



## Epithelial-Mesenchymal Transition in Cancer

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**ABSTRACT:** Epithelial-Mesenchymal transition (EMT) is a series of events where interactions between two cells as well as cell-extracellular matrix are modified, so as to reorganize the cytoskeleton structure and free the epithelial cell from its surrounding tissue. Transcription factors play crucial role here in providing cells the ability to move through the ECM with mesenchymal phenotypes. However, in some cases these cells lose control during this transitional phase and form metastatic tumours. The EMT is thus, a major event in development and injury, as well as destructive in terms of cancer initiation and progression. EMT helps the migration of tumour from primary site to other sites in the body by loosening the epithelial cells from each other and these cells move in the blood stream to other parts of the body. The events in EMT development and its relevance in cancer are being reviewed here. In this review, we are trying to re-examine the data available which relates EMT related transcription factors with the epithelial cell plasticity. Transcriptional and post-transcriptional regulatory mechanisms mediated by several inducers of EMT, in particular the ZEB and Snail factors, downregulate the expression and/or functional organization of core polarity complexes. These recent observations provide new insights into the relationship between alterations in cell polarity components and EMT in cancer, opening new avenues for their potential use as therapeutic targets to prevent tumour progression. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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