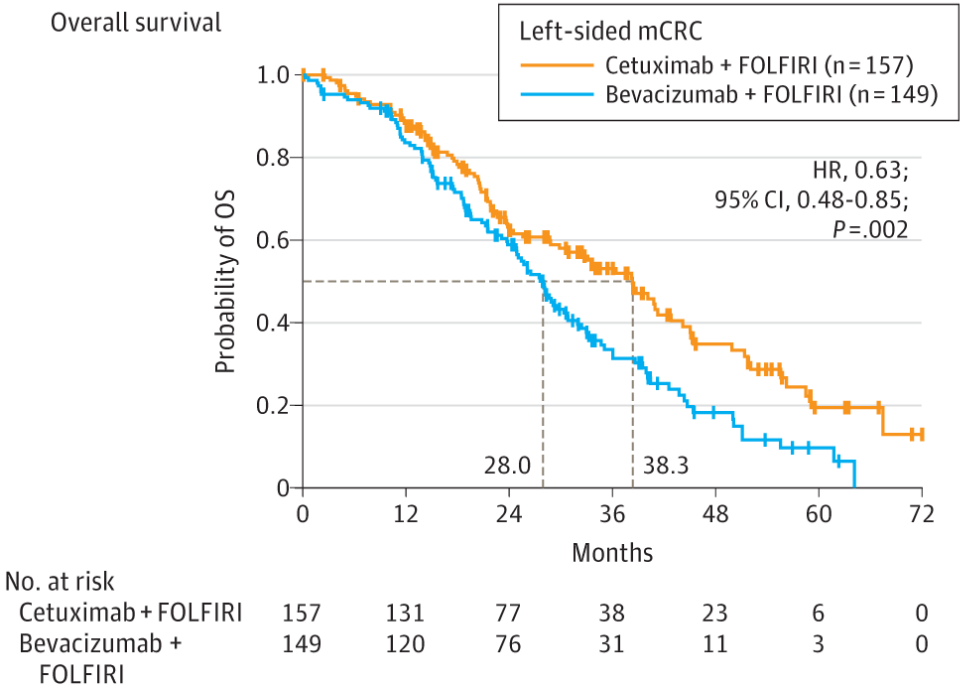
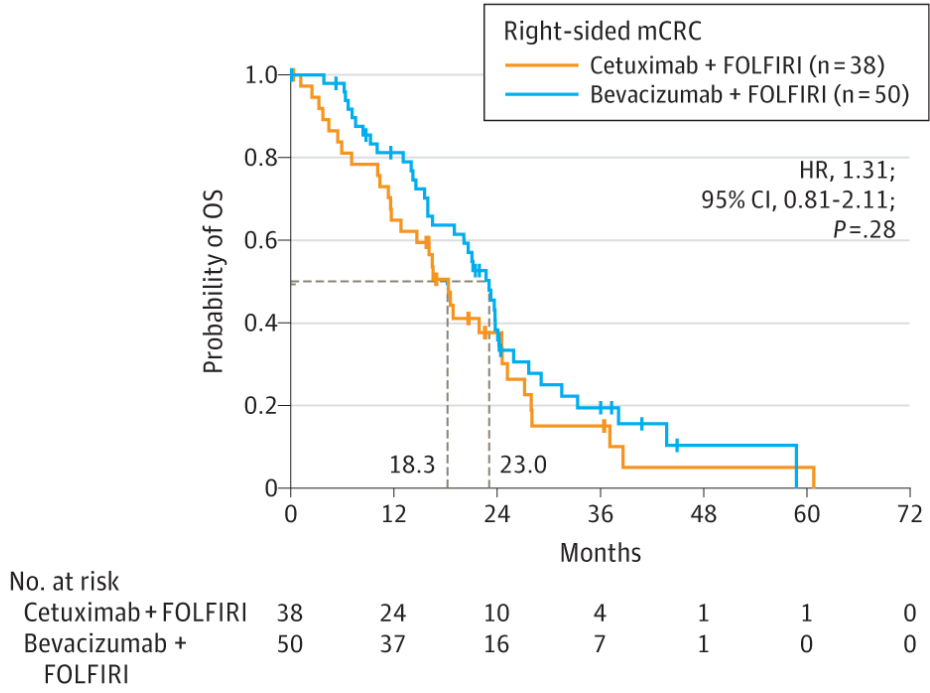
Venook A, et al. *JAMA*. 2017;317:2392-401.

FIRE-3

First line: FOLFIRI + Bevacizumab/Cetuximab

Benefit of Cetuximab is limited to wild type RAS LEFT side colon cancer



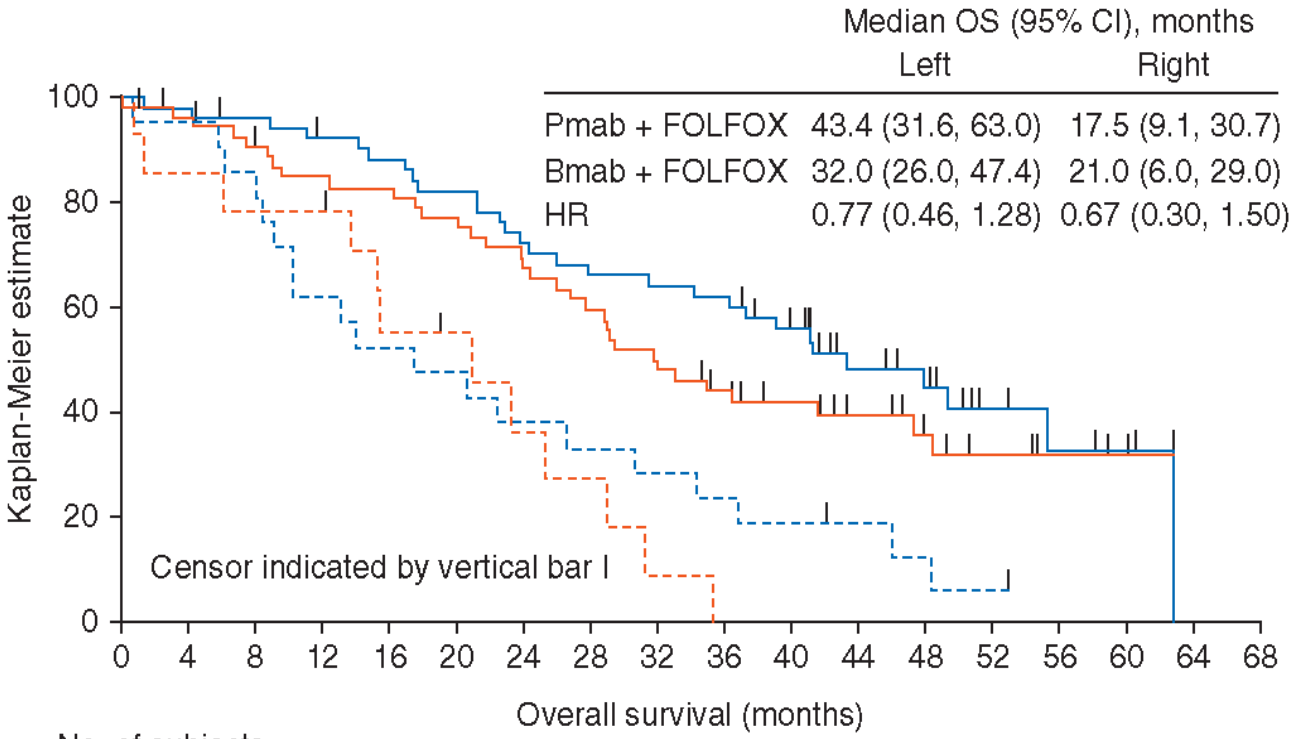


JAMA Oncol. 2017;3(2):194-201

Phase II PEAK Trial

First line, FOLFOX + Panitumumab or Bevacizumab

Benefit of Panitumumab is limited to wild type RAS LEFT side colon cancer



No. of subjects:

