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### Sommario/riassunto

The dissemination of the MIXED procedure in SAS has provided a whole class of statistical models for routine use. We believe that both the ideas behind the techniques and their implementation in SAS are not at all straight-forward and users from various applied backgrounds, including the pharmaceutical industry, have experienced difficulties in using the procedure effectively. Courses and consultancy on PROC MIXED have been in great demand in recent years, illustrating the clear need for resource material to aid the user. This book is intended as a contribution to bridging this gap. We hope the book will be of value to a wide audience, including applied statisticians and many biomedical researchers, particularly in the pharmaceutical industry, medical and public health research organizations, contract research organizations, and academic departments. This implies that our book is explanatory rather than research oriented and that it emphasizes practice rather than mathematical rigor. In this respect, clear guidance and advice on practical issues are the main focus of the text. Nevertheless, this does not imply that more advanced topics have been avoided. Sections containing material of a deeper level have been sign posted by means of an asterisk.