CHAPTER 7

The Role of Epithelial-Mesenchymal Interactions in Tissue Repair, Fibrogenesis and Carcinogenesis

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Summary

The epithelium and the mesenchyme comprise the two important cellular partitions found in virtually every organ, and one influence the other via paracrine and cell-cell interactions. These pithelialmesenchymal interactions have been shown to play important roles in normal tissue development during embryogenesis. They also exert crucial roles in the adult, being involved in roles as diverse as mammary gland development to skin homeostasis and repair. Studies have revealed that pathological disorders in these interactions may result in fibrogenesis and carcinogenesis, and a number of in vitro and in vivo models have been developed and employed to specifically investigate the epithelial-mesenchymal interactions in thes scenarios. A thorough understanding of the roles of epithelial-mesenchymal interactions in tissue repair, fibrogenesis and carcinogenesis will facilitate and define the appropriate treatment for fibrosis and cancer states

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Topics in Tissue Engineering, Vol. 5, 2009. Ed. N Ashammakhi