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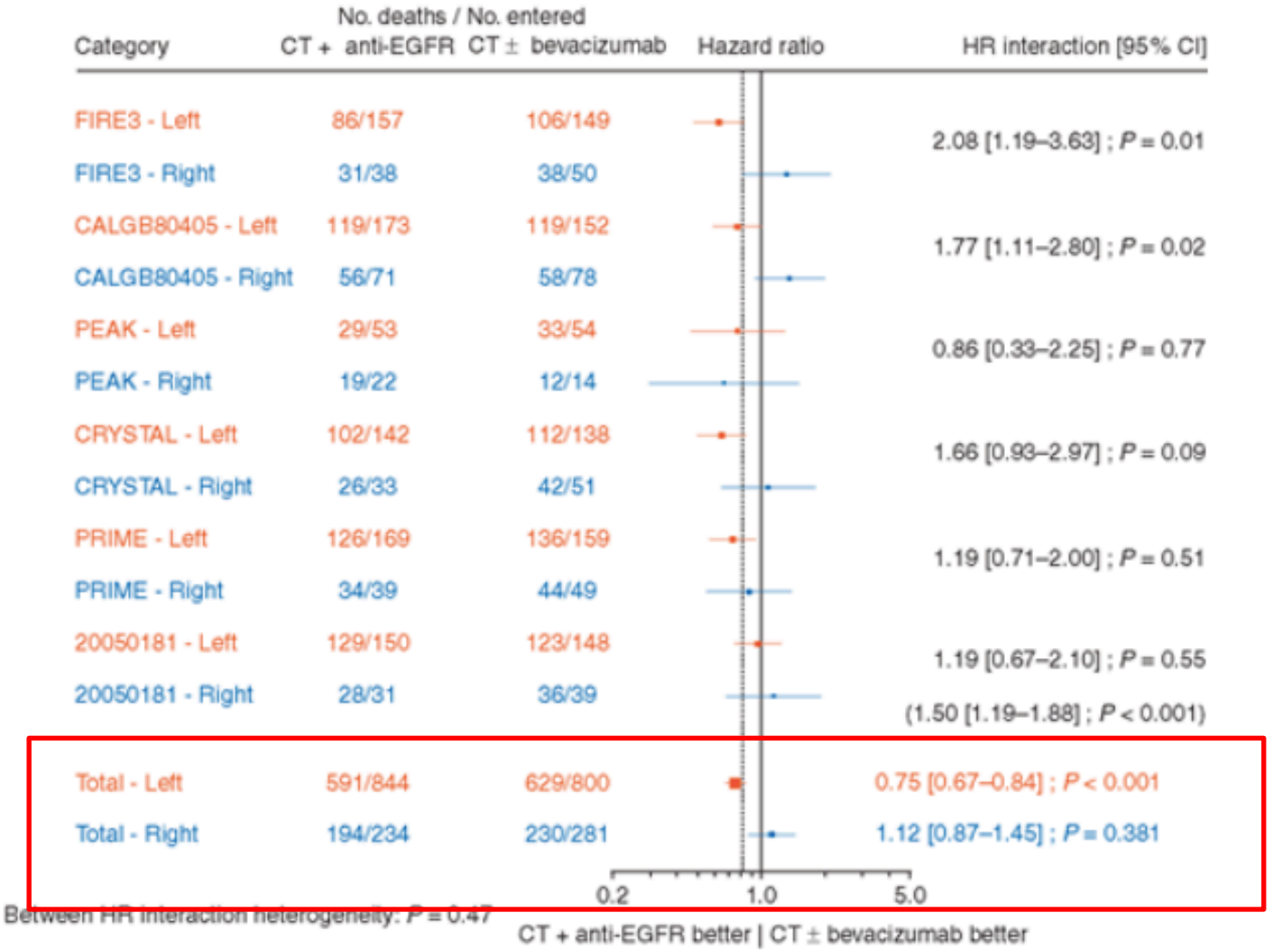
2:	54	51	48	44	43	40	35	31	26	21	17	13	10	5	3	2	0
3:	22	21	18	13	11	10	8	7	6	5	4	3	2	1	0		
4:	14	12	11	11	7	6	4	3	1	0							

Annals of Oncology, Volume 28, Issue 8, August 2017, Pages 1862–1868,

Prognostic and predictive value of primary tumour side in patients with *RAS* wild-type metastatic colorectal cancer treated with chemotherapy and EGFR directed antibodies in six randomized trials

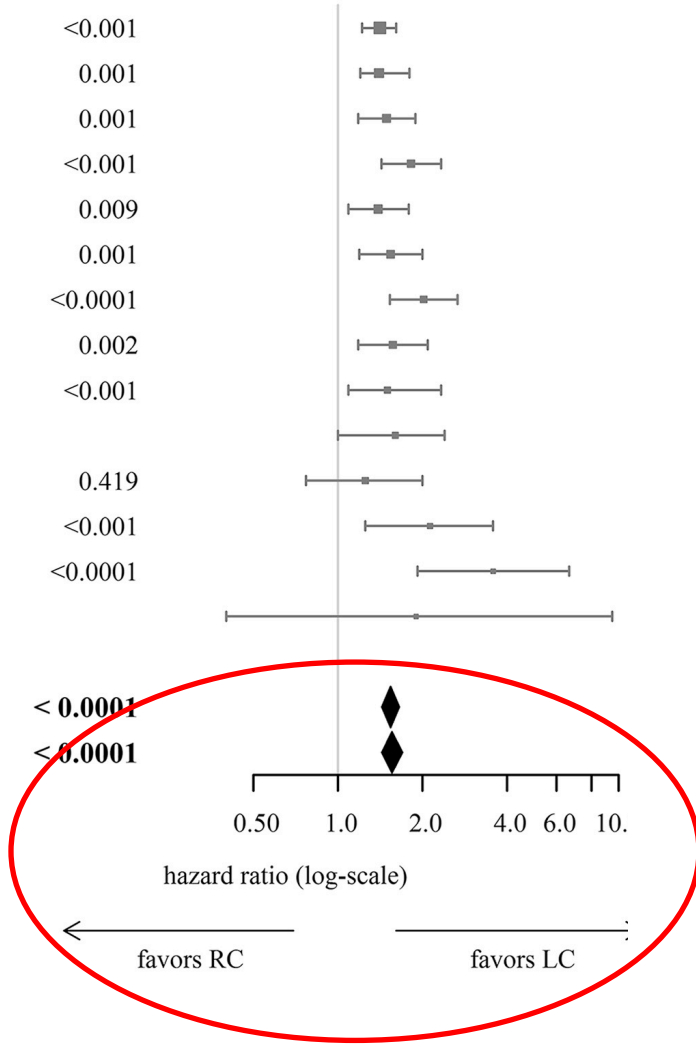


Annals of Oncology, Volume 28, Issue 8, August 2017, Pages 1713–1729

The relevance of primary tumour location in patients with metastatic colorectal cancer: A meta-analysis of first-line clinical trials

