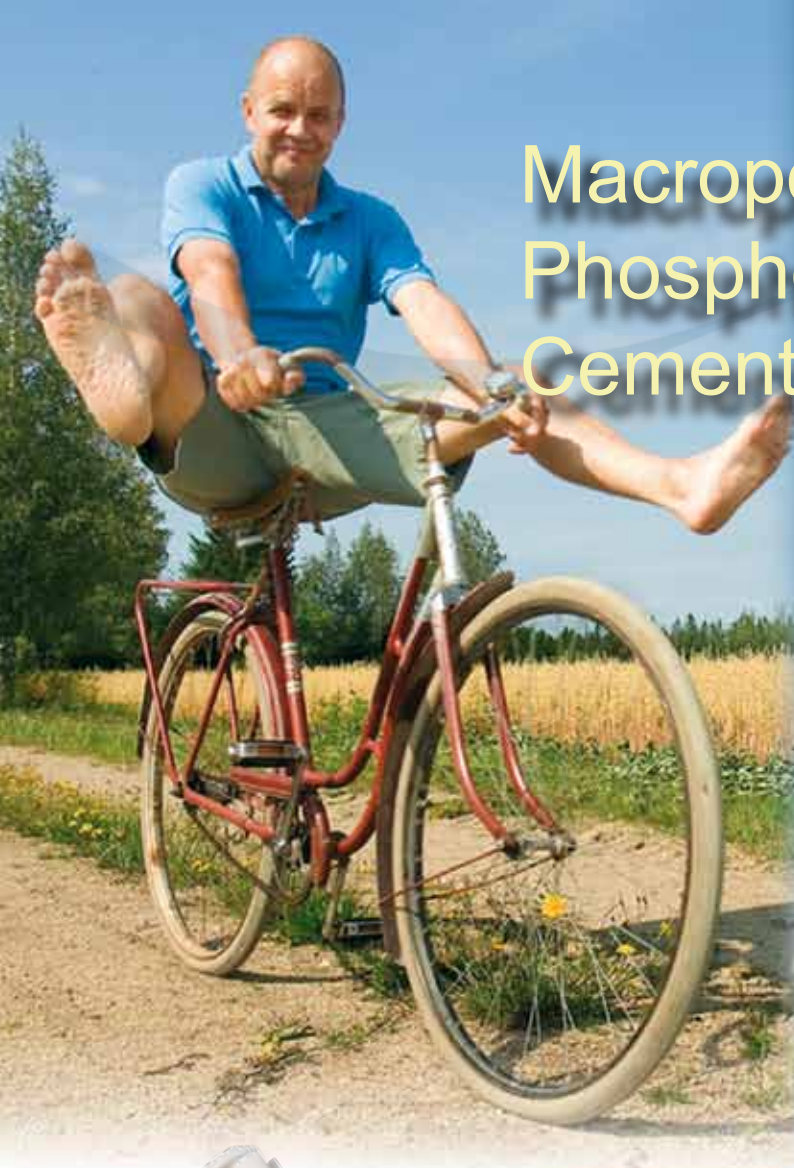


# Macroporous Phosphocalcic Cement

MCPC



Osteoconductive  
Injectable / Moldable  
Self setting



eXpert in bone architecture



# From synthetic to living

## New generation of resorbable phosphocalcic cements

MCPC is a self setting calcium phosphate cement. It is composed of BCP granules in a matrix of several Calcium Phosphates. The material is fully injectable and the self setting is achieved after about 20 minutes. The mechanical compression stress is identical to spongy bone after 24h in physiological solutions at 37°C. After implantation the matrix dissolves faster under non acidic pH, and the BCP granules act as a scaffold for bone ingrowth at the expense of the implant.

### Bioactive

HA/TCP ratio  
Short term dissolution/precipitation process into micropores

### Osteoconductive

Matrix resorption provides macroporosity of the cement

### Osteogenic

Strong interface with the host bone

## Unique macroporous calcium phosphate cement

Features of the innovation include:  
A matrix of fast resorbable calcium phosphates providing the macroporosity of the cement.  
Granules of biphasic calcium phosphate acting as a scaffold for osteoconduction.

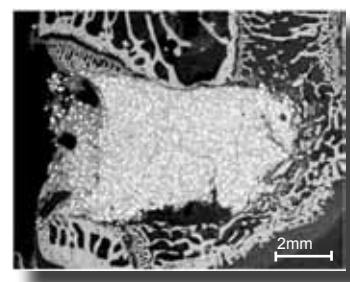
## Benefits

Injectable, MCPC could be used for Mini Invasive Surgery.  
Cohesive, MCPC resists streaming blood or other body fluids.  
Moldable, MCPC adapts to the bone defect geometry.  
Resistant, MCPC sets in situ as a self-hardening bone void filler.

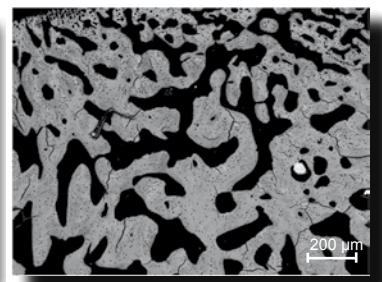
The optimal formulation of the MCPC leads to the controlled resorption with bone ingrowth at the expense of the MCPC.

## Indications

MCPC cement is a synthetic bone filling material which is injectable and moldable before setting.  
MCPC cement is indicated for the filling of loss of bone substance or of skeletal bone defects.  
These defects may have a surgical or traumatic origin.



Immediate section after MCPC filling of rabbit femoral epiphysis defect



12 weeks after implantation - Interconnected lamellar bone trabeculae formed after MCPC resorption (grey) - Bone marrow (black) and residual BCP granule (white)



|      |     |          |
|------|-----|----------|
| MCPC | 6cc | 0701Cl60 |
|------|-----|----------|



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