

Review gastrointestinal stromal tumors: to prospect the next decade

Despite their rarity, gastrointestinal stromal tumors (GISTs) have captured the interest of clinical and surgical oncologists since the beginning of this millennium. The discovery of gain-of-function mutations in KIT receptors (1) has inspired the application of imatinib mesylate, a tyrosine kinase inhibitor (TKI), in the treatment of a patient with advanced GISTs (2), finally leading to the development of molecularly targeted therapy for GISTs (3). This great success in molecular-biology-based medicine has convinced many researchers that they are in the right direction to overcome a variety of cancers, promoted further efforts for the identification of driver gene mutations, and accelerated the development of new molecularly targeted drugs. Meanwhile, this new type of cancer therapy has also raised challenging clinical issues regarding GIST therapy; i.e., secondary resistance to TKIs, potentially malignant small GISTs, and multimodality treatment for advanced GISTs. Although many papers addressing these issues have been published, a platform to systemically discuss and learn state-of-the-art therapy for GISTs remains lacking.

The editors of *Translational Gastroenterology and Hepatology* considered that it was time to once again organize current knowledge of the diagnosis and treatment of GISTs because more than 15 years have passed since imatinib therapy was introduced clinically. This special issue on GISTs contains 15 reviews and one technical note contributed by global experts. Readers will be able to integrally update their knowledge of GISTs and easily understand the current position on GIST research because the reviews concisely summarize accumulated evidence on GIST studies ranging from basic science to clinical practice and from endoscopic treatment to multimodality treatment of metastatic GISTs.

We hope that this special issue will serve as a helpful guide to not only specialists of GISTs but also young clinicians who are involved in treatment decision-making for patients with GISTs.

Acknowledgements

None.

References

1. Hirota S, Isozaki K, Moriyama Y, et al. Gain-of-function mutations of c-kit in human gastrointestinal stromal tumors. *Science* 1998;279:577-80.
2. Joensuu H, Roberts PJ, Sarlomo-Rikala M, et al. Effect of the tyrosine kinase inhibitor STI571 in a patient with a metastatic gastrointestinal stromal tumor. *N Engl J Med* 2001;344:1052-6.
3. Demetri GD, von Mehren M, Blanke CD, et al. Efficacy and safety of imatinib mesylate in advanced gastrointestinal stromal tumors. *N Engl J Med* 2002;347:472-80.



Tatsuo Kanda

Tatsuo Kanda, MD, PhD

Sanjo General Hospital, Niigata, Japan. (Email: kandat@herb.ocn.ne.jp)

doi: 10.21037/tgh.2018.07.07

Conflicts of Interest: The author has no conflicts of interest to declare.

View this article at: <http://dx.doi.org/10.21037/tgh.2018.07.07>

doi: 10.21037/tgh.2018.07.07

Cite this article as: Kanda T. Review gastrointestinal stromal tumors: to prospect the next decade. *Transl Gastroenterol Hepatol* 2018;3:46.