Study	n	Weight (%)	OS HR	95% CI	P-value
NO16966	1268	27	1.41	(1.22 , 1.61)	<0.001
FOCUS	1390	12.8	1.4	(1.2 , 1.8)	0.001
AGITG MAX	440	9.5	1.49	(1.18 , 1.89)	0.001
AVF2107g	559	8.9	1.82	(1.43 , 2.33)	<0.001
CALGB80405	474	8.6	1.39	(1.09 , 1.79)	0.009
FIRE-1	423	7.8	1.54	(1.19 , 2)	0.001
FIRE-3	394	6.7	2.02	(1.53 , 2.67)	<0.0001
CRYSTAL	364	6.5	1.57	(1.18 , 2.09)	0.002
FIRE-2	95	3.7	1.5	(1.09 , 2.33)	<0.001
PRIME	416	2.8	1.6	(1 , 2.4)	
MAVERICC	376	2.3	1.25	(0.77 , 2)	0.419
PROVETTA	200	1.9	2.13	(1.25 , 3.57)	<0.001
JACCRO-CC 05/06	110	1.4	3.57	(1.92 , 6.67)	<0.0001
PEAK	143	0.2	1.9	(0.4 , 9.5)	
Summary (FE)			**1.54**	**(1.43 , 1.65)**	**< 0.0001**
Summary (RE)			**1.56**	**(1.43 , 1.7)**	**< 0.0001**

Heterogeneity: I^2 = 16.3%, 95% CI = (0% , 83.9%)
P-value = 0.162 (χ^2 test)



Eur J Cancer. 2017 Jan;70:87-98.

Anti-EGFR Monoclonal Antibodies Beyond First Line

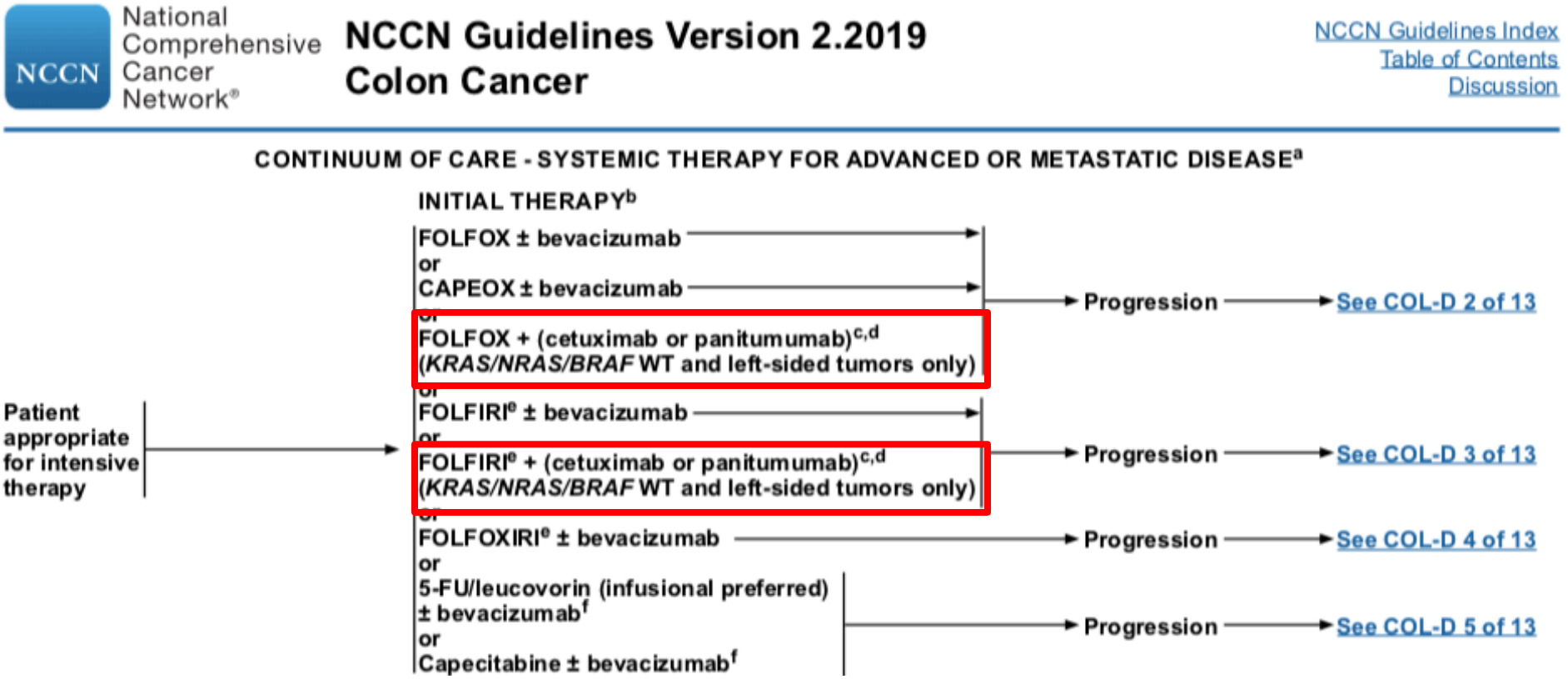
- Limited evidence on tumor site being a prognostic/predictive factor as a second and third-line therapy due to small numbers

- Given the mounting evidence in first line trials, may need to re-evaluate the use of anti-EGFR monoclonal antibodies in right-sided colon cancer

TAKE HOME

Results suggest in combination with chemotherapy the clinical benefit of first-line anti-EGFR monoclonal antibody is limited to left-sided colon cancers (splenic flexure to rectum) and there is a trend towards improvement in overall survival when compared to Bevacizumab in left-sided colon cancers.

Colorectal Cancer Guidelines



20th Annual WC5 Conference
September 28 – 29, 2018
Saskatoon, SK

CONSENSUS STATEMENTS

6) What is the optimal first line regimen for patients with left versus right side metastatic colorectal cancer?

- In RAS/BRAFV600 wild type left sided colorectal cancer – anti-EGFR agents are the preferred biologic agent to be used with first line combination chemotherapy when combination therapy is considered. In right sided colorectal cancer or RAS mutant patients, anti-VEGF agents should be considered in the first line setting with combination chemotherapy where appropriate. Patients receiving first line anti-EGFR should also be eligible for second line anti-VEGF unless contra-indicated.

How do we select therapy in left sided colon cancer (Bevacizumab or Anti-EGFR monoclonal antibodies)?

