

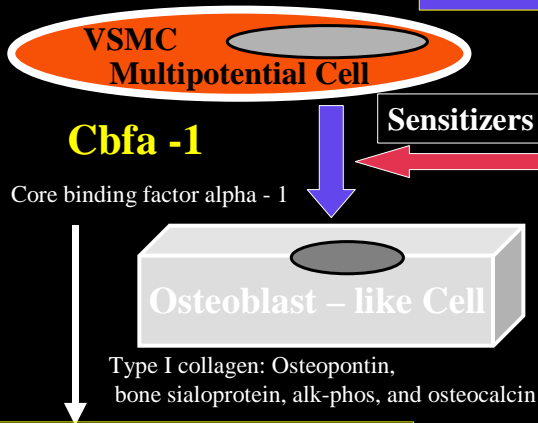
ARTERIAL OSSIFICATION

Modified atherosclerosis in ESRD (highest risk for mortality)
Calciphylaxis an emerging epidemic? (poor prognosis)
Abnormal bone mineral metabolism (renal osteodystrophy)

UREMIA

Elevated Pi, PTH
II Hyperparathyroidism
Aging, AGE, and Diabetes
[GLUCOSE] T2DM
Ox Lipoprotein elevation
HDL-C low
•ROS *
•Inflammatory Cytokines
•IL-1, IL-6, TNFalpha
•Growth Factors: TGF beta
•Ca⁺⁺, Vitamin D

VSMC (a mesenchymal cell)
Inflammatory cell
Pericyte



Cbfa-1 is currently thought to be the “switch” that turns This mesenchymal Cell Into an osteoblast - like Cell