

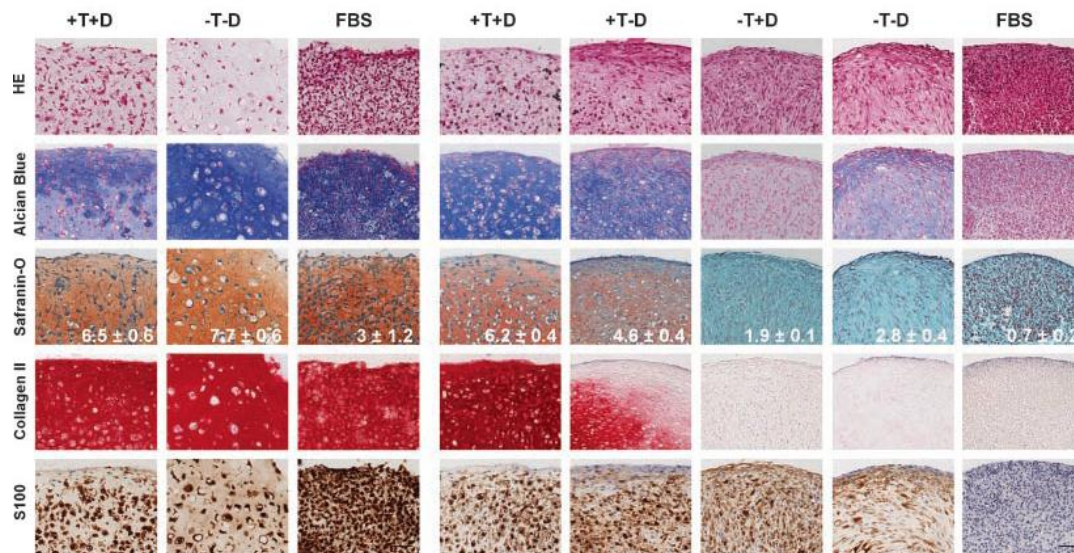
## Cartilage Bioassays

*Osteoarthritis (OA) is a joint disease characterized by progressive degeneration of articular cartilage and changes in other joint tissues. No disease-modifying therapies are currently available. OA severely impacts the quality of life of the elderly and is one of the most important disease that leads to disabilities.*

### **Test Systems**

- Healthy and osteoarthritis cadaveric primary chondrocytes of human, porcine and bovine origin (Cell isolation according to AGINKO SOP's or customized)
- Cultures of cartilage explants (Human/Porcine/Bovine)
- Human synoviocyte cell cultures (Healthy donor/OA/RA)
- Chondrocyte alginate cultures from various origin
- Cultures of stem cells isolated from bone marrow, fat, or muscle for differentiation potential screening
- Chondrocyte, synovial cell, and bone marrow stem cell co-cultures
- Supply of controlled and characterized tissues and cells (cell sourcing/disease stage)





### Cell Culture Screening System using stem cells and chondrocytes.

Courtesy of : Population Doublings and Percentage of S100-Positive Cells as Predictors of In Vitro Chondrogenicity of Expanded Human Articular Chondrocytes  
 SAMOA GIOVANNINI, JOSE DIAZ-ROMERO, THOMAS AIGNER, PIERRE MAINIL-VARLET, AND DOBRILA NESIC from J. Cell. Physiol. 222: 411–420, 2010.

## Contract Research



- In Vitro Cultures and Bioassays
- Molecular and cellular analysis, gene expression, RT-PCR, northern and western blotting, silencing and heterologous expression of proteins, MMP and protease quantification (ELISA), cytokine characterization
- Proliferation assay, co-culture, cell characterization (FACS)
- Histology, IHC, IF, morphological characterization of cells with specific staining
- Biochemistry, matrix analysis, synthesis and degradation of collagen and Proteoglycans

