Oncology Clinical Pathways
Gastrointestinal Stromal Tumors

October 2024 – V1.2024

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Gastrointestinal Stromal Tumors – Presumptive Conditions

VA automatically presumes that certain disabilities were caused by military service. This is because of the unique circumstances of a specific Veteran's military service. If a presumed condition is diagnosed in a Veteran within a certain group, they can be awarded disability compensation.

Atomic Veterans Exposed to Ionizing Radiation

- Cancers of the esophagus, stomach, and small intestine

Gulf War and Post 9/11 Veterans

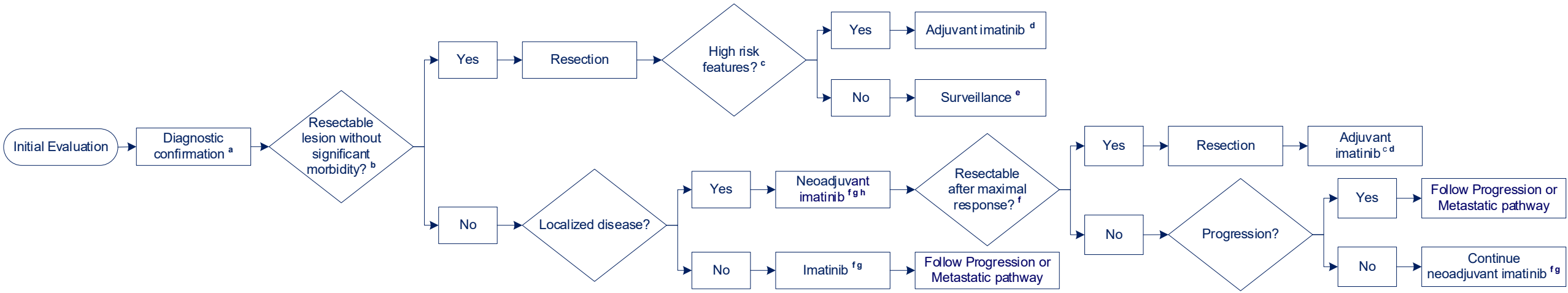
If the patient served on or after Sept. 11, 2001, in Afghanistan, Djibouti, Egypt, Jordan, Lebanon, Syria, Uzbekistan, or Yemen or if you served in the *Southwest Asia theater of operations, or Somalia, on or after Aug. 2, 1990, specific conditions include:

- Gastrointestinal cancer of any type

* The Southwest Asia theater of operations refers to Iraq, Kuwait, Saudi Arabia, the neutral zone between Iraq and Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, Oman, the Gulf of Aden, the Gulf of Oman, the Persian Gulf, the Arabian Sea, the Red Sea, and the airspace above these locations.

For more information, please visit U.S. Department of Veterans Affairs - Presumptive Disability Benefits (va.gov)

Gastrointestinal Stromal Tumors – Initial Evaluation



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Diagnostic Confirmation** includes imaging (CT and/or EGD and biopsy) and molecular testing (KIT PCR, with reflex to PDGFRA PCR)

[b] **Resectable Lesion** multidisciplinary discussion to determine if morbidity can be decreased with maximal response; select gastric lesions <2 cm may be observed

[c] **High Risk Features** including tumor size, location, mitoses per mm^2, and/or tumor rupture/perforation determined by multidisciplinary team using risk stratification table outlined in pathway

[d] **Adjuvant Imatinib** for a minimum of at least 3 years

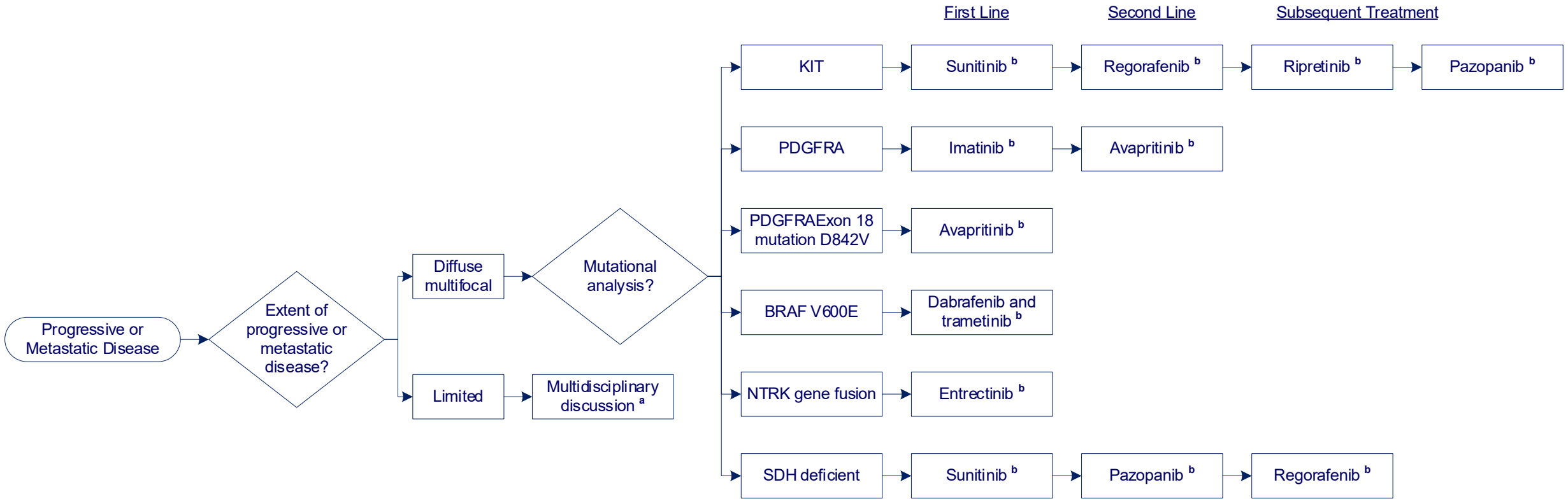
[e] **Surveillance** including history, physical, and CT of abdomen and pelvis with contrast every 6 months for 5 years and then annually; may not be indicated for patients with very low risk lesions