Patient Characteristics

- Patient attitude and expectations
- Co-morbid conditions
  - Hypertension
  - Cardiovascular disease
  - High output ileostomy
- Performance status

How do we select therapy in left sided colon cancer (Bevacizumab or Anti-EGFR monoclonal antibodies)?

Tumor Characteristics

- Tumor burden and behavior
- Symptomatic or Asymptomatic
- Tumor biology
  - RAS mutation status
  - BRAF mutation status
  - Others

How do we select therapy in left sided colon cancer (Bevacizumab or Anti-EGFR monoclonal antibodies)?

Treatment Characteristics

- Treatment schedule and type
  - IV or oral
  - Q2 or Q3 weeks
- Toxicity profile
  - Hair loss
  - Neuropathy
  - Skin rash
  - Thromboembolism
- Quality of life

Back to our case: 1

- A 50-year-old man presents with bright blood per rectum for 1 month. Colonoscopy showed a mass in the sigmoid colon (20 cm from the anal verge). No co-morbidities. ECOG PS 0. Physical exam was unremarkable.

- Sigmoid colon mass biopsy showed invasive adenocarcinoma.

- Molecular markers: normal MMR expression by IHC. Wild-type RAS and BRAF.

- CT showed multiple metastatic lesions in the liver and multiple enlarged retroperitoneal lymph nodes.

Case:1 …….audience poll

In this patient, what are the options for palliative intent systemic therapy?

1. 5-FU or Capecitabine +/- Bevacizumab
2. FOLFRI/FOLFOX alone
3. FOLFIRI/FOLFOX + Bevacizumab
4. FOLFIRI/FOLFOX + Cetuximab or Panitumumab
5. FOLFOXIRI +/- Bevacizumab

Case

What are the options for palliative intent systemic therapy?

1. 5-FU or Capecitabine +/- Bevacizumab
2. FOLFRI/FOLFOX alone

} **Patient preference, poor PS, contraindication to doublet chemotherapy or targeted agents**

3. FOLFIRI/FOLFOX + Bevacizumab
4. FOLFIRI/FOLFOX + Cetuximab or Panitumumab

5. FOLFOXIRI +/- Bevacizumab

} **Excellent PS, patient in need for significant down staging, BRAF V600E mutation, consider in right sided tumor**

Case

What are the options for palliative intent systemic therapy?

1. 5-FU or Capecitabine +/- Bevacizumab
2. FOLFRI/FOLFOX alone
3. FOLFIRI/FOLFOX + Bevacizumab
4. FOLFIRI/FOLFOX + Cetuximab or Panitumumab

Cetuximab or Panitumumab limited to left sided cancer cancer

Discussion on potential toxicities

5. FOLFOXIRI +/- Bevacizumab

Right vs. Left Sided Colon Cancer Summary

- Embryonal and genomic differences exist between the right/left side.
- Prognostic factor: left-sided colon cancer is associated with better survival when compared to right-sided colon cancers.
- Prognostic factor: Benefit of anti-EGFR monoclonal is limited to left-sided colon cancers.
- Selection of therapy (Bevacizumab or anti-EGFR monoclonal antibodies) should be based on patient preferences in left-sided colon cancers.

Adjuvant Therapy in Stage III Colon Cancer

Learning Objective:

Why some patients only require 3 not 6 months of adjuvant therapy

Case:2

- A 50-year-old man presents with bright blood per rectum for 1 month. Colonoscopy showed a mass in the sigmoid colon (20 cm from the anal verge). No co-morbidities. ECOG PS 0. Physical exam was unremarkable.
- Sigmoid colon mass biopsy showed invasive adenocarcinoma.
- Molecular markers: normal MMR expression by IHC.
- CT showed no evidence of metastatic disease.
- Patient underwent low anterior resection, pathology showed pT3 N1 disease.

Case:2 …….audience poll

In this patient, what are the options for adjuvant systemic therapy?

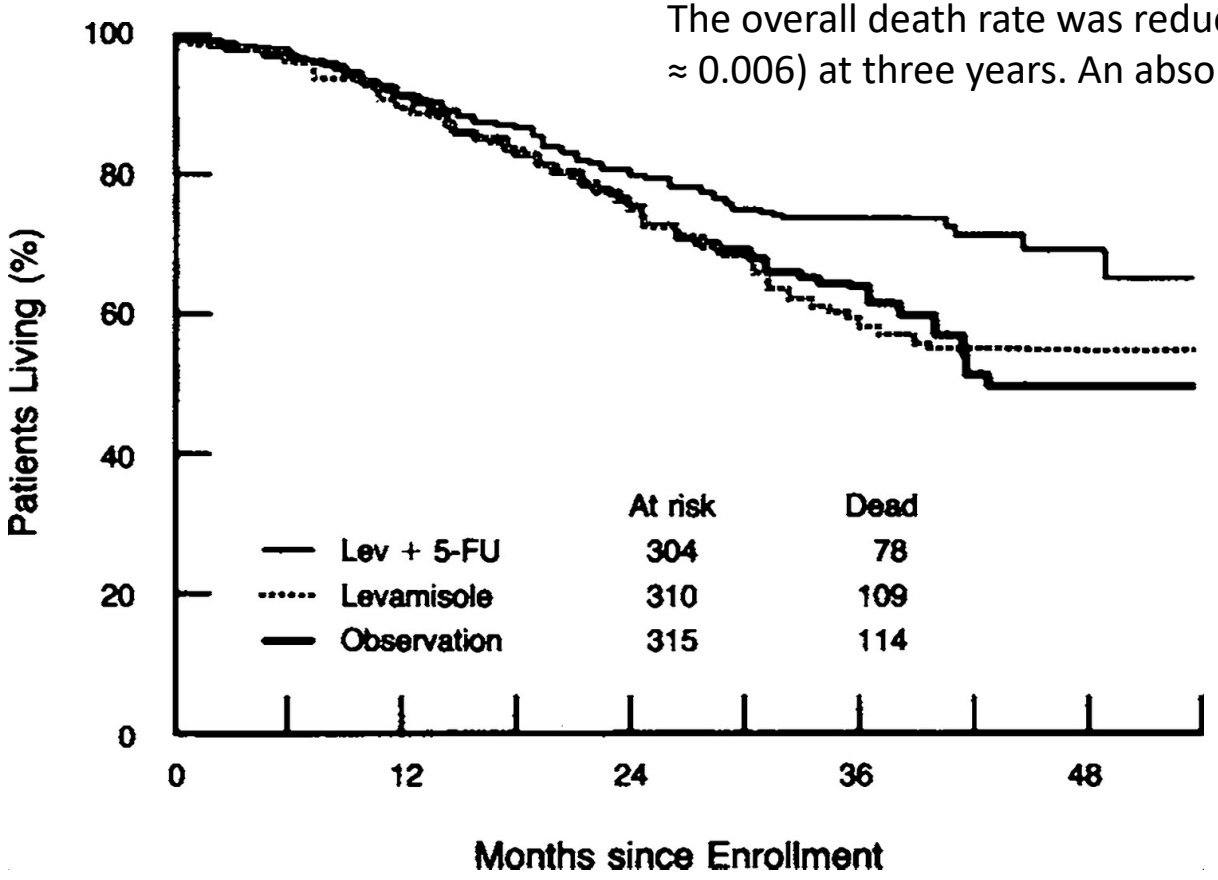
1. 5-FU or Capecitabine for three months
2. 5-FU or Capecitabine for six months
3. FOLFOX for three months
4. CAPOX for three months
5. FOLFOX/CAPOX for six months

