Since its founding in 1919, Olympus, a precision technology leader, creating innovative opto-digital solutions in healthcare, life science and consumer electronics products, has led the industry in developing medical innovations across its business lines. Throughout its history, Olympus has been known for pioneering many of the world’s firsts, such as the first gastrocamera, the first DNA computer for gene analysis and the first endoscope system featuring high-definition and Narrow Band Imaging™ technologies.

Today, Olympus has a leading market share of more than 70% in the global medical endoscope business.

**Timeline of Innovation**

1927 **Olympus pioneers affordable, high-quality biological microscope in Japan.**
The Showa GK biological microscope met the need for an affordable, high-quality, practical oil immersion type microscope (microscope requiring a drop of oil between specimen and objective lens for observations). For the first time, scientists could visualize the microscopic world. The Showa GK biological microscope was at the pinnacle of microscopes produced in Japan at the time.

Since the launch of its first model, Olympus microscopes have become vital to observation at the submicron level and are found in the leading research laboratories, clinical centers and educational institutions worldwide. Today, Olympus clinical laboratory microscopes are used in the U.S. more than any other brand.

1950 **Olympus develops world’s first gastrocamera.**
Mounted at the tip of a flexible tube, Olympus' miniature camera could record the stomach on film. This revolutionized endoscopy. For the first time, physicians could diagnose stomach conditions without performing surgery, thus increasing the speed of diagnosis. For patients, the gastrocamera made the procedure less invasive and decreased the risk of infection.

1964 **Olympus GTF gastrocamera fiberscope advances minimally invasive endoscopy.**
The 1960s saw another Olympus breakthrough with a fiberscope that allowed direct, real-time observation of the stomach that could transmit images in real time as well. This laid the foundation for minimally invasive endoscopic treatment. Setting the stage for further innovations, Olympus miniaturization technologies (once used for observation) have become the centerpiece of minimally invasive surgery, making treatment less invasive, shorter, less costly and more effective.

1969 **Physician and Olympus engineer revolutionize endoscopy with invention of device for nonsurgical removal of colon polyps.**
The polypectomy snare, for the first time, enabled physicians to nonsurgically remove polyps detected in the colon during a colonoscopy. The invention resulted from the visionary collaboration between a physician and an Olympus engineer. Considered by some as risky at the time, the polypectomy snare today is widely used in colorectal cancer screening. Colorectal cancer is one of the most preventable cancers when polyps are detected and removed early.

1978 **Olympus launches world’s first fully automated system in Japan to test blood for a broad spectrum of diseases.**
Olympus’ Automated Electrophoresis System (AES) for the first time entirely automated a complex laboratory blood test for a broad range of disease stages. The AES increased lab productivity for performing the test to separate antibody proteins in the blood serum called globulins. Prior to the launch of the AES, the test involved multiple steps, and highly skilled operators were required to handle the many requisite chemicals and procedures. (Procedures include serum application, electrophoretic run, staining, destaining, drying, densitometry, and recording.)

Olympus’ AES responded to laboratories’ needs for fully automated electrophoresis systems amid increasing test volume and built on Olympus’ development of a fully automated clinical chemistry analyzer in 1969.
2002  **Olympus develops world's first DNA computer for gene analysis.**
In Japan, Olympus unveiled the world's first functional computer for gene analysis, combining huge computing power and parallel processing. The result is a high-speed, fully automated process – from sample injection to reaction – that enables quantitative gene expression profiling for research and medical fields, such as genetic diagnosis and drug discovery. This computer is expected to be the fastest gene analyzer in the world.

In the future, Olympus' technology may enable customized drug development for target populations, rather than today's mass-demand approach.

2005  **Olympus introduces revolutionary system to simplify and streamline complex endoscopic procedure.**
The V-System, which incorporates a duodendoscope and EndoTherapy devices from Olympus, was developed to help simplify and streamline a therapeutic procedure known as Endoscopic Retrograde Cholangio-Pancreatography (ERCP). Conducted to correct a problem in the biliary and/or pancreatic ducts, ERCP has traditionally been a time consuming and complicated procedure, where cooperation and coordination between the nurse and doctor is critical. The V-System's design gives the endoscopist greater device control and the flexibility to give control of specific devices to the assistant.

2005  **Olympus unveils world's first endoscope platform featuring high-definition and Narrow Band Imaging ™ technologies.**
The Olympus EVIS EXERA II™ Series 180 high-definition platform is the world's first to deliver both high-definition (HDTV) and Narrow Band Imaging (NBI) technologies. The HDTV signal, when used together with Olympus’ 180 series high-definition, NBI endoscopes, offers gastroenterologists remarkably clear views of anatomical structures and fine capillaries. Olympus’ NBI technology enhances visualization of the capillary network and mucosal morphology during endoscopic observations of the gastrointestinal tract.

2005  **Olympus presents world’s first 360-degree electronic radial scanning gastrowidescope, expanding the potential of endoscopic ultrasound.**
The Olympus GF-UE160-AL5 is the world’s first 360-degree endoscope featuring electronic radial scanning. Combining exceptional scope capability with advanced ultrasound image quality and functionality, it allows for enhanced diagnostic capability and easier orientation in the upper GI tract. Additionally, the scope’s wide angulation range results in outstanding maneuverability supporting examination of the surface of the gastrointestinal tract as well as the layers beyond the wall, enabling physicians to determine the extent to which a lesion has penetrated.

2006  **Olympus commercializes the world’s first fully autoclavable flexible bronchowidescope.**
The introduction of the Olympus BF-Q180-AC provides hospitals and bronchoscopists with an imaging quality new to bronchoscopy while delivering sterilization benefits of autoclaving. Proprietary materials representing a new standard in durability along with advanced engineering enable this scope to withstand heat while maintaining its signature Olympus performance characteristics.

2007  **Olympus advances capsule endoscopy with the first commercially available Endo Capsule with real-time viewer.**
Olympus' high-resolution capsule endoscopy system redefines visualization of the small bowel mucosa. Endo Capsule is part of Olympus’ "EnteroPro" brand, the first total solution of its kind offered by one manufacturer designed to help physicians diagnose and treat small bowel abnormalities. The Endo Capsule offers unique features that provide physicians with exceptional imaging capabilities of the small bowel, including enhanced depth of field, the widest field of view available for a capsule, advanced color reproduction, automatic brightness control and structure enhancement. It also introduces the first commercially available portable, lightweight real-time viewer which conveniently allows physicians to verify its full functionality before the patient ingests the capsule.

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