Special Report: Genotyping for cytochrome p450 polymorphisms to determine drug-metabolizer status

BlueCross BlueShield Association

Record Status
This is a bibliographic record of a published health technology assessment. No evaluation of the quality of this assessment has been made for the HTA database.

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Citation

Authors' objectives
This report will provide background information on cytochrome p450 (CYP450) enzymes, genotyping applications for currently available drugs, examples of companies and products, evaluation of clinical utility, examples and the current state of evidence, regulatory issues, and cost-effectiveness analysis.

This report will also describe regulatory initiatives applicable to new drugs, but will not otherwise discuss the use of pharmacogenomics in ongoing drug development. A Technical Information section will be provided that will be useful to readers in defining genetics terminology and describing technologies.

Authors' conclusions
While the potential of pharmacogenomics is intriguing for many clinical applications, it is not yet clear which are most likely to yield clinical benefit in the near future. As this field evolves and matures, and if pre-prescription testing is shown to be of clinical utility for specific drugs, it will be important to establish evidence-based guidelines for healthcare professionals delineating the most effective courses of action based on genotyping results. Because pharmacogenomic applications may be complex and multifactorial, such guidelines will be of great value for the practicing clinician.

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