Optimising Patient Outcomes in Advanced Gastrointestinal Stromal Tumours (GIST) in Europe

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Introduction

GIST are malignant mesenchymal tumours and the most common sarcoma of the GI tract.¹

KIT and *PDGFRA* mutations are the drivers of approximately 85% of GISTs.²

The standard of care for advanced GIST is treatment with TKIs.¹

Progression through multiple lines of therapy is associated with deterioration in the QoL of patients with GIST, including cognitive and social functioning.³

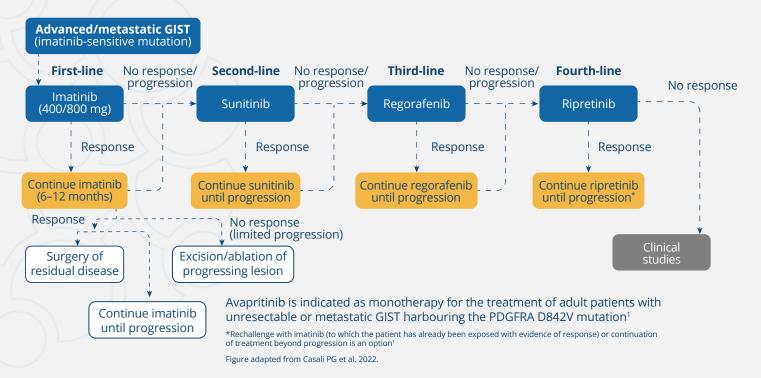
In advanced GIST, the treatment goals are to control disease progression and patient QoL.^{1,3-6}



ESMO Guidelines Recommend Life-long Systemic TKI Therapies for Advanced GIST¹

(ESMO-EURACAN-GENTURIS guidelines)¹

The introduction of TKIs has revolutionized the treatment of GISTs, resulting in a substantial gain in median overall survival.⁶ Discontinuing TKI therapy can lead to accelerated disease progression or worsen symptoms.^{1,4} Proactive adverse effect management is critical to ensuring patients continue on TKI therapy as appropriate.^{4,7}



TKI therapy improves patient outcomes in advanced GIST⁸⁻¹⁴

In advanced GIST, the ESMO guidelines recommend that treatment should be continued indefinitely where possible.¹ Toxicity management and tolerability during long-term treatment can be a challenge for some patients as severe and/or unmanaged toxicities may impact QoL and can lead to a lack of compliance, treatment interruption or treatment discontinuation.^{1,7} Supportive measures, including proactive counselling, to manage toxicity are needed.¹





Reported adverse reactions (very common events [≥1/10])

Abdominal pain, anaemia, dermatitis/eczema/rash, diarrhoea, dyspepsia, fatigue, fluid retention/oedema, headache, muscle spasm and cramps, musculoskeletal pain, nausea, neutropenia, periorbital oedema, thrombocytopenia, vomiting, weight increased ¹⁴	Abdominal pain, anaemia, arthralgia, back pain, constipation, cough, decreased appetite, diarrhoea, dizziness, dry skin, dyspepsia, dyspnoea, epistaxis, fatigue, hair colour changes, headache, hypertension, hypothyroidism, insomnia, leukopenia, mucosal inflammation, nausea, neutropenia, oedema, pain in extremity, PPES, pyrexia, rash, skin discolouration, stomatitis, taste disturbance, thrombocytopenia, vomiting ¹⁰	Anaemia, asthenia/fatigue, constipation, decreased appetite and food intake, diarrhoea, dysphonia, fever, haemorrhage, hand-foot skin reaction, hyperbilirubinaemia, hypertension, increase in transaminases, infection, mucosal inflammation, nausea, pain, rash, stomatitis, thrombocytopenia, vomiting, weight loss ¹¹
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Alopecia, arthralgia, back pain, blood bilirubin increased, constipation, diarrhoea, dry skin, dyspnoea, cough, fatigue, headache, hypertension, hypophosphataemia, lipase increased, muscle spasms, myalgia, nausea, oedema peripheral, pain in extremity, PPES, pruritus, seborrhoeic keratosis, vomiting, weight decreased⁸

