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978-1-108-45320-2 — The Epilepsy Prescriber's Guide to Antiepileptic Drugs
Philip Patsalos , Erik St Louis
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The Epilepsy Prescriber's Guide to
Antiepileptic Drugs

Third Edition

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PREFACE

The purpose of the first and second edition of *The Epilepsy Prescriber's Guide to Antiepileptic Drugs* was to help those involved in the treatment of patients with epilepsy to meet the challenge of having easy access to all relevant aspects of every antiepileptic medication currently available, including the newest ones. The *Prescriber's Guide* has been very well received, and the feedback indicates that the stated goal was met at the time. Four years on from the second edition, the authors now recognize the need for a new edition in order to continue to keep up with the original goal. Up-to-date new information has been added accordingly, with no change in the easy-to-use format.

One section has been added to the book in order to cover the new drug that has become available in the meantime, brivaracetam, and another (retigabine/ezigabine) has been deleted because it has been withdrawn from the market. All sections on pharmacokinetic interactions, as well as the table at the end of the book summarizing all known pharmacokinetic interactions between antiepileptic drugs, have been extensively updated, and they represent a most comprehensive and up-to-date source of information on pharmacokinetic interactions involving antiepileptic drugs. Suggested pediatric dosage schedules have been added for several drugs. Additional adverse effects, as well as recommended precautions and monitoring, were added where applicable. The issue of bone health, as well as vitamin D monitoring and supplementation, was addressed for selected drugs, and uses in special populations have been updated where relevant. Information on teratogenicity reported in recent publications and pregnancy registries was incorporated in the sections on pregnancy. Finally, for these multiple upgrades, the relevant references were added to the list of suggested reading.

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INTRODUCTION

The purpose of *The Epilepsy Prescriber's Guide to Antiepileptic Drugs* (AEDs) is to provide practical and concise information so as to allow the optimum use of AEDs in clinical practice. This quick reference guide provides a wealth of invaluable information for use by all who treat patients with epilepsy, including neurologists, neurosurgeons, general physicians, those caring for the elderly, emergency medicine doctors, medical students and trainees at all levels, general practitioners, nurses and epilepsy nurse specialists, and practice pharmacists.

All of the drugs are presented in the same design format and in alphabetical order to facilitate rapid access to information. Specifically, each drug is divided into eight sections and each section is designated by a unique color background: therapeutics, pharmacokinetics, drug interaction profile, adverse effects, dosing and use, special populations, and the overall place of the drug in the treatment of epilepsy, followed by suggested reading of key references.

Section 1: Therapeutics

This section covers the chemical name and structure; brand names in major countries; generics available; licensed indications as approved by the US Food and Drug Administration (FDA) and the European Medicines Agency or the United Kingdom Medicines and Healthcare products Regulatory Agency; non-licensed use; seizure types for which the drug is ineffective or contraindicated; mechanism of action; and efficacy profile.

Section 2: Pharmacokinetics

The second section highlights the pharmacokinetic parameters relevant to each drug's clinical therapeutics and includes absorption and distribution, metabolism, and elimination parameters.

Section 3: Drug Interaction Profile

The interaction profile of each drug is divided into three major sections which include pharmacokinetic interactions, pharmacodynamic interactions, and interaction with hormonal contraception. The pharmacokinetic interaction section is further subdivided into interactions between AEDs and interactions between AEDs and non-AED drugs. Non-interacting drugs have been omitted.

Section 4: Adverse Effects

This section explains how the drug causes adverse effects and contains a list of common, life-threatening, or dangerous adverse effects; an effect on weight is noted, and advice given on what to do about adverse effects.

Section 5: Dosing and Use

This section provides the usual dosing range; available formulations; how to dose and dosing tips; how to withdraw drug; symptoms of overdose and how to manage; what tests and therapeutic drug monitoring are needed; other warnings and precautions; and when not to use.

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Section 6: Special Populations

The sixth section gives information about use of the drugs in the presence of renal and hepatic impairments, and any precautions to be taken for treating children, the elderly, and pregnant and breast-feeding women.

Section 7: The Overall Place of the Drug in the Treatment of Epilepsy

This section provides an overview, based on the authors' opinions, as to where each AED can be placed in relation to the treatment of patients with epilepsy and summarizes the primary and secondary seizure types for which it shows efficacy. Finally it highlights the potential advantages and disadvantages of each AED.

Section 8: Suggested Reading

In this section, the authors highlight the key references that were used in compiling the information contained in each drug section and readers are advised to read these if more information is needed. Readers are also encouraged to consult standard comprehensive reference books on epilepsy and AED textbooks for more in-depth information. At the back of the guide is an index by drug name. In addition, there is a list of abbreviations and a table highlighting the interactions that can occur between the different AEDs.