

<http://ww2.aievolution.com/acm1301/index.cfm?do=abs.viewAbs&abs=1771>

Cross-talk between Cancer Stem Cells and Metastatic Niche, Emerging Metastasis Pathway?

Presented During: [Poster Presentations - Even Numbered](#)

Fri, 3/22: 10:30 AM - 11:30 AM

Phoenix Convention Center North Building

Room: Exhibit Halls B-D

Abstract Number:

544

Authors: [Babak Behnam](#)¹, Hassan Fazilaty²

Institutions:

¹Tehran University of Medical Sciences, Tehran, Iran, Islamic Republic of, ²Tehran University of Medical Sciences, Tehran, Tehran

Abstract:

Forming metastatic colonization represents final step of metastasis and is the major cause of cancer related mortality. Metastasis is quite an "inefficient" process which requires the right population of tumor cells in a suitable microenvironment to form secondary tumors. Cancer stem cells are the only population of tumor cells capable of progress to overt metastasis. On the other hand, occurrence of appropriate microenvironment conditions within the target tissue would be critical for metastasis formation. Metastatic niche is the specialized microenvironment that is believed to support tumor initiating cells at the distant organ. Key elements have been recently proposed to have pivotal roles in metastasis. Master transcription factors that determine cancer stem cell state and extracellular matrix key elements, sound like two sides of the metastasis coin. In this review, we propose a possible emerging metastasis pathway that connects cancer stem cell and metastatic niche formation to a number of key elements in breast cancer metastasis.

Topic Focus:

Molecular Genetics

Keywords:

Clinical Applications of Molecular Cytogenetics

Genes in Development

Identification of Disease Genes

Molecular Pathophysiology

Oncogenesis