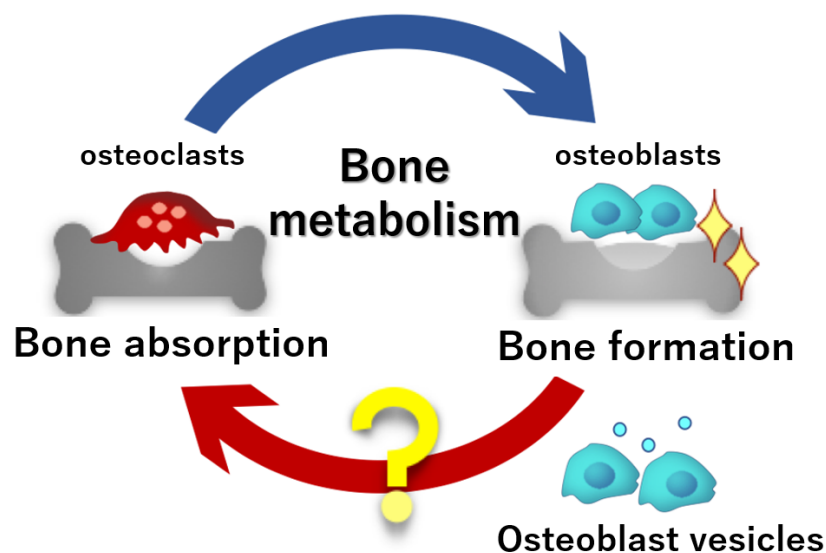


Osteoblasts Secrete Extracellular Vesicles to Exchange Information

Keywords: imaging, osteoblast, extracellular vesicles, cell biology

The mechanism of the transition from bone formation to bone resorption has been unknown. Using original cutting-edge technology for *in vivo* bone imaging, Maki Uenaka, Junichi Kikuta, Masaru Ishii (IFReC/Graduate School of Medicine/Graduate School of Frontier Bioscience, Osaka University) and their research group revealed that bone-forming cells (osteoblasts) secrete micro particles (vesicles) outside the cells. These extracellular vesicles secreted from osteoblasts suppress the differentiation of osteoblasts and promote the differentiation of osteoclasts. The regulation of the vesicles is expected to be applied to new therapeutic agents for bone diseases.



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