DESCRIPTION

An integrated view of chiral drugs—from concept and synthesis to pharmaceutical properties

Chirality greatly influences a drug’s biological and pharmacological properties. In an effort to achieve more predictable results from chiral drugs, the Food and Drug Administration now requires that these medicines be as pure as possible, which places great demands on drug synthesis, purification, analysis, and testing. To assist researchers in acquiring the essential knowledge to meet these rigid guidelines, Chiral Drugs focuses on three vital chiral technologies—asymmetric synthesis, biocatalytic process, and chiral resolution—to offer details on the basic concepts, key developments, and recent trends in chiral drug discovery, along with:

• The history of chiral drugs development and industrial applications of chiral technologies

• A section listing twenty-five approved or advanced-trial chiral drugs that lists each drug name, chemical name and properties, a representative synthetic pathway, pharmacological characterizations, and references

• An interdisciplinary approach combining synthetic organic chemistry, medicinal chemistry, and pharmacology
Nearly two-thirds of the drugs on today's market are chiral drugs. Reducing and eliminating their negative characteristics is an ongoing and serious challenge for the pharmaceutical industry. With its well-balanced approach to covering each important aspect of chirality, Chiral Drugs champions important strategies for tipping the medical scale in a positive direction for the production of more effective and safer drugs.

 ABOUT THE AUTHOR

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