

1. Record Nr.	UNINA9910808218503321
Titolo	Disease markers in exhaled breath : basic mechanisms and clinical applications // edited by Nandor Marczin and Magdi H. Yacoub
Pubbl/distr/stampa	Amsterdam ; ; Washington, DC, : IOS Press, c2002
ISBN	600-00-0402-8 1-280-50559-1 9786610505593 1-60129-419-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (443 p.)
Collana	NATO science series. Series I, Life and behavioural sciences, , 1566-7693 ; ; v. 346
Altri autori (Persone)	MarczinNandor <1962-> YacoubMagdi
Disciplina	616.2/4075
Soggetti	Lungs - Diseases - Diagnosis Breath tests Biochemical markers Nitric oxide - Pathophysiology Carbon monoxide - Pathophysiology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Also published in 2003 in the Lung biology in health and disease series by M. Dekker.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""Cover""; ""Title page""; ""Preface""; ""Sponsors""; ""List of Participants""; ""Contents""; ""Part I. Introduction to Disease Markers in Exhaled Breath""; ""Section 1. Nitric Oxide""; ""Regulation of Nitric Oxide Synthases in the Lung""; ""Nitric Oxide Production in the Lung and its Regulation by Oxygen""; ""S-Nitrosothiols in Respiratory Biology""; ""Inhibitors of Nitric Oxide Synthase: Experimental Findings and Clinical Implications""; ""Inhaled NO as a Replacement Therapy""; ""Physiology of Exhaled Nitric Oxide""; ""The ""Vascular"" Origins of Exhaled Nitric Oxide"" ""Exhaled NO originates in Airway Epithelium""""NO is Generated via NOS Enzymes""; ""Technical Aspects of Exhaled NO: Investigator Point of View""; ""Technical Aspects of Exhaled Nitric Oxide: Aerocrine Point of View""; ""Section 2. Carbon Monoxide""; ""Cytoprotection by Heme

Oxygenase / CO in the Lung"; "Role of Heme Oxygenase in Airway Smooth Muscle Contractility"; "Exhaled Carbon Monoxide is Produced in the Lungs"; "Exhaled Carbon Monoxide is Delivered from Systemic Sources"; "Kinetics of Carbon Monoxide Accumulation in Exhaled Breath"

"ETCOc: An Indicator of Hemolysis in Neonatal Hyperbilirubinemia"

Section 3. Volatile Organic Compounds (VOCs); "Volatile Organic Compounds as Exposure Markers"; "Volatile Organic Compounds as Markers in Normal and Diseased States"; "Section 4. The "Living State"

"The Living State: Intimate Insights through Personal Discoveries"; "Part II. Asthma"; "Biology of Asthma"; "Transcriptional Regulation of Airway Inflammation"; "Molecular Mechanisms of Steroid Actions"; "Nitric Oxide Reactions in the Asthmatic Airway"

"Regulation of pH in the Human Airway: Mechanisms and Monitoring"; "Markers in Exhaled Air and Condensate to Monitor Treatment in Asthma"; "Extended NO Analysis Applied to Patients with Known Altered Values of Exhaled NO"; "Exhaled Nitric Oxide and Atopy"; "Bradykinin and Exhaled Nitric Oxide in Asthma"; "Exhaled NO is an Optimal Marker of Severity and Responsiveness to Therapy in Asthma"; "Superoxide-NO Interactions in Paranasal Sinus Inflammatory Diseases"; "Part III. Chronic Lung Diseases"; "Biology, Diagnosis and Management of COPD"

"Disease Markers in COPD: Exhaled Breath vs. Exhaled Condensate"; "The Biology of Cystic Fibrosis"; "Exhaled Markers in Cystic Fibrosis"; "Lung Cancer Screening by Breath Analysis"; "Nitric Oxide and Rheumatic Diseases"; "Nitric Oxide in Hepatopulmonary Syndrome"; "Pathological Changes in the Airways Epithelium of Liquidators of the Chernobyl Catastrophe"; "Part IV. Transplantation"; "Heme Oxygenase-1 and/or Carbon Monoxide can Promote Organ Graft Survival"; "Mechanisms of and Clinical Efforts to Minimise Perioperative Lung Injury"; "Condensate Inflammatory Markers in Lung Transplantation"

"Disease Markers in COPD: Exhaled Breath vs. Exhaled Condensate"

"The Biology of Cystic Fibrosis"; "Exhaled Markers in Cystic Fibrosis";

"Lung Cancer Screening by Breath Analysis"; "Nitric Oxide and

Rheumatic Diseases"; "Nitric Oxide in Hepatopulmonary Syndrome";

"Pathological Changes in the Airways Epithelium of Liquidators of the

Chernobyl Catastrophe"; "Part IV. Transplantation"; "Heme

Oxygenase-1 and/or Carbon Monoxide can Promote Organ Graft

Survival"; "Mechanisms of and Clinical Efforts to Minimise

Perioperative Lung Injury"

"Condensate Inflammatory Markers in Lung Transplantation"

Sommario/riassunto

This monograph contains the contributions of invited speakers and participants at the NATO Advanced Study Institute on Disease Markers in Exhaled Breath: Basic Mechanisms and Clinical Applications, held in Greece in 2001. This ASI was designed to summarize and disseminate expert knowledge regarding this rapidly evolving field of lung biology. Breath testing dates from the earliest history of medicine and puzzled brilliant scientific minds including Linus Pauling. The recent developments hold enormous promise that analysis of exhaled breath could open a valuable new window onto human metabolism
