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Chapter 8: Whole-Exome and Whole-Genome SequencingTake Home Points; Overview of Exome Chip, WES, and WGS Technologies; Available Strategies for the Conduct of WES Studies; Application of WES to Cardiovascular Disease; Next-Generation Sequencing Technologies for Clinical Diagnostics; Future Directions; Conclusions; References;
Chapter 9: Gene-Environment Interactions; Take Home Points; Defining Interactions; Investigating Interactions: Study Design; Investigating Interactions: Statistical Power; Gene-Environment Interactions in Cardiovascular Disease
The Promise and Challenges of Gene-Environment Interaction ResearchSummary; References; Chapter 10: Genetic Counseling; Take Home Points; Definition of Genetic Counseling; The Power of the Pedigree and Family Health History; Risk Assessment Beyond Basic Mendelian Principle; Psychosocial Counseling; Genetic Counselors in Cardiovascular Practice; Cardiovascular Genetic Testing; Partners in Practice; Conclusions; References; Part II: Genetics of Cardiovascular Disorders/Traits; Chapter 11: Blood Pressure Genomics; Take Home Points
Case Study: Severe Monogenic Hypertension-An Application of Whole-Exome Sequencing

Sommario/riassunto

Cardiovascular Genetics and Genomics in Clinical Practice presents clinical cases to illuminate basic concepts of cardiovascular genetics and genomics as practitioners encounter them in day-to-day practice. The unique use of real-world case discussions facilitates the memorization and understanding of basic principles, which can be more readily applied to actual cases. Cardiovascular Genetics and Genomics in Clinical Practice features a step-by-step learning process that begins with an easy-to-understand ""primer"" of basic scientific concepts regarding cardiovascular genetics and genomics fol