Avapritinib is indicated as monotherapy for the treatment of adult patients with unresectable or metastatic GIST harbouring the PDGFRA D842V mutation¹

*PFS converted from weeks to months for sunitinib, and from years to months for imatinib

In Advanced GIST, Controlling the Disease Progression is Key



Interruption of TKI therapy may cause increased tumour activity and rapid tumour progression.^{1,15}



Treatment management and change of lines of treatment should be evaluated **balancing** radiologic progression and clinical benefit.¹



Management should be carried out at reference centres for sarcomas and GISTs and/or within reference networks utilising **multidisciplinary treatment planning**.¹

Considerations when switching therapy^{1,7}

Check in with patients often to monitor signs of progression or poor tolerability of current therapy, in line with ESMO guidelines



Reinforce treatment adherence^{1,7,16}

Educating patients on risks and potential side effects prior to therapy initiation may facilitate adherence to TKI therapy

Strategies for managing side effects include supportive care, dose modifications, and treatment holds or discontinuations

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Provide patients the opportunity to ask questions⁷

Facilitating increased communication prior to the start of therapy may enable early management of side effects

Conclusions

In advanced GIST, goals of care focus on controlling disease progression and patient QoL.^{1,3,4,6}______

ESMO guidelines recommend life-long systemic TKI therapies for advanced GIST, in order to improve patient outcomes.¹

Consistent patient follow-up to monitor for signs of progression or poor tolerability of current therapy is recommended.¹ Patients progressing on or intolerant to current line of therapy should be considered for a change in treatment option.¹



References

- 1. Casali PG et al. Ann Oncol. 2022;33(1):20-33.
- 2. Serrano C et al. Ther Adv Med Oncol. 2023;15:17.
- 3. Eichler M et al. Eur J Cancer Care. 2021;30(6):e13484.
- 4. Reichardt P et al. Expert Rev Anticancer Ther. 2010;10(2):221-32.
- 5. Wolter P, Schöffski P. Acta Oncol. 2010;49(1):13-23.
- 6. van de Wal D et al. Cancers (Basel). 2022;14(7):18
- 7. Brackert S, Polson K. J Adv Pract Oncol. 2023;14(4):317-28.
- QINLOCK Summary of Product Characteristics. Revised 14 March 2023. Available at: https://www.medicines.org.uk/emc/product/ 14641/smpc#gref. Last accessed: 28 August 2024.
- Gastrointestinal Stromal Tumor Meta-Analysis Group (MetaGIST). J Clin Oncol. 2010;28(7):1247-53.
- SUTENT Summary of Product Characteristics. Revised 9 April 2024. Available at: https://www.medicines.org.uk/emc/product/ 7966/smpc#gref. Last accessed: 28 August 2024.
- 11. STIVARGA Summary of Product Characteristics. Revised 18 May 2023. Available at:

https://www.medicines.org.uk/emc/product/ 1263/smpc#gref. Last accessed: 28 August 2024.

- 12. Demetri GD et al. Lancet. 2013;381(9863):295-302.
- 13. Blay JY et al. Lancet Oncol. 2020;21(7):923-34.
- 14. GLIVEC Summary of Product Characteristics. Revised 27 January 2024. Available at: https://www.medicines.org.uk/emc/product/ 5566/smpc#gref. Last accessed: 16 September 2024.
- 15. Demetri GD et al. J Natl Compr Canc Netw. 2010;8(Suppl 2):S1-44.
- 16. Tetzlaff ED, Davey MP. J Adv Pract Oncol. 2013;4(4):238-50.

Abbreviations:

ESMO: European Society for Medical Oncology; EURACAN: European Reference Network for Rare Adult Solid Cancers; GENTURIS: European Reference Network for Genetic Tumour Risk Syndromes; GI: gastrointestinal; GIST: gastrointestinal stromal tumour; mPFS: modified progression-free survival; ORR: objective response rate; PFS: progression-free survival; PPES: palmar-plantar erythrodysaesthesia syndrome; QoL: quality of life; TKI: tyrosine kinase inhibitor.



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