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Autore	Escherich Gabriele
Titolo	Acute Lymphoblastic Leukemia in Children and Adolescents // edited by Gabriele Escherich, Valentino Conter
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031711800 9783031711794
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Descrizione fisica	1 online resource (387 pages)
Collana	Pediatric Oncology, , 2191-0812
Altri autori (Persone)	ConterValentino
Disciplina	616.15
Soggetti	Hematology Pediatrics Oncology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Part I: Epidemiology and Predisposition of ALL. Genetic predisposition for leukemia -- Association of leukemia with genetic diseases. Part II: Biology and Diagnostics of ALL. Genetic aberrations and profiles in Bcp ALL -- Genetic aberrations and profiles in T ALL -- Features of ALL in children, adolescents, and young adults -- Immunological Diagnosis -- MRD response: FCM, Ig/Tcr PCR, NGS. Part III: Stratification and treatment considerations in ALL. Stratification and treatment of Bcp ALL and T-ALL -- Stratification and treatment of Adolescents/AYA -- CNS therapy -- Stratification and treatment of Down Syndrome -- Stratification and treatment of Infants -- Stratification and treatment of BCR/ABL and ABL class fusion. Part IV: Immunotherapy in ALL. Immunotherapy with monoclonal antibodies -- Immunotherapy with CAR-T. Part V: Strategies for patients with Lymphoblastic Lymphoma/mature B-ALL. Stratification and treatment of lymphoblastic lymphomas -- Stratification and treatment of mature B ALLs. Part VI: Strategies for patients with refractory or relapsed ALL. Relapses: classification and treatment -- HSCT in 1st CR and after subsequent CRs: indications, conditioning regimens. Part VII: Toxicity and Late effects following ALL treatment. Genetic disposition for toxicity Late toxicity including SMN -- late effects after HSCT. Part VIII: Perspectives and Future directions -- Global disparities in ALL treatment and

outcome -- New agents.

Sommario/riassunto

This book is a comprehensive and up-to-date compendium on diagnosis, treatment and late effects of Acute Lymphoblastic Leukemia in children, adolescents and young adults. After introductory chapters on the epidemiology and biology of ALL, treatment considerations are extensively reviewed, also with emphasis on special patient groups, such as Infants, Adolescents and patients with Down Syndrome. Immunotherapy in Acute Lymphoblastic Leukemia is reviewed as well as strategies for patients with Lymphoblastic Lymphoma and for patients with refractory or relapsed ALL. The authors are internationally recognized experts and offer up-to-date insights on etiology, biology, and treatment. This book will prove indispensable for those treating or researching into this disease.

2. **Record Nr.**

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Autore

Malcata F. Xavier

Titolo

Fundamentals of Biocatalysts : Cell Structure and Function // by F. Xavier Malcata

Pubbl/distr/stampa

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ISBN

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Edizione

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Descrizione fisica

1 online resource (1113 pages)

Disciplina

660.634

Soggetti

Biotechnology
Biochemical engineering
Mathematical models
Industrial microbiology
Chemistry, Technical
Chemical Bioengineering
Bioprocess Engineering
Mathematical Modeling and Industrial Mathematics
Industrial Microbiology
Industrial Chemistry

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico

Monografia

Nota di contenuto

Part I: Introduction to Biotechnology -- Historical Overview -- Part II: Biocatalyst Features -- Cell Morphology -- Cell Genetics -- Cell Metabolism -- Cell Operation -- Cell Stoichiometry -- Cell Engineering -- Cell Interaction. .

Sommario/riassunto

This textbook covers the essentials of cells as biocatalysts, including cell morphology, cell genetics, cell metabolism, cell operation, cell stoichiometry, cell engineering, and cell interaction. A pragmatic and systematic approach is provided to all such topics, from the point of view of a biological engineer – illustrated by criteriously selected and carefully solved problems, proposed at the end of each section. In the first part of this textbook, readers will find a brief historical review of biotechnology; and in the second part, the author explores the performance of biocatalysts, in terms of native features and upon rational manipulation thereof. Whenever appropriate, mathematical derivations are put forward that are easy to follow step-by-step – even by students holding only elementary mathematical and biochemical backgrounds; and are developed at a pace suitable for self-learning. Furthermore, the functional forms and meanings of the expressions produced are explored, and the final germane formulae are duly highlighted and graphically interpreted in dimensionless form – to facilitate the perception of major trends and asymptotic patterns. Therefore, this book offers a valuable resource for both instructors and undergraduate/graduate students – as an aid to grasp and relate basic concepts dealing with living cells as catalysts designed for bioreactors, rather than engaging in cumbersome descriptions of their physiological behaviour. This textbook, together with the companion volumes Operation Fundamentals in Bioreactor Engineering and Modelling Fundamentals in Bioreactor Engineering, fill the gap between qualitative approaches, focused on biochemistry; and technological approaches, which often resort to empirical correlations – unlikely to support a fundamental understanding of the essential concepts.
