

Ensuring stage III colon cancer patients are treated according to recommended guidelines

RCN Gastrointestinal Disease Site Group

GASTROINTESTINAL DS CO-LEADS



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RCN Support staff

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2017/2018 PRIORITIES

- Ensure earlier treatment for stage III colon cancer patients to increase **SURVIVAL**
- Standardize patient transfer across the RCN for clinical trials to ensure access to **LEADING-EDGE TREATMENTS**
- Improve cancer care of patients with rectal cancer through selection and measurement of a quality indicator

Colleagues invited to steering committee meetings	Institution	Discipline
Alan Barkun / Alain Bitton	MUHC	Gastroenterologist
Neil Kopek	MUHC	Radiation oncologist
Artho Giovanni / Mark Leventhal	MUHC	Int Radiologist
Sender Liberman	MUHC	Surgeon
Zu-Hua Gao / Victoria Marcus	MUHC	Pathologist
Thierry Alcindor / Raghu Rajan / Michael Thirwell	MUHC	Medical Oncologist
Colleen Rooney	MUHC	IPO
Olga Aleynikova / George Chong / Adrien Gologan	JGH	Pathologist
Marylise Boutros / Gabriela Ghitulescu / Carol Vasilevsky	JGH	Surgeon
Gerald Batist	JGH	Medical Oncologist
Tamim Niazi / Te Vuong	JGH	Radiation oncologist
Jonathon Wyse	JGH	Gastroenterologist
Dawn Anderson	SMHC	Surgeon
Richard Dalfen / Adrian Langleben	SMHC	Medical Oncologist
Alexander Marcus	SMHC	Pathology

INDICATOR G11

Delays to post-operative chemotherapy for stage III colon cancer patients

Among patients with stage III colon cancer, adjuvant chemotherapy has been shown to decrease recurrence rates and mortality. Clinical practice guidelines, updated in 2012 by an international consensus conference established by the European Society for Medical Oncology (ESMO), recommend that chemotherapy be started as early as 4 weeks following surgery, **up to a maximum of 12 weeks post-surgery**.¹

A more recent analysis of 6620 colon cancer patients by the Netherlands Comprehensive Cancer Organization support initiating adjuvant chemotherapy in stage III colon cancer patients within 8 weeks post-surgery since delaying chemotherapy beyond 8 weeks was associated with decreased survival (Figure 1).²

Fig 1: Overall survival depending on the presence and timing of adjuvant chemotherapy (AC) after surgery. (From Bos et al., 2015).

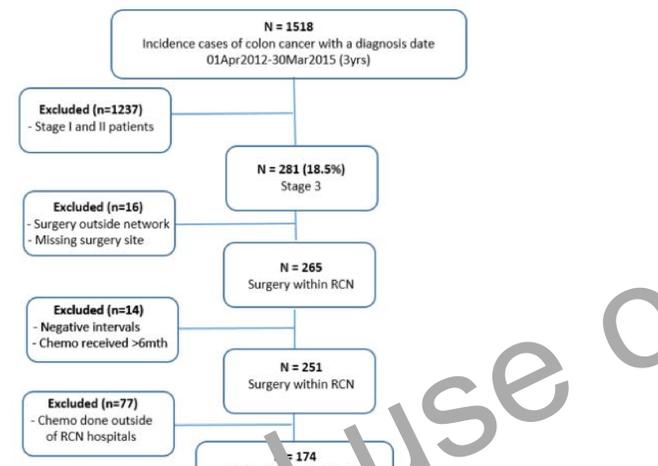
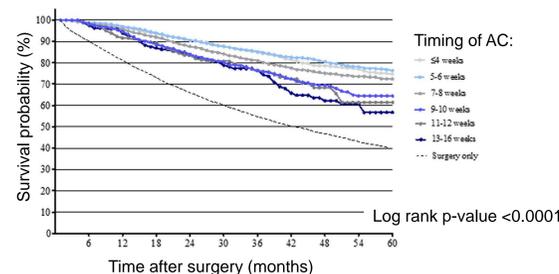


