

AB Sciex software to accelerate drug screening

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Singapore: AB Sciex, a global analytical technology provider, has launched MPX TF 1.0 Software to accelerate drug screening with accurate mass-based technology for laboratories performing clinical research.

The new software is designed to deliver faster turnaround times, increased sample throughput and lower costs compared to single-stream, mass spectrometry (MS) methods.

With the new MPX TF Software, researchers are now able to increase throughput by as much as twofold. This is made possible by enabling the use of two parallel liquid chromatography streams. The ability to stagger chromatographic runs while collecting sample data allows the use of instrument "dead time" to increase the number of samples run in a given time period. This means identifying more compounds in a shorter period of time.

By combining the increased throughput of the MPX software with the capability of the AB Sciex TripleTOF 4600 accurate mass system to produce reliable data for a large number of compounds, researchers will be able to do more in less time compared to single-stream MS methods while significantly reducing rates of false positives and false negatives, thanks to LC separation of potential interferences and the enhanced specificity of high-resolution accurate mass technology.

Among the researchers who are using accurate mass technology today is Dr Kara Lynch, from the University of California, San Francisco (UCSF). She uses a TripleTOF platform to identify unknown compounds, complementing the targeted analysis she does with triple quadrupole instrumentation.

"As the list of drugs and their metabolites are always changing, the value of high resolution, accurate mass technology is identifying unknowns with high specificity," said Dr Lynch. "Accurate mass-based analysis with a TripleTOF system helps identify compounds that could be missed in a targeted approach if a certain drug is not in the original method. Furthermore, with this technology, you are able to re-interrogate the data at a later date to answer new questions, without needing to re-run the samples."

"AB SCIEX continues to drive innovation in clinical research to address existing issues, such as slow turnaround times and

false positives or negatives, which hinder these labs from increasing productivity and improving data quality," said Mr Rainer Blair, president, AB Sciex. "We are helping clinical research labs reshape how they conduct drug screening to accurately identify not only known but also unknown compounds."