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Nota di contenuto	UNCERTAINTY MODELING IN DOSE RESPONSE; CONTENTS; Acknowledgments; Contributors; Introduction; 1 Analysis of Dose-Response Uncertainty Using Benchmark Dose Modeling; Comment: The Math/Stats Perspective on Chapter 1: Hard Problems Remain; Comment: EPI/TOX Perspective on Chapter 1: Re-formulating the Issues; Comment: Regulatory/Risk Perspective on Chapter 1: A Good Baseline; Comment: A Question Dangles; Comment: Statistical Test for Statistics-as-Usual Confidence Bands; Response to Comments 2 Uncertainty Quantification for Dose-Response Models Using Probabilistic Inversion with Isotonic Regression: Bench Test ResultsComment: Math/Stats Perspective on Chapter 2: Agreement and Disagreement; Comment: EPI/TOX Perspective on Chapter 2: What Data Sets Per se Say; Comment: Regulatory/Risk Perspective on Chapter 2: Substantial Advances Nourish Hope for Clarity?; Comment: A Weakness in the Approach?; Response to Comments; 3 Uncertainty Modeling in Dose Response Using Nonparametric Bayes: Bench Test Results; Comment: Math/Stats Perspective on Chapter 3: Nonparametric Bayes Comment: EPI/TOX View on Nonparametric Bayes: Dosing PrecisionComment: Regulator/Risk Perspective on Chapter 3: Failure to

Communicate; Response to Comments; 4 Quantifying Dose-Response Uncertainty Using Bayesian Model Averaging; Comment: Math/Stats Perspective on Chapter 4: Bayesian Model Averaging; Comment: EPI/TOX Perspective on Chapter 4: Use of Bayesian Model Averaging for Addressing Uncertainties in Cancer Dose-Response Modeling; Comment: Regulatory/Risk Perspective on Chapter 4: Model Averages, Model Amalgams, and Model Choice; Response to Comments 5 Combining Risks from Several Tumors Using Markov Chain Monte Carlo6 Uncertainty in Dose Response from the Perspective of Microbial Risk; 7 Conclusions; Author Index; Subject Index

Sommario/riassunto

A valuable guide to understanding the problem of quantifying uncertainty in dose response relations for toxic substances In today's scientific research, there exists the need to address the topic of uncertainty as it pertains to dose response modeling. Uncertainty Modeling in Dose Response is the first book of its kind to implement and compare different methods for quantifying the uncertainty in the probability of response, as a function of dose. This volume gathers leading researchers in the field to properly address the issue while communicating concepts from diverse viewpoints and incorpo