Systemic Therapies Agents

5-Fluorouracil, Capecitabine, Oxaliplatin

Levamisole and Fluorouracil for Adjuvant Therapy of Resected Colon Carcinoma

The overall death rate was reduced by 33 percent (P ≈ 0.006) at three years. An absolute benefit: 16%

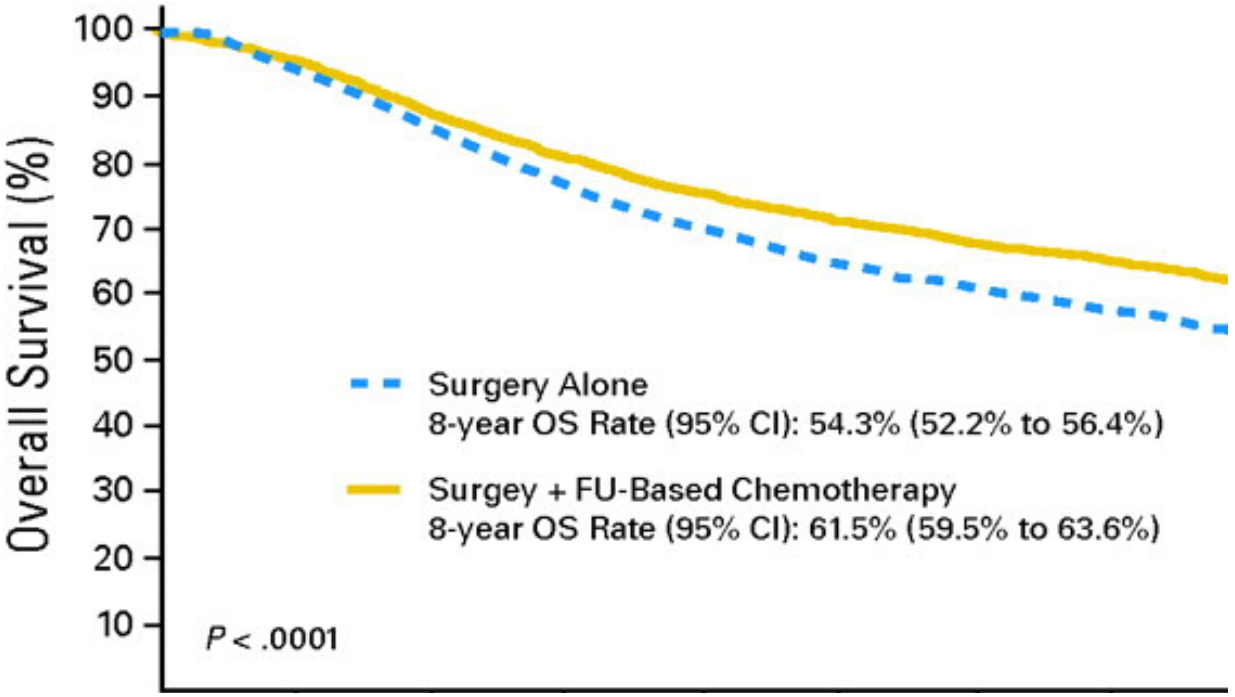


N Engl J Med 1990;322:352-358.

THE NEW ENGLAND JOURNAL of MEDICINE

Evidence for Cure by Adjuvant Therapy in Colon Cancer: Observations Based on Individual Patient Data From 20,898 Patients on 18 Randomized Trials

5FU, 5FU + LV, 5FU + LEV based
adjuvant therapy resulted in a 7% improvement in 8-year OS rate
(5% in stage II patients and 10% in stage III patients)



J Clin Oncol2009; 29:872-877

Adjuvant Oxaliplatin and 5-Fluorouracil

Clinical benefit mainly in Stage III disease

Trial	N	Control	Exp.	Stage	DFS HR P value	OS HR P value	Absolute Gain in OS	G3 Neuro Tox
MOSAIC[1]	2246	FULV2	FOLFOX4	II/III	0.80 0.003	0.84 0.046	**4,2**% at 6 y stage III	12%
NSABP-C07[2]	2407	FULV Roswell	FLOX	II/III	0.80 0.0034	0.82 0.002	**2,7 %** at 5 y Stage III	8,2%
XELOXA[3]	1886	FULV Mayo	CAPEOX	III	0.80 0.0038	0.83 0.04	**6 %** at 7 y	11%

[1]André T, et al. J Clin Oncol 2007; 27:3109-3116.
[2]Kuebler JP, et al. J Clin Oncol 2007; 25:2198-2204
[3]Schmoll HJ et al. J Clin Oncol 2015; 33:3733-3740

