

# Sunitinib in Patients with Metastatic Colorectal Cancer and *FLT-3* alterations: Results from the Targeted Agent and Profiling Utilization Registry (TAPUR) Study

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## Background

- The TAPUR Study is a phase II basket study that evaluates the anti-tumor activity of commercially available targeted agents used in patients (pts) with advanced cancers with genomic alterations that are known targets for drugs in TAPUR.
- Results from a cohort of pts with metastatic colorectal (mCRC) cancer with *FLT-3* amplification treated with sunitinib, an oral multi-kinase inhibitor that inhibits Fms-related tyrosine kinase 3, are reported.

## Methods

### Study Design:

- Eligible pts had mCRC with no remaining standard treatment options, PS 0-2, and adequate organ function. Treatment was assigned according to pre-specified protocol matching rules based on genomic testing performed using commercially available tests selected by clinical sites.
- All pts in this analysis had mCRC with *FLT-3* amplification.
- Pts received sunitinib (S) at a dose of 50 mg orally once daily for four weeks followed by two weeks off until disease progression. Tumor evaluations were performed at weeks (wks) 8 and 16 after treatment initiation.

Primary endpoint is objective response (OR) at or before 16 wks or stable disease (SD)  $\geq$  16 wks per RECIST v1.1. Secondary endpoints are progression-free survival (PFS), overall survival (OS) and toxicity per CTCAE. Grades 3-4 adverse events (AEs) at least possibly related to drug are reported.

### Statistical methods:

- Simon's optimal two stage design was used to test the null hypothesis of 15% response rate versus the alternative of 35%.
- Power and type I error rate were set at 85% and 10%, respectively.
- Design requires 10 pts in stage 1 and if  $<2$  pts have OR at or before 16 wks or SD  $\geq$  16 wks, the cohort is closed.

## Results

- Baseline demographics and clinical characteristics are shown in Table 1.

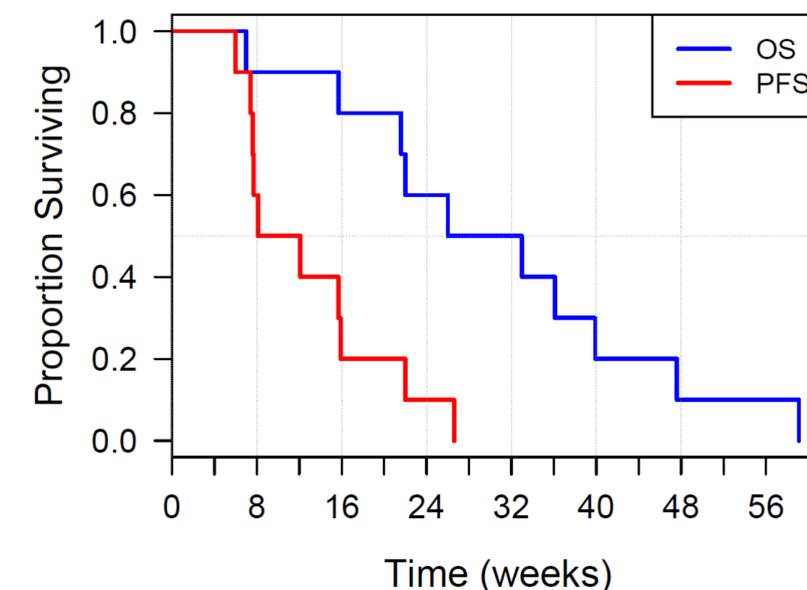
### Treatment Exposure and Clinical Outcomes

- 10 pts were enrolled from November 2016 to April 2018.
- No ORs were observed and despite observation of 2 pts with SD at  $\geq$  16 wks, the cohort was closed after further examination revealed both pts with SD died due to disease progression shortly after the 16 wk evaluation (see Figure 2).
- mPFS, wks, (90% CI) : 10.1 (7.1, 15.9)
- mOS, wks, (90%CI) : 29.5 (15.7, 39.9)
- A single grade 3 AE (diarrhea) was reported that was at least possibly related to S.

**Table 1: Demographics and Baseline Characteristics**

Characteristic	Sunitinib targeting <i>FLT-3</i> alterations, N (%)
Tumor Type	mCRC (N=10)
Median Age, years (range)	56 (41-71)
Sex	Male 8 (80%)
Race	White 10 (100%)
ECOG Performance Status	0 3 (30%) 1 7 (70%) 2 0 (0%)
Prior Treatments	Pts with radiation therapy 6 (60%) Pts with prior systemic therapies 1 1 (10%) 2 1 (10%) 3 8 (80%)
Genomic Test Performed	FoundationOne 9 (90%) NGS test from local laboratory (Molecular Diagnostic Laboratory at MD Anderson Cancer Center) 1 (10%)

**Figure 1: OS and PFS in mCRC Pts with *FLT-3* amplification treated with Sunitinib**



## Conclusions

These results suggest monotherapy with S does not have sufficient clinical activity in pts with metastatic colorectal cancer with *FLT-3* amplification for continued evaluation in this pt population. Other treatments should be considered for these pts, including treatments offered in clinical trials.

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