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Rat; 13 Two-Stage Clonal Growth Modeling of Cancer; 14 Statistical and Physiological Modeling of the Toxicity of Chemicals in Mixtures  
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SECTION 5 MODEL APPLICATION AND EVALUATION; 16 Modeling Exposures to Chemicals From Multiple Sources and Routes; 17 Probabilistic Reverse Dosimetry Modeling for Interpreting Biomonitoring Data; 18 Quantitative Modeling in Noncancer Risk Assessment; 19 Application of Physiologically Based Pharmacokinetic Modeling in Health Risk Assessment; 20 Uncertainty, Variability, and Sensitivity Analyses in Simulation Models; 21 Evaluation of Quantitative Models in Toxicology: Progress and Challenges; Index

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#### Sommario/riassunto

Governments around the world are passing laws requiring industry to assess the toxicity of the chemicals and products they produce, but to do so while reducing, refining, or even replacing testing on animals. To meet these requirements, experimental toxicologists and risk assessors are adopting quantitative approaches and computer simulations to study the biological fate and effects of chemicals and drugs. In Quantitative Modeling in Toxicology leading experts outline the current state of knowledge on the modeling of dose, tissue interactions and tissue responses. Each chapter desc

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