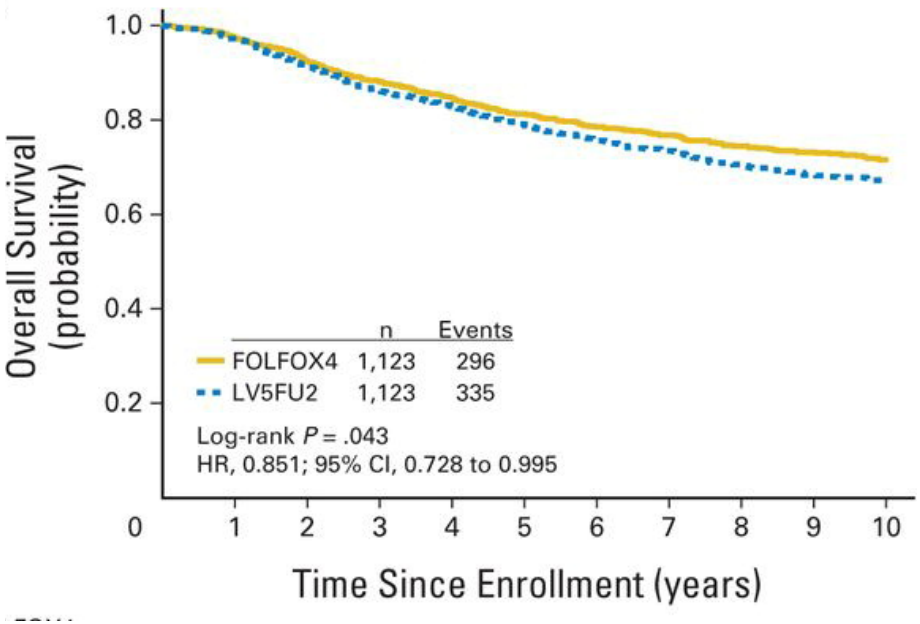
Slide: ESMO Academy 2018

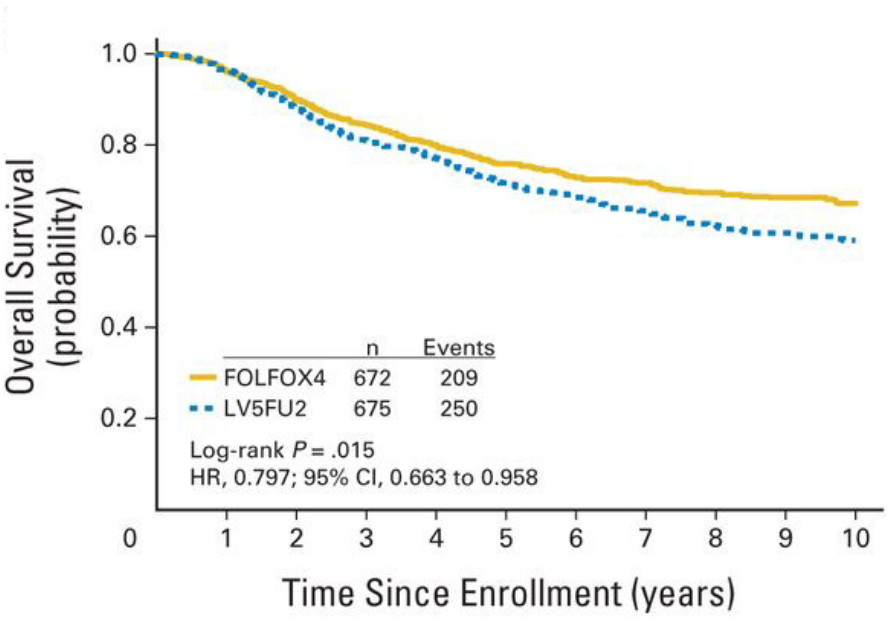
Adjuvant Oxaliplatin and 5-Fluorouracil

10-year Follow-up of the MOSIAC trial

10-year OS rates in the 5-FU + LV and FOLFOX4 arms

- 67.1% versus 71.7% (hazard ratio [HR], 0.85; P = .043) in the whole population.
- 79.5% versus 78.4% for stage II (HR, 1.00; P = .980)
- 59.0% versus 67.1% for stage III (HR, 0.80; P = .016)





J Clin Oncol. 2015 Dec 10;33(35):4176-87

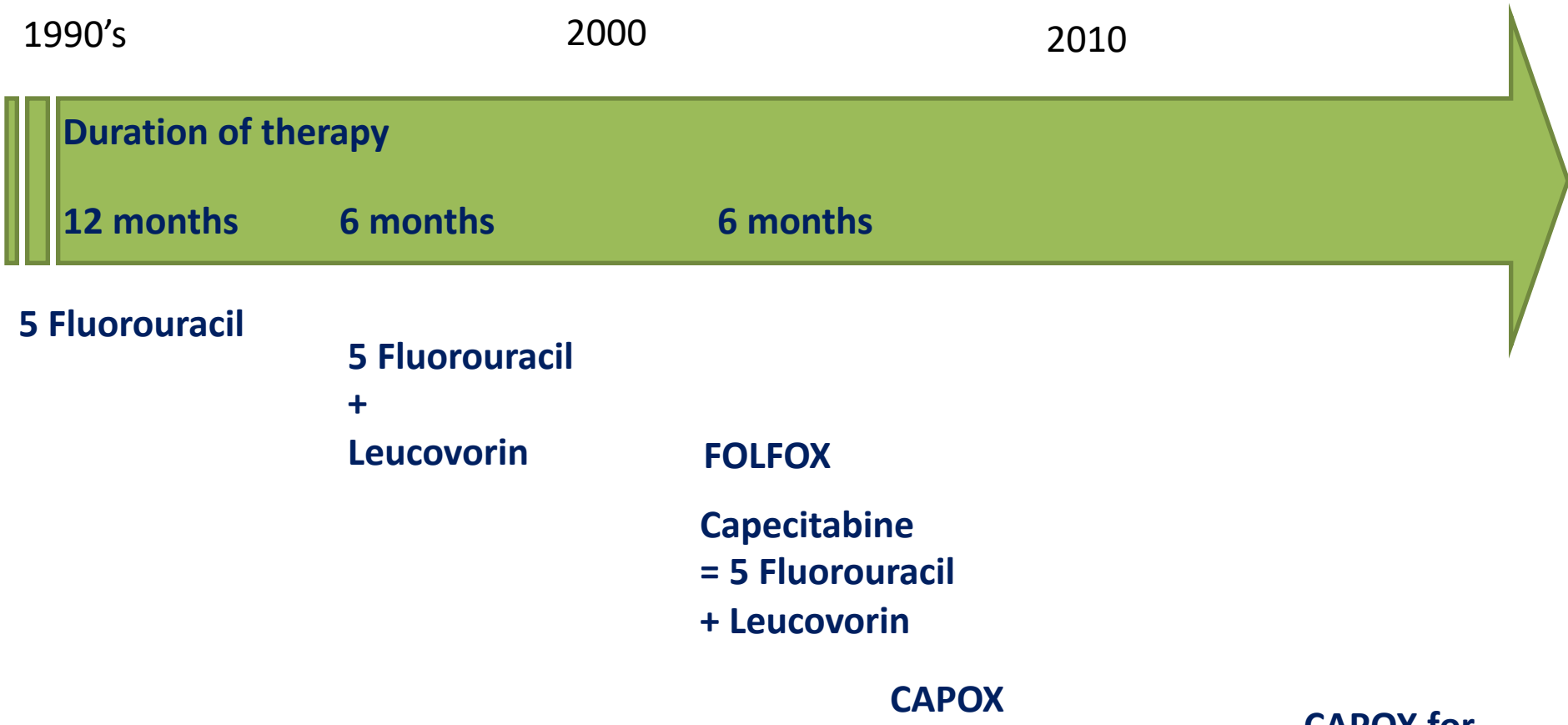
Other Systemic Agents

There is **NO role of these agents in adjuvant therapy**

- Irinotecan
- Targeted therapy:
  - Antiangiogenic agents
  - Anti-epidermal growth factor receptor monoclonal antibodies

Treatment Duration in Adjuvant Colon Cancer

Adjuvant Systemic Therapy Colon Cancer



CAPOX for three months in Stage II, low risk stage III disease

Treatment Duration:

Standard of care for 5-Fluorouracil/Capecitabine = 6 months

- Three randomized trials comparing six to twelve months to 12 months of adjuvant 5-Fluorouracil showed no difference in outcomes.

- A Cochrane review of seven clinical trials showed the adjuvant 5-Fluorouracil should not last longer than six months.

- There is no prospective randomized trial that has directly compared three versus six months of adjuvant 5-Fluorouracil/Capecitabine.

