



Samenvatting van het proefschrift

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"GEP-NET: rare tumour connections"

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GEP-NETs comprise a group of heterogeneous tumours, with a wide and complex spectrum of clinical behaviour. They originate in a great diversity of tissues and are characterized by their ability to produce various hormonal peptides that cause distinct clinical syndromes. As incidence rates of both GI carcinoids and duodenopancreatic NETs have been increasing over the past years in The Netherlands, these tumours might not be as uncommon as previously thought. This increasing incidence and large heterogeneity of GEP-NETs underlines the urgent need for better understanding of the underlying pathological mechanisms, in order to facilitate the development of new therapeutic strategies. In this thesis, several studies to reveal new markers in the pathogenesis of GEP-NETs are described. Foremost, we suggest endoglin as a novel marker that indicates the presence and potential development of metastases in GEP-NETs, of potential use in the postresection approach in the therapy of these tumours. Next, preliminary evidence for a role of two autocrine growth systems, involving the bombesinlike peptides GRP and NMB, and the IGF-system in concerted action with matrilysin, respectively, in the growth and development of these tumours, is provided. Although further research to reveal the exact mechanism of these autocrine growth systems in GEP-NETs is required, these studies provide rationale for the development of new anti-cancer therapies in these tumours.

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