



Focused Expertise of IOTox GI Service Can Improve Quality of Clinical Care and Outcome of Immune Mediated Diarrhea/Colitis Among Inpatients: A Retrospective Review and Quality Improvement Project

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Background & Aim:

- ICIs pre-dispose to immune related adverse events, immune related diarrhea and colitis (IMDC) being the most frequently encountered.
- We aimed to evaluate quality outcomes of cancer inpatients in regards to IMDC and cancer after implementation of an institutional practice change with a standardized algorithm by a dedicated toxicity GI service

Study Design & Methods:

- Retrospective, single center study
- Standardized algorithm and practice change instituted in 2018
- Comparative analysis of management and outcomes of inpatients with IMDC 2017 and 2019

Table 1: Baseline characteristics of sample (N=126)

Characteristic	Number of patients (%)
Median age at IMDC (years) IQR	62 (55.25-70)
Male gender	81 (64.3)
Caucasian ethnicity	108 (85.7)
Median Charlson Comorbidity Index at IMDC (IQR)	4.75 (7.25-12)
Cancer type	
Melanoma	29 (23)
Genitourinary cancer	45 (35.7)
Lung cancer	11 (8.7)
Others	38 (30.2)
Cancer stage	
Stage III	16 (12.7)
Stage IV	104 (82.5)

