

# Molecular Biology Approaches to Gastrointestinal Malignancy Cure

Ming Guo\*

Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

## Introduction

From the mouth to the anus, the stomach and intestine-related (GI) region of land is a long passage. Everything you consume goes through your esophagus and is processed in your stomach and small intestines to remove food-like substances. Finally, waste is expelled from the body via the colon and rectum. A tumour can arise in one of these organs if a mutation in the DNA leads cells to grow differently than they would normally. This type of change occurs as a result of the modification. Stomach and intestine-related cancer is frequent in the United States and around the world, and it could be anything from hidden under circumstances to lifestyle decisions to the study of microscopic chemical assembly instructions inside living things. Treatments are more successful when cancer is identified at an early stage, which can be difficult to do [1].

## Description

Many microorganisms, including bacteria, archaea, organisms with nuclei within membranes, and viruses, fill human bodies with individuals or other living things, although bacteria are the most abundant and well-studied. The stomach- and intestine-related (GI) microbiome is shaped by a range of circumstances, including diet, additional factors connected to surrounding conditions or the health of Earth elements, and the associated to microscopic chemical assembly instructions inside of living things background of the host. The gastrointestinal microbiota is a complex community that comprises millions of small chemical assembly instructions inside living things, which are translated into secret code enzymes that produce metabolites that can influence health and disease [2].

In general, men are more likely than women to get stomach and intestine cancers, and the risk increases with age. These malignancies have been associated to cigarette smoking, alcohol consumption, and poor diets in studies [3]. Tumors can also be caused by specific hidden conditions, such as gastroesophageal reflux disease, *Helicobacter pylori* infection in the stomach, pancreas disease with wildly fluctuating blood sugar, insulting bowel disease in the large intestine colon and rectum, liver disease B or C virus infection, or liver disease.

The majority of the times, symptoms of stomach and intestine malignancies do not appear until the tumour has progressed. After then, it is determined by the type of cancer. Patients with esophageal cancer may have difficulties swallowing, but those with stomach cancer may experience open, painful sore-

like symptoms such as indigestion, loss of appetite, swelling, and agony. Liver cancer and cancer of the pancreas can induce discomfort in the centre of the body, while cancer of the intestines and rectum can cause changes in bowel function or bleeding, as you might imagine [4,5].

## Conclusion

If a patient exhibits symptoms of illness and the doctor has grounds to believe that a disease or condition, or the cause of stomach- and intestine-related cancer, has been identified, they may do one or more of the following tests: Endoscopy or esophagogastroduodenoscopy (EGD) to look for tumours in the lining of the oesophagus, stomach, and small intestine; medical examination of the intestines to look for abnormal growths in the colon and rectum that could lead to cancer; Tests to see whether there are any changes in the blood that could indicate malignancy. Studies on imaging MRI, X-ray, ultrasound, CT scan, or PET scan to look for tissue that isn't what you'd expect. Take a sample of living tissue from anywhere in the digestive system for analysis to collect a sample of tissue that is unusual from what is generally expected and carefully examine it for the presence of cancer cells. When the tumour is easily accessible, surgery may be all that is required. When it's more difficult to access or removing it would have a major impact on stomach and bowel function, potent treatments to help cure disease, such as radiation therapy or targeted therapy, may be used first. The tumour and surrounding tissue are completely removed during surgery. A treatment termed communication may be used to reconnect the remaining healthy sections of the oesophagus or stomach to restore function. Some people with liver cancer may be eligible for transplantation. If a patient has advanced stomach or intestine cancer that can't be adequately treated, doctors may try to alleviate symptoms rather than cure the disease.

## References

1. Corless, Christopher L., Christine M. Barnett, and Michael C. Heinrich. "Gastrointestinal stromal tumours: Origin and molecular oncology." *Nat Rev Cancer* 11 (2011): 865-878.
2. Demetri, George D., Margaret von Mehren, Cristina R. Antonescu, and Ronald P. DeMatteo, et al. "NCCN Task Force report: Update on the management of patients with gastrointestinal stromal tumors." *J Natl Compr Canc Netw* 8 (2010): S1-S41.
3. Von Mehren, Margaret, and Heikki Joensuu. "Gastrointestinal Stromal Tumors." *J Clin Oncol* 36 (2018): 136-143.
4. Blay, Jean-Yves, Yoon-Koo Kang, Toshiroo Nishida, and Margaret Von Mehren. "Gastrointestinal stromal tumours." *Nat Rev Dis Primers* 7 (2021): 22.
5. Nishida, Toshiroo, Toshihiko Doi, and Yoichi Naito. "Tyrosine kinase inhibitors in the treatment of unresectable or metastatic gastrointestinal stromal tumors." *Expert Opin Pharmacother* 15 (2014): 1979-1989.

\*Address for Correspondence: Ming Guo, Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA 02139, USA, E-mail: guo.ming@gmail.com

Copyright: © 2022 Guo M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 05 February, 2022, Manuscript No: MBL-22-51351; Editor assigned: 07 February, 2022, PreQC No: P-51351; Reviewed: 10 February, 2022, QC No: Q-51351; Revised: 15 February, 2022, Manuscript No: R-51351; Published: 20 February, 2022, DOI: 10.37421/2168-9547.2022.11.306

How to cite this article: Guo, Ming. "Molecular Biology Approaches to Gastrointestinal Malignancy Cure." *Molbiol* 11 (2022): 306.