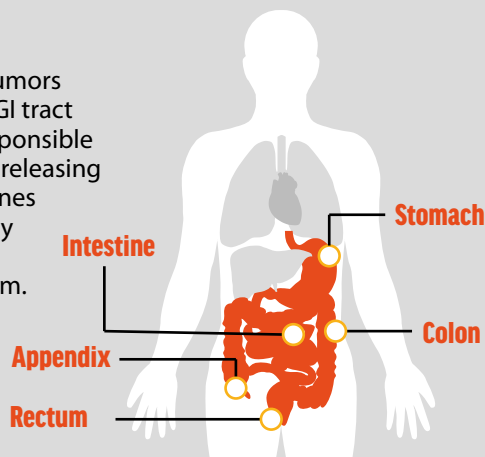


# GASTROINTESTINAL (GI) NEUROENDOCRINE TUMORS (NET)

## About GI NET

Neuroendocrine tumors originating in the GI tract arise from cells responsible for producing and releasing a variety of hormones that regulate bodily functions within the digestive system. The GI tract includes the:



NET is diagnosed in approximately **5 cases per 100,000**<sup>1</sup> people, with GI NET accounting for

**61%**  
of NET diagnoses.<sup>2</sup>

GI NET can occur in these different stages:

- **Localized GI NET:** Cancer has not spread beyond where it originally started
- **Metastasized (advanced, inoperable) GI NET:** Cancer has spread to other areas of the body, making it difficult to treat

## Signs & Symptoms

Signs and symptoms of GI NET often depend on tumor location. Symptoms may include, but are not limited to:



GI NET can be either symptomatic (functional) or asymptomatic (non-functional). **30%** of GI NET are symptomatic.<sup>3</sup>

### Functional GI NET

- Produce symptoms related to the excess hormones released by the tumor cells
- Are most commonly found in the small intestine
- May cause carcinoid syndrome - a set of symptoms that occurs when a GI NET releases extreme amounts of hormones

### Non-Functional GI NET

- May be asymptomatic or can produce symptoms related to the NET itself, such as pain as the tumor grows
- Are typically found in the small intestine, appendix, colon or rectum
- Generally patients present late or with advanced disease
- Produce non-intact hormones

## Diagnosis

Inaccurate or delayed diagnoses are common because GI NET are usually small and tend to grow slowly. The symptoms of functional GI NET are often mistaken for other conditions such as irritable bowel syndrome or food allergies.

Non-functional GI NET are often found by accident because there may be vague symptoms or none at all.

## Management Approach

A multidisciplinary team of medical experts is often involved in GI NET management. This team may include an oncologist, gastroenterologist, endocrinologist, surgeon, nurse and nutritionist, among others.

Management of GI NET depends on several factors, including the stage of disease, size and location of tumor, and whether the patient has any other serious medical conditions.

- For those with localized disease, surgery is the primary treatment option
- For patients with advanced GI NET, the use of somatostatin analogs for symptomatic control and where applicable also for tumor control are amongst other limited available and approved treatment options, including chemotherapies and targeted therapies



1. Yao J, et al. One Hundred Years After "Carcinoid:" Epidemiology of and Prognostic Factors for Neuroendocrine Tumors in 35,825 Cases in the United States. *J Clin Oncol*. 2008; 26: 3063-72.  
2. Lawrence B, et al. The Epidemiology of Gastroenteropancreatic Neuroendocrine Tumors. *Endocrinol Metab Clin N Am*. 2011; 40: 1-18.  
3. Oberg K, et al. Neuroendocrine gastro-entero-pancreatic tumors: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*. 2012; 23: vii124-vii130.