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Titolo	Biomarkers in Bone Disease / / edited by Victor R. Preedy
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Collana	Biomarkers in Disease: Methods, Discoveries and Applications, , 2542-3657
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Soggetti	Cancer - Research
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Nota di contenuto	Serum uric acid and biomarkers of lumbar spine bone mineral density -- Use of alkaline phosphatase (ALP) activity and disease severity to determine secular changes in bone disease as applied to Paget's disease of the bone -- Bone Turnover and Spinal Cord Injury -- Bone-related proteins as markers in vascular remodelling -- Serum Sclerostin as Biomarker in Osteogenesis Imperfecta -- Parathyroid Hormone (PTH) assays and applications to bone disease: Overview on methodology -- Registered microcomputed tomography data as a four dimensional imaging biomarker of bone formation and resorption -- Use of bone biomarkers after weight loss: Example of bariatric surgery -- Adiponectin as biomarker of osteoporosis -- Effect of statins on bone turnover markers -- Chitinases as biomarkers in bone studies -- Hormone relaxin as biomarker for bone health and disease -- Panoramic radiomorphometric indices of mandible: Biomarker for osteoporosis -- Hip Fracture Risk is Strongly Related to Circulating Levels of the Advanced Glycation End-product Carboxy-Methyl Lysine (CML) -- Effects of glucose on bone markers: Overview of current knowledge with focus on diabetes, glucose, and bone markers -- Traditional medicine and use of bone biomarkers -- Osteosarcoma

Biomarkers discovery using "omics" approaches -- Creatine kinase as biomarker in osteogenesis imperfecta -- Ameloblastin as biomarker of bone -- Biomarker genes in autosomal dominant osteopetrosis type II (ADO II) -- Bone markers in Rett syndrome -- Bone Specific Alkaline Phosphatase and Exercise -- Bone turnover markers and glucocorticoid treatments -- Overview of biochemical markers of bone metabolism -- Biomarkers of natural radionuclides in bone and teeth -- Bone markers throughout sexual development: epidemiological significance and population-based findings -- Parathyroid hormone (PTH) and the relationship between PTH and bone health: structure, physiology, actions, and ethnicity -- Quantitative ultrasound as a biomarker tool in newborn infants for bone -- Bone biomarkers in gestational hypertension -- Bone biomarkers in intrauterine growth restriction -- Raman spectroscopy as a biomarker-investigative tool in bone metabolism -- Pentosidine as a biomarker for poor bone quality and elevated fracture risk -- Spine bone texture and the trabecular bone score (TBS) -- Bone biomarkers in HIV -- Bone Biomarkers Related to Osteoarthritis -- Dietary Soy Phytoestrogens and Biomarkers of Osteoporosis -- Utilisation and reference values of osteocalcin and procollagen type 1 n-propeptide -- Analysis of integrin alpha2beta1 (a2b1) expression as a biomarker of skeletal metastasis -- Circulating Sclerostin in Bone Sclerosing Disorders -- Pentraxin 3 as a bone biomarker -- Sirtuins as markers of bone disease: a focus on osteoarthritis and osteoporosis -- Tartarate resistant acid phosphatase as a biomarker of bone remodeling. .

| Sommario/riassunto | In the past decade there has been a major sea change in the way disease is diagnosed and investigated due to the advent of high throughput technologies, such as microarrays, lab on a chip, proteomics, genomics, lipomics, metabolomics etc. These advances have enabled the discovery of new and novel markers of disease relating to autoimmune disorders, cancers, endocrine diseases, genetic disorders, sensory damage, intestinal diseases etc. In many instances these developments have gone hand in hand with the discovery of biomarkers elucidated via traditional or conventional methods, such as histopathology or clinical biochemistry. Together with microprocessor-based data analysis, advanced statistics and bioinformatics these markers have been used to identify individuals with active disease or pathology as well as those who are refractory or have distinguishing pathologies. New analytical methods that have been used to identify markers of disease and is suggested that there may be as many as 40 different platforms. Unfortunately techniques and methods have not been readily transferable to other disease states and sometimes diagnosis still relies on single analytes rather than a cohort of markers. There is thus a demand for a comprehensive and focused evidenced-based text and scientific literature that addresses these issues. Hence the formulation of Biomarkers in Disease. The series covers a wide number of areas including for example, nutrition, cancer, endocrinology, cardiology, addictions, immunology, birth defects, genetics, and so on. The chapters are written by national or international experts and specialists. |