Cochrane Database Syst Rev. 2010

Treatment Duration: FOLFOX/CAPOX

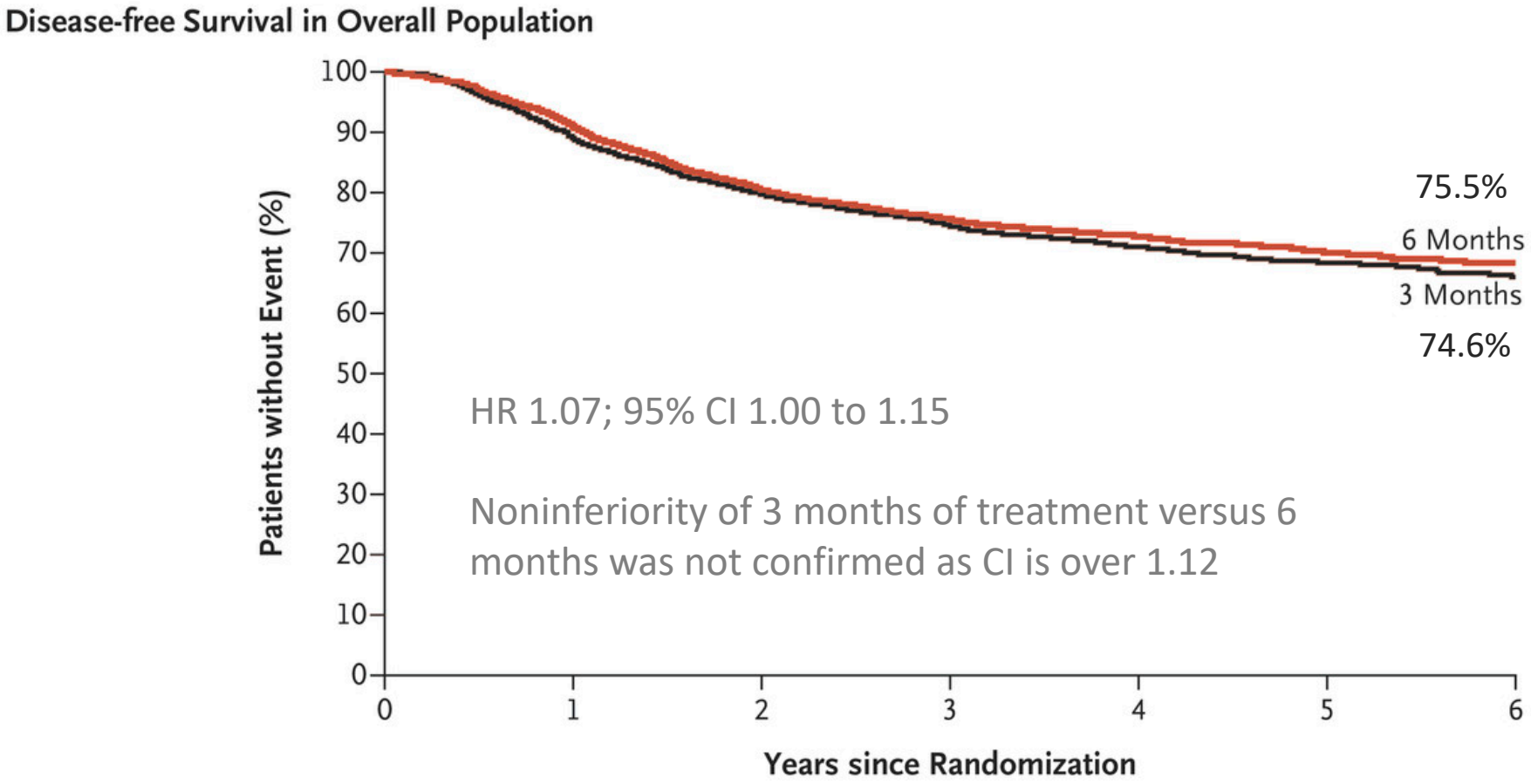
International Duration Evaluation of Adjuvant Chemotherapy (IDEA) collaboration

- Background: reduce cumulative neurotoxicity (grade 3 ~ 12 % with six months of FOLFOX) and duration of therapy

- Prospectively to combine and analyze data from six randomized trials conducted whether a three-month course of oxaliplatin-based adjuvant therapy (FOLFOX4/modified FOLFOX6 or XELOX) is non-inferior to the current standard six-month treatment for patients with high-risk stage II or stage III colon cancer

- Non-inferiority design and the primary endpoint is disease-free survival at three years.

IDEA Collaboration Results

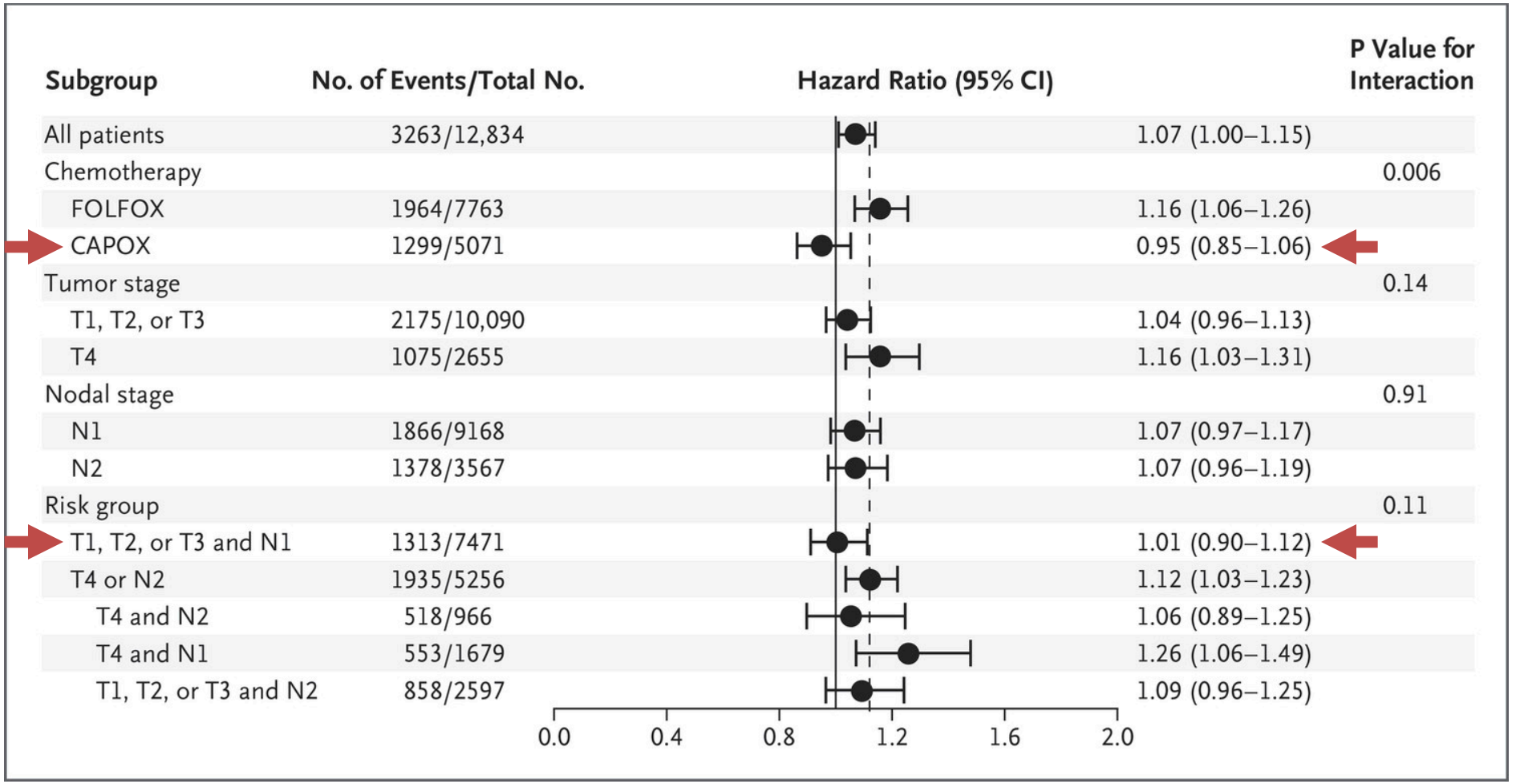


N Engl J Med 2018;378:1177-1188.