Fig 2: Consort diagram of Patient Selection for GI1

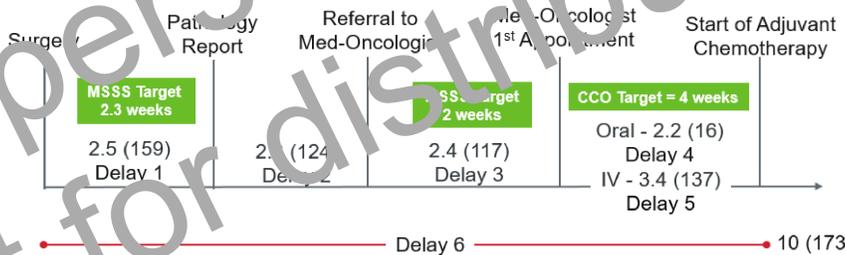


Fig 3: RCN delay (in median weeks) from the date of surgery to the start of adjuvant chemotherapy (oral or IV) in stage III colon cancer patients— April 2012 to March 2015. Data was presented at the CPAC conference in Toronto, April 7-8 by Dr Arielle Elkrief, resident.

Table 1: Time (in weeks) from the date of surgery to the start of adjuvant chemotherapy (oral or IV) in stage III colon cancer patients by hospital (April 2012 to March 2015). Percent of patients meeting the 8 and 12-week targets are noted.

	JGH	MUHC	SMH	RCN	CCO
N	60	78	35	173	-
Mean	10	10	9.7	9.9	-
Median	9.1	9.6	9.7	9.6	-
Interquartile Range (25 th and 75 th percentile)	7.9-11.8	8.3-12	7-11.6	7.9-11.9	-
% patients meeting 8 week target	33	23	37	30	63*
% patients meeting 12 week target	77	74	80	76	-

*Cancer Care Ontario (CCO) target: 60 days (8.6 weeks). Toronto Central Region (PMH and Sunnybrook). Data from 2010-14.

Indicator results show that 24% of stage III colon cancer patients treated at the RCN (MUHC, JGH, and SMHC) did not receive adjuvant chemotherapy (oral or intravenous) within 12 weeks (Table 1).

The goal is to increase the number of patients starting adjuvant chemotherapy within 8 weeks and have the majority of patients started by 12 weeks.

Significant findings of the multivariate analysis

Delay in impacting meeting the 8-and 12-week targets

Increase in **Delay 1** reduces the likelihood that patients will meet the 8- (p=0.013) and 12-week (p=0.028) targets

- Increase in **Delay 2** reduces the likelihood that patients will meet the 8-week target (p=0.001)

- Increase in **Delay 5** reduces the likelihood that patients will meet the 8- and 12-week targets (p<0.001 for both)

- Patients who start IV chemo in ≤ 4 weeks (delay 5) are 14 (CI: 2.9-68.3) times more likely to achieve the 8-week target and 9 (CI: 3.5-23.3) times more likely to achieve the 12-week target. Wide odds ratio confidence intervals are due to the small sample size of the study.

- Having **1 or more surgical complication** reduces the likelihood that patients will meet the 8- (p<0.001) and 12-week target (p=0.053)

KEY MESSAGES

- 24% of patients are not being treated within the 12-week target

- 70% of patients are not being treated within the 8-week target

Lets discuss! → What is considered an appropriate target? And what % of patients should be meeting each respective target?

SMHC quality improvement (2016):

- Medical oncologists now consult patients while they recover from surgery, thereby significantly decreasing delays

Results FY2014-15 → FY2015-16:

- 60% → 100% receiving chemotherapy within 12-week target
- 9% → 62% receiving chemotherapy within 8-week target

Lets discuss how to make these suggested improvements!

- Reduce pathology report turnaround time to 2 weeks (**Delay 1**)
- Initiate earlier referral to medical oncology (**Delays 1 and 2**)
- Initiate IV chemotherapy within 2 weeks of med-onc appt (**Delay 5**)

REFERENCES

- Schmoll HJ, Van Cutsem E, Stein A et al. ESMO Consensus guidelines for management of patients with colon and rectal cancer. A personalized approach to clinical decision making. Annals of Oncology 23: 2479-2516, 2012.
- Bos ACRK, van Erning FN, van Gestel RYBM et al. Timing of adjuvant chemotherapy and its relation to survival among patients with stage III colon cancer. European Journal of Cancer 51:2554-2561.