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Titolo	Hemoglobin-based oxygen carriers as red cell substitutes and oxygen therapeutics / / Hae Won Kim, A. Gerson Greenburg, editors
Pubbl/distr/stampa	Heidelberg [Germany] : , : Springer, , 2013
ISBN	3-642-40717-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xxiii, 746 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	611.01816 615.19 615.399 616.15
Soggetti	Oxygen - Physiological transport Oxygen therapy Blood substitutes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Brief historical account of HBOC development -- Physiology of respiration -- Oxygen transport to tissues -- Pathophysiology of acute anemia -- Global blood safety and need for safe blood supply -- Blood transfusion and its limitations -- Scientific basis and design of HBOCs -- HBOCs: a regulatory perspective -- Current HBOC products in development -- Clinical indications and clinical trials of HBOCs -- HBOCs and adverse events observed in clinical trials -- HBOC-mediated vasoactivity and hypertension -- HBOC and oxygen and nitrogen radical mediated toxicity -- HBOCs and clinical laboratory interference -- Animal models for HBOC studies -- New emerging Technologies for universal RBCs -- Future prospects.
Sommario/riassunto	Currently, hemoglobin (Hb)-based oxygen carriers (HBOCs) are leading candidates as red blood cell substitutes. In addition, HBOCs are also potential oxygen therapeutics for treatment of patients with critical ischemic conditions due to atherosclerosis, diabetes and other conditions. This book will provide readers a comprehensive review of topics involved in the HBOC development. It focusses on current products and clinical applications as well as on emerging technologies

and future prospects.