IDEA Collaboration

Preplanned Subgroup Analysis

CAPOX regimen and T1-3 N1 disease met prespecified noninferiority margin



N Engl J Med 2018;378:1177-1188.

IDEA Conclusion

- Among patients with stage III colon cancer who were receiving adjuvant therapy with FOLFOX or CAPOX, the noninferiority of a 3-month duration of therapy, as compared with a 6-month duration, was not confirmed.

- In patients treated with CAPOX, 3 months of therapy was as effective as 6 months, particularly in the lower-risk subgroup :T1-3 N1 disease.

Briefly on Adjuvant Therapy in Stage II Colon Cancer

- Clinical benefit of adjuvant therapy in stage II disease is limited across multiple trials:
  - QUASAR trial showed an absolute benefit in OS at 5-years to be 3.6%
  - ACCENT study showed an absolute benefit in OS at 8 years to 5.4%
  - MOSIAC trial at 10 year follow-up showed no benefit with Oxaliplatin in low-risk patients, while a nonsignificant benefit in high-risk group

- Microsatellite instability is a validated prognostic marker in assessing for adjuvant therapy.

Briefly on Adjuvant Therapy in Stage II Colon Cancer

- Current guidelines suggest considering adjuvant therapy in **high-risk stage II disease** (T4 disease, obstruction, perforation, poorly differentiated tumors, lymph vascular invasion, perineural invasion, lymph nodes sampled <12, positive margin). However, the **definition of high-risk disease varies among the guidelines.**

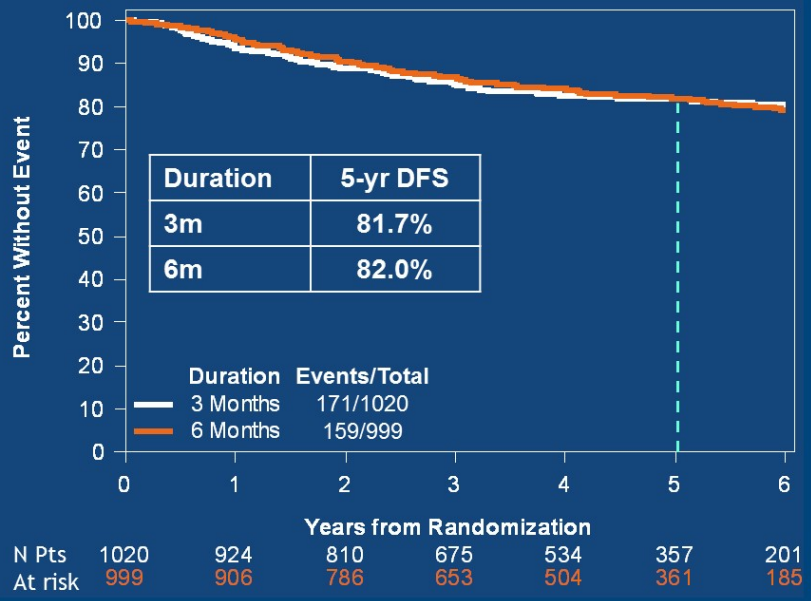
- **In MMR proficient tumors with high-risk features**: six months of 5-Fluorouracil or Capecitabine or FOLFOX/CAPOX (T4 disease).

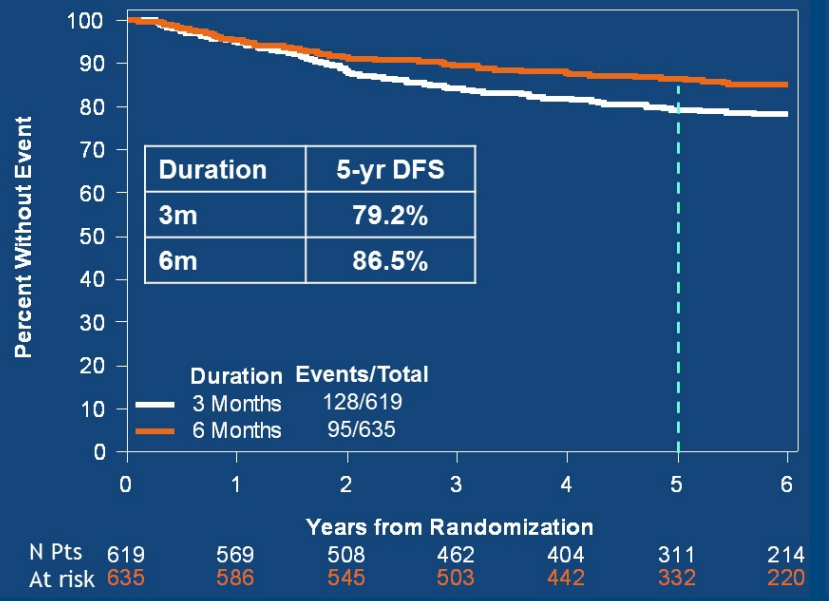
- **In MMR deficient tumors with high-risk features**: six months of FOLFOX or CAPOX

IDEA Collaboration of High Risk Stage II Colorectal Cancer

CAPOX for three months appears to be non-inferior on subgroup analysis

Results: DFS Comparison by Regimen





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Presented By Timothy Iveson at 2019 ASCO Annual Meeting

TAKE HOME

Duration of adjuvant therapy in stage II/III colon cancer is based on the stage of the disease and treatment regimen.

- **5-Fluorouracil or Capecitabine**
- **mFOLFOX-6**

} 6 months

- **CAPOX**
  - Clinical data evolving, may be in T3-4 N0 (Stage II) disease: CAPOX for three months
  - **T1-3 N1 disease: CAPOX for three months**
  - **T4 N1-2 or N2 disease: CAPOX for six months**

Case: 2

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Case:2 …….audience poll

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4. CAPOX for three months
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Case:2

In this patient, what are the options for adjuvant systemic therapy?

1. 5-Fuor Capecitabine for three months: **No evidence to support this option.**
2. 5-FU or Capecitabine for six months: **patient preference**
3. FOLFOX for three months: **non-inferiority not proven in IDEA collaboration.**
4. **CAPOX for three months**
5. FOLFOX/CAPOX for six months: **based on IDEA collaboration prefer three months of CAPOX to minimize the risk of neurotoxicity.**

Questions?