

Matrix metalloproteinases in urinary system tumors. Part II - Matrix metalloproteinases in urinary bladder carcinoma

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ABSTRACT

Matrix metalloproteinases (MMPs), also referred to as matrixines, provide a group of proteolytic enzymes. They belong to the family of endopeptidases that break down elements of the extracellular matrix, resulting in its continuous remodeling.

Their activity is regulated at multiple levels, while tissue inhibitors of metalloproteinases play a major role in this process. Metalloproteinases play a significant part in neoplastic processes due to their contribution to local tumor invasion,

the formation of distant metastases, as well as to angiogenesis. Urinary tract tumors pose a significant diagnostic and therapeutic challenge and their incidence tends to grow every year. The aim of this second part of the review is to describe the urinary system structure and function, and to highlight the contribution of matrix metalloproteinases to the development of urinary bladder tumors.

Keywords: matrix metalloproteinases, urinary tract tumors, urinary bladder carcinoma

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