

**Subject Index****A**

Absorbable collagen sponge, 150  
 Adventitious agents, 176  
 Aging, 77  
 Alginates, 172  
     standards, 137  
 Allograft, 47  
     processing, 54  
 Anhydrobiosis, 197  
 Artificial skin, 12  
 Assays, 176

**B**

bFGF, 254  
 Bioinformatics, 40  
 Biological safety, 176  
 Biological tissue constructs, 120  
 Biomarkers, 84, 246, 254  
 Biomechanical properties, 67  
 Biomechanics, 67  
 Biopolymers, 137  
 Biopreservation, 197  
 Biosynthetic response, 77  
 Bone, 100  
 Bronchoscopic lung, 20

**C**

Cartilage, mechanical properties, 67  
 Cartilage injury, 67, 77  
 CE-SSCP, 246  
 Cell characterization, 40  
 Cell culture, 100  
 Cell differentiation, 254  
 Cell growth, monitoring, 59  
 Cell-material interactions, 40  
 Cellular damage, 246  
 Chitosan, 172  
     standards, 137  
 Chondrocyte viability, 67, 77  
 Coherence microscopy, 59  
 Collagen, 172  
 Complex moduli, 120  
 Connexin43, 254

Cortical bone, 47  
 Cryopreservation, 197

**D**

Demineralized bone matrix, 90  
 DHPLC, 246  
 Disease transmission, 54  
 DNA, 40  
     oxidative damage, 84

**E**

Elastic modulus, 67  
 Emphysema, 20  
 Encapsulation, 137  
 Endpoint determination, 90

**F**

F 2064, 137  
 F 2103, 137  
 Fast Fourier transform, 120  
 Fibrin gels, 20  
 Fluorescence microscopy, 59  
 Fracture repair, 150  
 Free radical damage, 84  
 Freeze-drying, 197

**G**

Gap junction, 254  
 Genetic damage, 246  
 Glycosaminoglycan, 67, 77

**H**

Human dermal fibroblast, 254  
 Human papillomavirus, 12  
 Hyaluronate, 172  
 Hydrogel, 20  
 Hypothermic storage, 197

**I**

IL-1beta stimulation, 67, 77  
 InnervTube, 182  
 Intercellular communication, 254

**K**

KGF, 254

**M**

- Material characterization, 40, 47, 120  
 Measurement technologies, 40  
 Mechanical properties, 47, 120  
 Mechanical testing, 47  
 Mesenchymal cells, 120  
 Microbiological contamination, 176  
 Morphology, 3, 59

**N**

- National Institute of Standards and Technology, 40  
 Natural materials, characterization, 172  
 Neural guidance conduit, 182

**O**

- OCT, 59  
 Osteoblasts, 100  
 Osteoinductive properties, 150

**P**

- PCR, 12  
 Pore size, 3  
 Porosity, 3  
 Pre-market approval, 182

**R**

- Recombinant bone morphogenetic protein-2, 150  
 Risk management, 226

**S**

- Safety, 12  
 SRM, 40  
 Stabilization, 197  
 Standard reference materials, 40  
 Standards, 40, 172  
     alginate and chitosan, 137  
     international, 226  
     testing, 182  
 Stereomicroscopy, 90  
 Sterilization, 54  
 Storage, 197  
 Surface characterization, 40

**T**

- Test methods, 4, 176  
 Tissue scaffolds, 3, 40, 59, 137, 172  
 TP53, 246  
 Transport, 197  
 Trauma, 67, 77  
 Tumor promotion, 254

**V**

- Virus, 176  
 Viscoelastic, 120  
 Vitrification, 197  
 Volume reduction therapy, 20

**Y**

- Y-chromosome, 246