## Prostate cancer spreads to bones by overtaking the home of blood stem cells.

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Next to skin cancer, prostate cancer is the second most commonly diagnosed cancer for men, and it is the second leading cause of cancer-related death in men. While the initial growth in the prostate is serious, a patient's prognosis worsens once the cancer has spread (metastasized) to other parts of the body. Researchers at Harvard University and the University of Michigan have discovered a key role of hematopoietic stem cells (HSC) in bone metastases, cancers that have spread into the skeletal system.

HSCs exist within a "niche" in bones. This is where they grow and differentiate into specialized cells. Researchers report that when prostate cancer metastasizes to the bone in a mouse model, it directly competes with healthy HSCs for the HSC niche.

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