## BC Cancer Protocol Summary for Third- or Later-Line Therapy of Advanced Gastroesophageal Carcinoma Using Trifluridine-Tipiracil

Protocol Code

Tumour Group
GIGAVTRFT

Contact Physician
Gastrointestinal

GI Systemic Therapy

## ELIGIBILITY:

- Metastatic gastric cancer or adenocarcinoma of gastroesophageal junction
- ECOG 0-1
- At least two prior lines of therapy including fluoropyrimidine, platinum, taxane or irinotecan and HER2 directed therapy if positive - if relapse within 6 months of peri-operative or preoperative treatment that will count as a line of therapy.


## EXCLUSIONS:

- Patients with CNS metastases


## TESTS:

- Baseline: CBC, differential, platelets, sodium, potassium, creatinine, urea, bilirubin, ALT, alkaline phosphatase, LDH, dipstick urine protein. Optional : CEA, 19-9
- Prior to each cycle: CBC, differential, platelets, sodium, potassium, creatinine, urea, bilirubin, ALT, alkaline phosphatase, LDH.
- Day 15:CBC, differential and platelets
- If clinically indicated: dipstick urine protein, CEA, 19-9


## PREMEDICATIONS:

- Antiemetic protocol for low emetogenic chemotherapy protocols (see SCNAUSEA)

TREATMENT:

| Drug | Dose | BC Cancer Administration <br> Guideline |
| :---: | :---: | :---: |
| trifluridine-tipiracil | $35^{*} \mathrm{mg} / \mathrm{m}^{2}$ BID on <br> days $1-5$ and days $8-12$ | PO |

* based on the trifluridine component; up to maximum of $80 \mathrm{mg} /$ dose.

Repeat every 28 days (one cycle) until progression or unacceptable toxicity.

Dose Levels:

| Starting dose | Dose level -1 | Dose level -2 | Dose level -3 |
| :---: | :---: | :---: | :---: |
| $35 \mathrm{mg} / \mathrm{m}^{2}$ | $30 \mathrm{mg} / \mathrm{m}^{2}$ | $25 \mathrm{mg} / \mathrm{m}^{2}$ | $20 \mathrm{mg} / \mathrm{m}^{2}$ |

- Dose escalation is not permitted after it has been dose reduced.
- Round dose to nearest 5 mg .
- A total daily dose of 50 mg should be taken as $1 \times 20 \mathrm{mg}$ tablet in the morning and $2 \times 15$ mg tablets in the evening.

Suggested Dose Dispensing Table:

| Dose (mg)* <br> (given BID) | Number of Tablets per Dose |  |
| :---: | :---: | :---: |
|  | $\mathbf{1 5 ~ m g ~ T a b l e t ~}$ | 20 mg Tablet |
| 35 | 1 | 1 |
| 40 | 0 | 2 |
| 45 | 3 | 0 |
| 50 | 2 | 1 |
| 55 | 1 | 2 |
| 60 | 0 | 3 |
| 65 | 3 | 1 |
| 70 | 2 | 2 |
| 75 | 1 | 3 |
| 80 | 0 | 4 |

* based on the trifluridine component; up to maximum of $80 \mathrm{mg} / \mathrm{dose}$.

15 mg tablet $=$ trifluridine-tipiracil $15 \mathrm{mg}-6.14 \mathrm{mg}$ tablet
20 mg tablet $=$ trifluridine-tipiracil $20 \mathrm{mg}-8.19 \mathrm{mg}$ tablet

## DOSE MODIFICATIONS:

1. Hematological:

Table 1: Dose interruption and resumption criteria for hematological toxicities

| Parameter | Interruption Criteria | Resumption Criteria* |
| :---: | :--- | :---: |
| ANC | Less than $0.5 \times 10^{9} / \mathrm{L}$ | Greater than or equal to $1.5 \times 10 \% / \mathrm{L}$ |
| Platelets | Less than $50 \times 10^{9} / \mathrm{L}$ | Greater than or equal to $75 \times 10^{9} / \mathrm{L}$ |