[f] **Imaging** CT at 3 month intervals to assess response

[g] **Neoadjuvant Imatinib** higher doses are recommended for patients with KIT exon 9 mutation; if patient is intolerant to therapy sunitinib is recommended

[h] **Mutation** if PDGFRA D842V, the use of avapritinib is recommended and can be continued based on patient tolerance; observation is appropriate for alterations of SDH deficiency in NF1 mutation with lack of KIT/PDGFRA mutation; BRAF and NTRK directed therapies may be used in the presence of those alterations

Gastrointestinal Stromal Tumors – Progressive or Metastatic Disease



Clinical trial(s) always considered on pathway. For assistance finding a clinical trial, email CancerClinicalTrialsNavigation@va.gov.

[a] **Multidisciplinary discussion** to determine the role of metastasis directed local therapy in combination with systemic therapy

[b] **Surveillance** CT abdomen and pelvis with contrast every 3-6 months to monitor for response and stability or progression

Gastrointestinal Stromal Tumors – Risk Stratification Table

Risk Stratification of GIST by Mitotic Count, Tumor Size, and Anatomic State					
Tumor Parameters	**Risk of Progressive Disease (Metastasis or Tumor-related Death)**				
	Size (cm)	**Gastric**	**Duodenum**	**Jejenum/Ileum**	**Rectum**
Mitotic Index ≤ 5 / 50 HPFs	≤ 2	None (0%)	None (0%)	None (0%)	None (0%)
	> 2 - ≤ 5	Very low (1.9%)	Low (8.3%)	Low (4.3%)	Low (8.5%)
	> 5 - ≤ 10	Low (3.6%)	Insufficient data	Moderate (24%)	Insufficient data
	> 10	Moderate (10%)	High (34%)	High (52%)	High (57%)
Mitotic Index > 5 / 50 HPFs	≤ 2	Insufficient data	Insufficient data	High (limited data)	High (52%)
	> 2 - ≤ 5	Moderate (16%)	High (50%)	High (73%)	High (52%)
	> 5 - ≤ 10	High (55%)	Insufficient data	High (85%)	Insufficient data
	> 10	High (86%)	High (86%)	High (90%)	High (71%)

Gastrointestinal Stromal Tumors – Recurrence Free Survival Rates

Calculation of Probabilities of 2-year and 5-year Recurrence Free Survival (RFS) Rates																
Feature	**Size (cm)**												**Mitotic Index**		**Site**		
	2.5	5	7.5	10	15	20	25	30	35	40	45	50	< 5 / 50 HPFs	≥ 5 / 50 HPFs	Stomach/Other	Colon/Rectum	Small Intestine
Points	15	30	42	52	65	70	75	80	85	90	95	100	0	80	0	5	80

Used to predict probabilities of 2-year and 5-year recurrence free survival. To calculate a score add the points for size, mitotic index, and site to determine total points.

Probability of Recurrence Free Survival (RFS)									
Points	15	35	60	70	80	90	100	120	150
2-year RFS	97%	94%	88%	84%	78%	72%	64%	43%	10%
5-year RFS	94%	89%	79%	71%	62%	53%	41%	19%	1%

Tumor sizes and points falling between given values are in between estimates of 2-year and 5-year RFS.

Gastrointestinal Stromal Tumors – Molecular Testing Table

Eligibility	Test Category	Test Type	Recommended Vendors	NPOP Coverage	Specimen Type
Gastrointestinal Stromal Tumor (GIST)	Molecular Testing	KIT PCR, with reflex to PDGFRA PCR	Local VA or locally contracted vendor	No	Tumor Tissue