The Precision Medicine Resource Guide highlights resources that provide awareness and understanding of this technology.
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Goal of this Resource Guide and How to Use It

What is the Resource Guide?

The Precision Medicine Resource Guide is one of four CAP Resource Guides that brings a collected set of resources together in one place that are focused on a specific hot-topic technology important to pathologists. Each comprehensive guide highlights current resources such as a curated set of journal articles, and a collected set of CAP resources that includes learning opportunities, proficiency testing, and accreditation related to this technology. Also, each Resource Guide includes an "Insights From Adopters" section to gain perspective from pathology leaders in the field. In sum, each Resource Guide provides a one-stop resource that will assist busy pathologists to find valuable information about a dynamic and important emerging technology.

How to Use This Precision Medicine Resource Guide

This Resource Guide is designed in a modular manner to facilitate its use in several different ways. For example, the guide may be used in its entirety as a comprehensive guide to the rapidly evolving field of genomic and molecular pathology. Conversely, it may be used by a pathologist to focus on and gain a current understanding of the application of genomic and molecular pathology to a very specific organ system or disease process. The tables are designed not only to organize and summarize the contents of a section, but also to serve as stand-alone, quick reference guide to a topic. To some, these tables may hold the greatest value and become a frequently used reference. The Adopters sections will undoubtedly prove to be of great value to those contemplating taking or actually taking the plunge into the enhanced application of genomic and molecular pathology approaches to their practice.
Special Features of the Precision Medicine Resource Guide

Be sure and see the Quick Reference Table: Selected Tests by Tumor Type in Solid Tumors in Section 2.1.2. There are other valuable tables such as Mutated Genes of Potential Clinical Significance (Section 2.12.1), Commonly Tested Genes for Hereditary Disease (Section 3.1), Inherited Cardiovascular Disorders and Associated Genes (Section 3.2), Hereditary Cancers and Associated Genes (Section 3.12), High Multiplexed IVD Assays to Detect Important Human Pathogens (Section 4.6) and Pharmacogenomics: Commonly Tested Gene-Drug Pairs (Section 5). Be sure and see Section 9.1 on the Short Presentations on Emerging Concepts (SPECs) which provides a valuable tool for tumor boards or in discussion with local clinicians about emerging molecular tests that are actionable for patient care today. Also, the CAP webinar series on genomic and molecular topics listed in Section 9.2.

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The Precision Medicine Resource Guide is a product of the CAP’s Personalized Health Care Committee.
The CAP has four Pathology Resource Guides:
Pathology Resource Guide: Precision Medicine
Pathology Resource Guide: Digital Pathology
Pathology Resource Guide: In Vivo Microscopy
Pathology Resource Guide: Clinical Informatics

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What is Precision Medicine?

The National Institute of Health says, “Precision medicine is an emerging approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person. While significant advances in precision medicine have been made for select cancers, the practice is not currently in use for most diseases. Many efforts are underway to help make precision medicine the norm rather than the exception.”

President Obama’s Precision Medicine Initiative says, “Most medical treatments have been designed for the “average patient.” As a result of this “one-size-fits-all-approach,” treatments can be very successful for some patients but not for others. This is changing with the emergence of precision medicine, an innovative approach to disease prevention and treatment that takes into account individual differences in peoples’ genes, environments, and lifestyles. Precision medicine gives clinicians the tools to better understand the complex mechanisms underlying a patient’s health, disease, or condition and to better predict which treatments will be most effective.”
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