Figure 1 : Colitis practice change

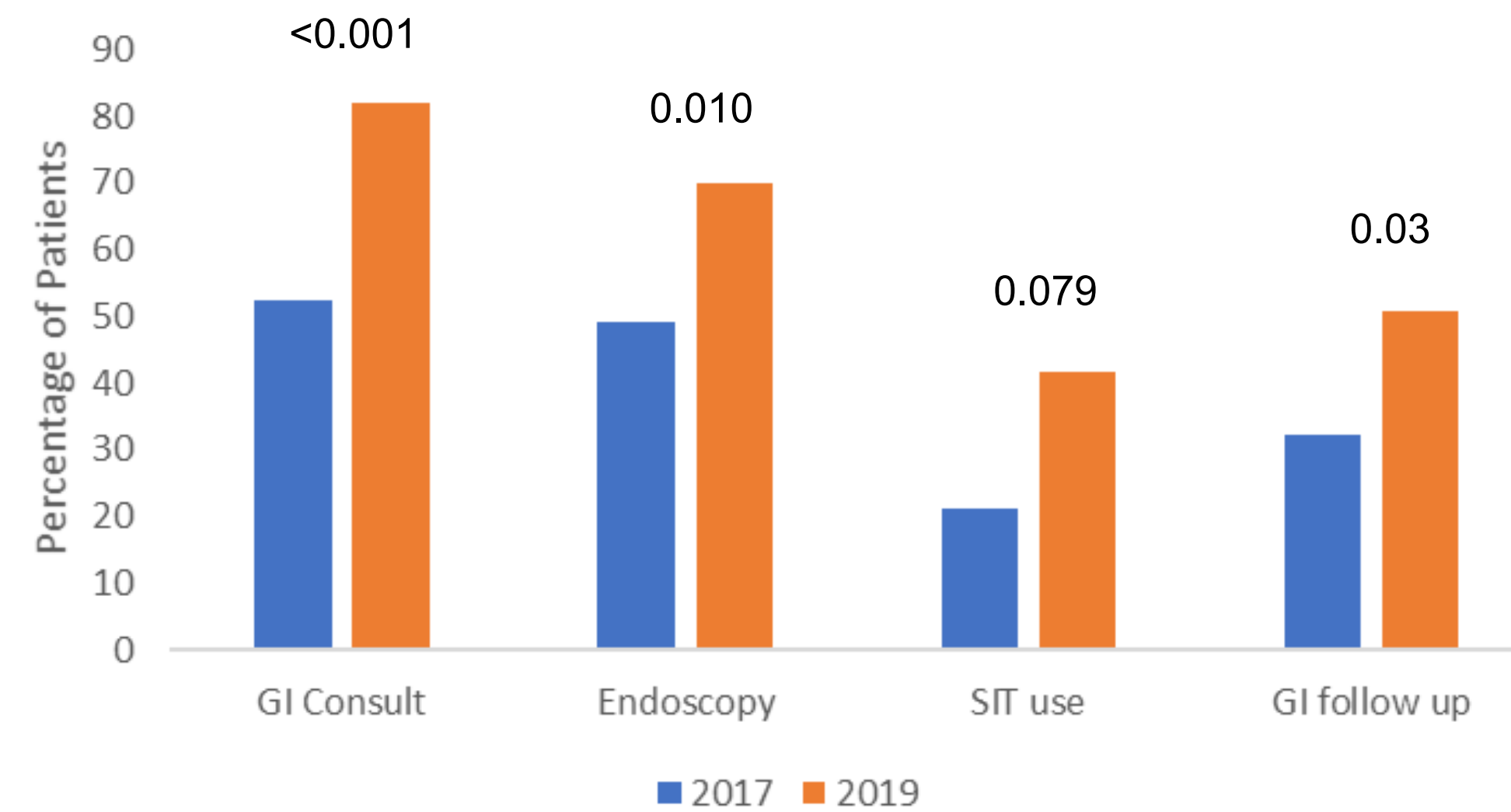


Figure 2: Colitis-Related Outcome

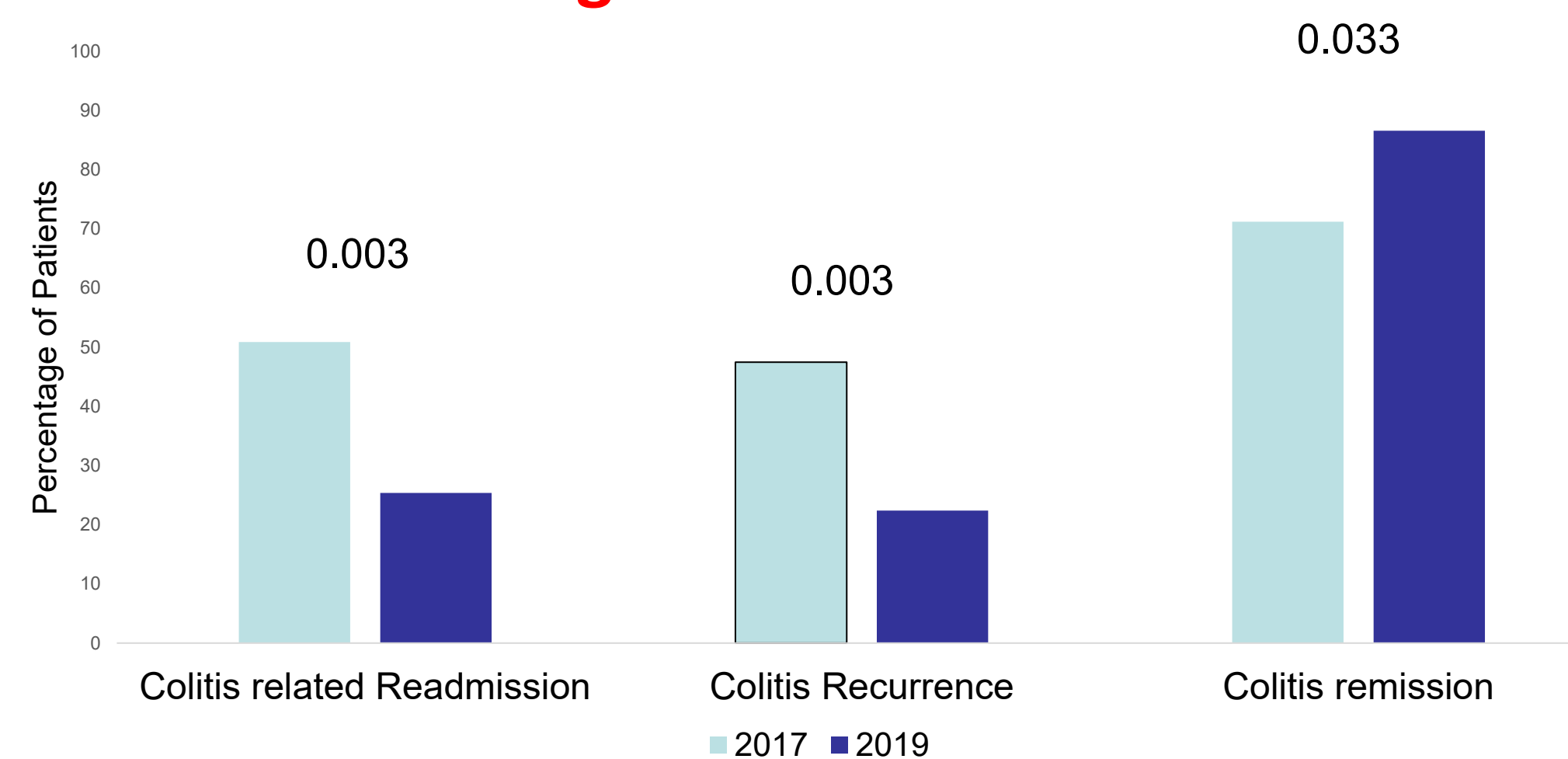
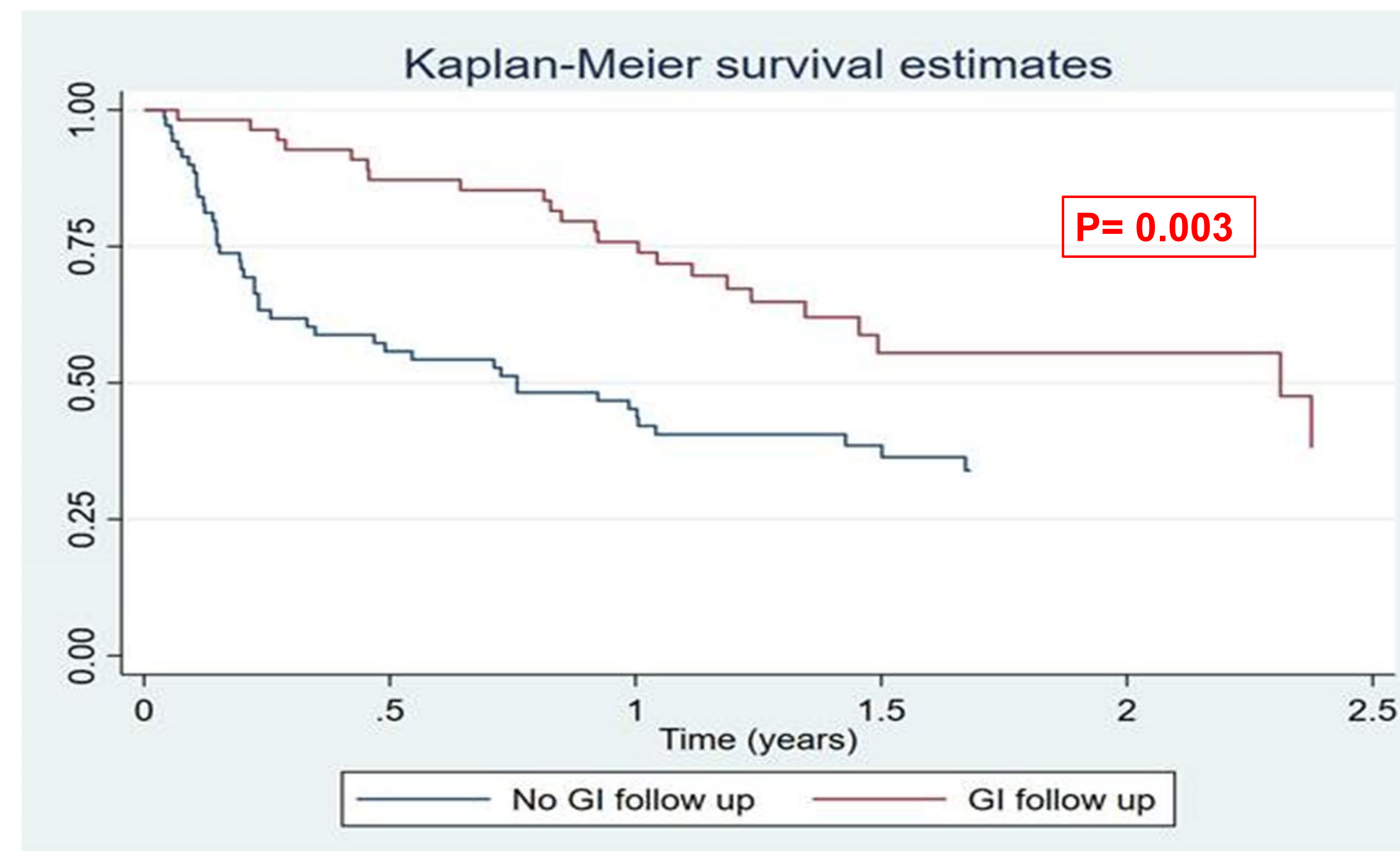


Figure 3: Outcome of GI follow up on Overall survival (OS)



Results:

Demographic and oncologic profile of sample:

A majority were white males (81%) with a median age of 62 years. Genitourinary cancer (36%) was the most frequent cancer type. (Table 1)

Colitis practice change: (Figure 1)

2019 group had significantly higher rates of

- GI consultation
- Endoscopic evaluation
- Selective immunosuppression use and
- Post discharge GI follow up

Colitis related outcomes: (Figure 2)

2019 group had significantly lower

- days to clinical remission
- hospital re-admissions and
- recurrence of IMDC

Cancer outcomes: (Figure 3)

OS was higher for at least 2 years in 2019 group

Conclusion

Early evaluation and management by an expert IOTox specialty service with implementation of a regimented management algorithm improves the quality of care and outcome of complex cancer patients with IMDC