Agilent Technologies

Agilent in the Pharmaceutical Industry

SYSTEMS, SOFTWARE, AND SERVICES FOR A HIGHLY REGULATED MARKET

In every segment of the pharmaceutical industry—disease research, drug discovery, drug development, manufacturing, quality control—researchers are looking for answers. Answers that will help ensure the safety and efficacy of the medicines they develop.

Developing new medicines is not a simple process.

A single drug compound can take more than 10 years and $1 billion to progress from a therapeutic target to the marketplace. Why? From the moment a potential drug candidate is identified in a research laboratory, it must pass a lengthy and complex series of tests and evaluations to meet rigorous safety and efficacy standards before it can be approved for use.

Agilent has long been known for producing exceptional quality-control solutions to support both products and processes. Customers depend on Agilent to help them test the purity of their therapeutics, but it goes way beyond that. Agilent is ranked No. 1 in compliance services, meaning customers call on Agilent to make sure their instruments—and their technicians—perform to the highest standards.

A strong value proposition

Go into any major drug company and you'll see Agilent equipment. Agilent is renowned for the reliability of its instruments and for continually making them more sensitive, more robust, and more accurate. Which is exactly what pharmaceutical companies are looking for in their constant quest to increase success rates, boost productivity, and meet increasingly stringent regulations.

Agilent instruments are acknowledged for their ability to deliver consistent results. If a company buys two Agilent instruments, each will deliver the same results. So if labs in different locations are working on the same project, they're going to get consensus on their data.

Finally, Agilent's informatics software makes it easy for customers to share data throughout their many facilities.

A broad set of solutions

Agilent's portfolio—one of the broadest of any company serving the pharmaceutical market—includes gas and liquid chromatographs, mass spectrometers, spectrophotometers, microarrays, chemistries and automation solutions, as well as software and services.

High-throughput screening, compound synthesis, purification, purity analysis, and impurity analysis are all vital to the success of pharma companies—and Agilent provides important tools in each area.

Agilent products enable researchers in drug discovery to rapidly assess hundreds of compounds per day as part of their lead identification and optimization studies.

The company's easy-to-use open access systems enable customers to rapidly assess the success of their strategies for compound synthesis.

Agilent solutions also address purification—from the small-scale requirements of the medicinal chemist to the larger scale requirements of the process chemist—with a range of liquid and gas chromatographs coupled with mass spectrometers. These systems provide the right technology to analyze purity across the spectrum of drug discovery, development, and manufacturing.

Safety regulations require drug makers to identify and profile impurities in active ingredients and finished dosage forms. These regulations cover organic impurities, metal impurities, and residual solvents. Agilent is uniquely positioned to offer comprehensive systems for impurity analysis in all three areas:

For organic impurities: high-performance liquid chromatography; liquid chromatography/mass spectrometry; capillary electrophoresis; and supercritical fluid chromatography.

For metals: inductively coupled plasma-mass spectrometry and inductively coupled plasma-optical emission spectroscopy**.**

For residual solvents: gas chromatography/gas chromatography/mass spectrometry.

For information specific to Agilent in the biopharmaceutical industry, go here.