



Digestive System

The digestive tract, also known as the gastrointestinal (GI) tract is the system of organs that takes in food, digests it to extract the necessary nutrients and ingredients, and expels the remaining waste. The entire process is known as digestion. In a normal adult male, the GI tract is approximately 25 feet long.

Food enters our body through our mouth where it is chewed up and digestive enzymes in our saliva begin to break it down. Once we swallow, the food moves through the esophagus into the stomach where it is further digested by acids and enzymes. The food then goes into the small and large intestines where nutrients are extracted and exported into the bloodstream for transfer to cells throughout the body. Eventually, after most nutritive quality has been taken out, the resulting waste is expelled through the rectum.

Constipation

Constipation occurs when bowel movements become difficult or less frequent. The normal length of time between bowel movements ranges widely from person to person. Some people have bowel movements three times a day; others, only one or two times a week. Going longer than three days without a bowel movement is too long. After three days, the stool or feces become harder and more difficult to pass.

Indication	Company	Product	Phase
Constipation	Theravance Inc	TD-5108	II
	Nektar Therapeutics	NKTR-118 / PEG-naloxol	II
	Shaklee Corp	Herb-Lax	M

Diarrhea

Diarrhea describes bowel movements that are loose and watery. It is very common and usually not serious. Many people will have diarrhea once or twice each year. It typically lasts two to three days and can be treated with over-the-counter medicines. Others have diarrhea often as part of irritable bowel syndrome or other chronic diseases of the large intestine.

Indication	Company	Product	Phase
Diarrhea	Napo Pharmaceuticals Inc	CRO-IBS / Crofelemer / SP-303	II
	Napo Pharmaceuticals Inc	CRO-ID / Crofelemer / SP-303	II
	Napo Pharmaceuticals Inc	CRO-HIV / Crofelemer / SP-303	III
	Osel Inc	Cdactin-O / Miya-BM	III
	Novartis AG	Dukoral	M

Dry Mouth

Saliva moistens and cleanses the mouths and aids in digesting food. Saliva also prevents infection by controlling bacteria and fungi in the mouth. Dry mouth can cause speech and eating difficulties, halitosis (bad breath), an increase in the number of cavities, and increased vulnerability to infection. Drug side effects, medication, alcohol trauma, dehydration, radiation therapy, and marijuana also may contribute to the problem.

Indication	Company	Product	Phase
Dry Mouth	Impax Laboratories Inc	Pilocarpine Hydrochlorine Tablets	M
	Parnell Pharmaceuticals Inc	Mouthkote Oral Moisturizer	M

Gastroesophageal Reflux Disease (GERD)

Gastroesophageal reflux disease, known as GERD, is defined as chronic symptoms or mucosal damage produced by the abnormal reflux of gastric (stomach) contents into the esophagus. It is characterized by heartburn, esophageal inflammation, difficulty swallowing and chronic chest pain. Certain foods are known to exacerbate GERD: coffee, alcohol, Vitamin C, high fat foods, soft drinks, chocolate, peppermint, and spicy foods, among many others. Patients should first change the foods they eat and ensure that they are exercising regularly. In more serious cases, drug therapies and surgery might be necessary.

Company	Product	Phase	Indication
Receptor BioLogix	Insegia (G17DT immunogen) / Gastrim-mune	II	Gastroesophageal Reflux Disease
Xenopt Inc	XP19986	II	
Aridis Pharmaceuticals LLC	Rotavax	II	Gastrointestinal Disorders
ARYx Therapeutics	ATI-7505	II	
Impax Laboratories Inc	Omeprazole Delayed Release Capsules	M	Gastroesophageal Reflux Disease

Pancreatic Diseases

The pancreas is an organ which aids in digestion by producing digestive enzymes that will be used in the stomach and by digestive organelles. The pancreas is also responsible for the production of insulin, the body's main regulator of sugar in the blood. Because of the large range of functions, there are many diseases and disorders which can be linked to the pancreas. Treatments are being developed to treat pancreatic abnormalities and diseases.

Company	Product	Phase	Indication
Impax Laboratories Inc	Lipram (pancrelipase)	M	Pancreatic Diseases

Ulcerative Colitis

Ulcerative Colitis is an inflammatory bowel disease (IBD) that causes inflammation and ulcers in the lining of the bowels, specifically the rectum and colon. Ulcers form where the inflammation has killed cells usually lining the colon; these areas bleed and produce pus. Colon inflammation causes diarrhea and rectal inflammation; if the entire colon is affected it is commonly called pancolitis. Ulcerative colitis can be very difficult to diagnose because symptoms are similar to other another IBD called Crohn's disease. Crohn's, however, causes inflammation in different organs.

Company	Product	Phase	Indication
Cerimon Pharmaceuticals Inc	Simulect (basiliximab)	II	Ulcerative Colitis
Genentech Inc	MLN0002	II	
Genentech Inc	MLN0002 / MLN02	II	
PDL BioPharma Inc	Nuvion (visilizumab) / SMART anti-CD3 antibody	III	