1. Record Nr. UNINA9910820356503321

Titolo	Bone morphogenetic protein and collagen : an advances in tissue banking specialist publication / / editor, Glyn O. Phillips
Pubbl/distr/stampa	River Edge, NJ, : World Scientific, c2003
ISBN	1-281-93570-0 9786611935702 981-279-529-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (169 p.)
Collana	Series in allografts in bone healing ; ; v. 2
Altri autori (Persone)	PhillipsGlyn O
Disciplina	612.75
Soggetti	Bone morphogenetic proteins Collagen
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"An Advances in tissue banking specialist publication."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	CONTENTS ; Introduction to the Series ; Preface ; List of Contributors ; Chapter 1 From Bone Allografts to Synthetic Bone Grafts: Bone Morphogenetic Proteins and Osteoinduction ; 1. Introduction ; 2. Bone Morphogenesis is a Cascade 3. Purification Cloning and Expression of Recombinant BMPs 4. BMPs and Chondrogenesis and Cartilage Maintenance ; 5. BMPs: Pleiotropy and Thresholds ; 6. BMP Receptors and Smads ; 7. BMPs: Clinical Applications ; 8. Acknowledgements ; 9. References Chapter 2 The Osteoinductive Properties of Demineralised Bone Matrix Grafts 1. Introduction ; 2. Factors Affecting the Osteoinductivity of DBM Grafts ; 3. Cellular Effects of DBM Grafts ; 4. The BMPs ; 5. DBM Grafts in Clinical Use ; 6. Assays For DBM Activity ; 7. References Chapter 3 Processing Factors Contributing To Production Of Maximally Osteoinductive Demineralised Ground Bone For Use In Orthopaedic Or Periodontal Applications

1. Introduction ; 2. Cleaning of Bone ; 3. Demineralization of Bone ; 4. Determination of Osteoinductive Potential of Bone
5. Summary and Conclusions 6. References
; Chapter 4 Clinical Effectiveness of Demineralised Bone Matrix Assayed in Human Cell Culture
; 1. Introduction ; 2. Material and Methods
; 3. Results ; 4. Discussion ; 5. Acknowledgement ; 6. References
Chapter 5 The Influence of Sterilisation on the Osteoinductive Properties of Bone in Rat Bone Marrow Cell Culture

Sommario/riassunto

What are bone morphogenetic proteins (BMPs) and how can they be used in orthopaedic practice? Ever since Urist proposed in 1976 that protein factors from cortical bone appeared to modulate bone healing in animals, there has been a search for these mysterious osteoinductive components. Now that their structure has been elucidated, they have been purified and cloned, and are now available for the improvement of bone healing. The best source of BMPs is demineralised bone. This bone allograft is used to achieve greater osteoinductive capacity. But are the actions of procurement, processing, demi