

ARK Diagnostics New TDM Tools for Personalized Medicine

Sunnyvale, California: ARK™ Diagnostics, Inc. is working actively to improve patient care through the expansion of therapeutic drug monitoring and management (TDM). TDM is the branch of clinical chemistry designed for measuring drug levels in the blood.

As healthcare moves toward personalized medicine, TDM can play a critical role. Therapeutic drug management has progressed beyond the population approach and now targets concentrations for the individual patient. To personalize drug therapy, therapeutic drug monitoring can be applied independently or in conjunction with pharmacogenetic tests that predict metabolic responsiveness to therapy. However, pharmacogenetic testing cannot predict problems associated with drug absorption, drug-drug interactions, compliance or ensure a desired drug level.

Therapeutic drug monitoring in combination with pharmacogenetic testing is a powerful approach. It matches individuals with optimal drugs and personalizes the management of therapy with optimal dosing. TDM provides a phenotype expression of the drug in an individual, and is therefore complimentary to pharmacogenetics; access to both tools is vital for truly personalized medicine.

ARK Diagnostics is innovating with the development of new assays for TDM, and the ARK team takes pride in the technical performance in the lab. ARK has the only commercially available assay for levetiracetam (Keppra®) that is applicable to automated clinical chemistry analyzers. The ARK Levetiracetam Assay is ARK's lead assay for new generation anti-epileptic drugs. ARK's anti-epileptic menu includes levetiracetam, topiramate, zonisamide, lamotrigine*, and gabapentin*. ARK Diagnostics also has developed a full line of TDM assays for antiretroviral drugs. These assays can inform physicians to better manage their HIV patients, and are available for research or export only.

The objectives of therapeutic drug management are to (1) define a personalized therapeutic range of drug concentrations associated with the best achievable response in an individual, (2) correlate the actual drug level to a specific dose, and (3) achieve and maintain optimal dosing for safe and effective therapy.

Taking medications is a personal experience. When managing dosing, one size does not fit all!

ARK Diagnostics: Assays for the Next Generation

*pending FDA clearance

ARK Diagnostics, Inc. makes homogeneous enzyme immunoassays for therapeutic drug management (TDM). Founded in 2003, ARK Diagnostics is a privately held company in Sunnyvale, CA and is certified to ISO 13485:2003 CMDCAS. ARK is dedicated to the design, development, and manufacture of TDM assays for personalizing therapy and improving the quality of patient health. For more information, visit www.ark-tdm.com

For further information

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