Osteotropic cancer diagnosis by an osteocalcin inspired molecular imaging mimetic

Jae Sam Lee^{a,b} and Ching-Hsuan Tung^a

^aDepartment of Translational Imaging, The Methodist Hospital Research Institute, ²Weill Cornell Medical College, Houston, TX 77030, USA

^bDepartment of Radiology and Medical Imaging, School of Medicine, University of Virginia, Charlottesville, VA 22904, USA

Supplementary Figure 1

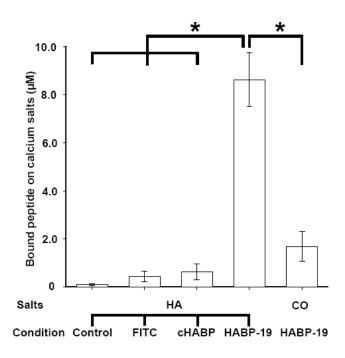


Fig. S1. Hydroxyapatite (HA) binding affinity with FITC, cHABP, and HABP-19 was evaluated by incubating 1 ml of 10 μ M peptide solution with 5 mg at room temperature (RT) for 3 h with constant agitation. Then, calcium oxalate (CO) was incubated with HABP-19 under the same conditions. Quantification of the amount of imaging probes bound to HA, and of HABP-19 bound to CO, was determined indirectly by measuring unbound peptide in solution (490 nm) using a SpectraMax M2 Microplate (Molecular Devices, Sunnyvale, CA) and comparing these values those of the FITC standard in PBS buffer (pH = 7.2) at 490 nm (ϵ = 67,000). (n = 3; *P < 0.05). This data was redrawn from our published article (Atherosclerosis, 224,340-347, 2012).

Supplementary Figure 2

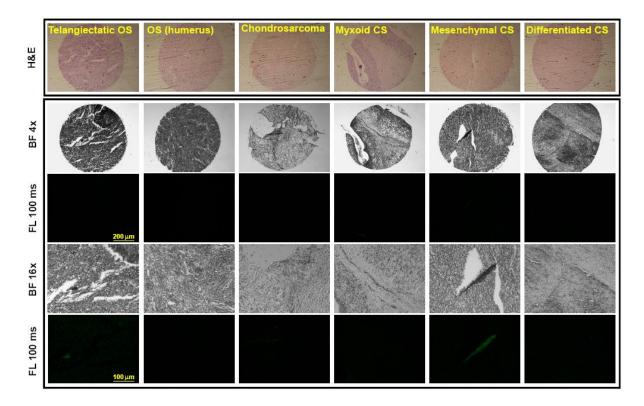


Fig. S2. Histological analysis of osteosarcoma TMAs which were stained with H&E or HABP-19 to identify HA.