[^0]| Toxicity |  |  |  | Dose |
| :---: | :---: | :---: | :---: | :---: |
| Grade | ANC (x10\% ${ }^{\text {c }}$ ) |  | $\begin{aligned} & \text { Platelets } \\ & \left(\times 10^{9} / \mathrm{L}\right) \\ & \hline \end{aligned}$ |  |
| 1 | greater than or equal to 1.5 | or | greater than or equal to 75 | 100\% |
| 2 | 1.0 to less than 1.5 | or | 50 to less than 75 | 100\% |
| 3 | 0.5 to less than 1.0 | or | 25 to less than 50 | 100\% |
| 4 | less than 0.5 | or | less than 25 | Delay until resolution to Grade 1 or baseline and then reduce one dose level. (minimum dose of $15 \mathrm{mg} / \mathrm{m}^{2}$ twice daily in severe renal impairment) |
| Febrile neutropenia |  |  |  | Delay until resolution to Grade 1 or baseline and then reduce one dose level. (minimum dose of $15 \mathrm{mg} / \mathrm{m}^{2}$ twice daily in severe renal impairment) |

Dose escalation is not permitted after it has been dose reduced.

## 2. Non-Hematological toxicity:

| CTCAE*- Grade | Dose |
| :--- | :--- |
| Grade 3 or 4 toxicity <br> (except for Grade 3 nausea and/or <br> vomiting controlled by antiemetic therapy <br> or diarrhea responsive to antidiarrheal <br> therapy) | Hold dose until symptoms resolve to Grade 1 or <br> baseline and then reduce one dose level. <br> (minimum dose of $15 \mathrm{mg} / \mathrm{m}^{2}$ twice daily in severe <br> renal impairment) |
| Interstitial Lung Disease/Pneumonitis <br> (treatment-related) | Hold dose and investigate. If confirmed, discontinue <br> treatment permanently. |

* CTCAE : Common terminology criteria for adverse events.

Dose escalation is not permitted after it has been dose reduced.
3. Renal dysfunction:

| Creatinine Clearance (mL/min) | Dosage recommendation |
| :---: | :---: |
| Greater than or equal to 60 | No adjustment required |
| 30 to 59 | No adjustment required; monitor for increased |
| hematologic toxicity |  |
| 15 to 29 | Recommend dose reduction to $20^{* *} \mathrm{mg} / \mathrm{m}^{2}$ (based <br> on the trifluridine component); monitor for increased <br> hematologic toxicity |
| Less than 15 | no information found |

** Reduce dose to $15 \mathrm{mg} / \mathrm{m}^{2}$ twice daily in patients with severe renal impairment who are unable to tolerate a dose of $20 \mathrm{mg} / \mathrm{m}^{2}$ twice daily. Dose escalation should not be considered after the dose has been reduced. Permanently discontinue in patients who are unable to tolerate a dose of $15 \mathrm{mg} / \mathrm{m}^{2}$ twice daily.
calculated creatinine clearance $=\frac{\mathrm{N}^{*} \times(140-\text { Age }) \times \text { weight in } \mathrm{kg}}{\text { serum creatinine in micromol/L }}$
For males $\mathrm{N}=1.23$;
For females $\mathrm{N}=1.04$

## 4. Hepatic dysfunction:

No dose adjustment is required in patients with mild hepatic impairment (Child-Pugh class A). No information found in patients with moderate or severe hepatic impairment (Child-Pugh class B or C). Higher incidence of grade 3 or 4 hyperbilirubinemia was observed in patients with baseline moderate hepatic impairment.

## PRECAUTIONS:

1. Patients who received prior radiotherapy may be at higher risk of hematological and myelosuppression related adverse reaction including febrile neutropenia.
2. Myelosuppression can be severe and life-threatening. Fatal events related to neutropenic infection, sepsis, or septic shock have occurred. Monitor closely for signs of infection and treat as indicated.
3. Pregnancy/Lactation: Trifluridine-tipiracil is not recommended for use in pregnancy. Adequate contraception should be used by both sexes during treatment, and for at least 6 months after the last dose. Women using a hormonal contraceptive must also use a barrier contraceptive, as it is unknown whether trifluridine-tipiracil may reduce the effectiveness of hormonal contraceptives. Breastfeeding is not recommended during treatment and for one day following the final dose.

Call the GI Systemic Therapy physician at your regional cancer centre or the GI Systemic Therapy Chair Dr. Theresa Chan at (604) 930-2098 with any problems or questions regarding this treatment program.

## References:

1. Shitara, K, Doi, T, et al. Trifluridine/tipiracil versus placebo in patients with heavily pretreated metastatic gastric cancer (TAGS): a randomised, double-blind, placebo-controlled, phase 3
trial Lancet Oncol 2018; 19: 1437-1448.
2. LONSURF® Product monograph, Taiho Pharma Canada Inc. Submission Control No. 235999, Date of revision: 29 Oct 2020.

[^0]:    * Resumption Criteria applied to the start of the next cycle

