

# UEGW 2010 - Abstract Submission

## 13.4 Diagnosis of malignant disease

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### APPROPRIATE CLINICAL AND PATHOLOGICAL CLASSIFICATION PREDICTS LONG-TERM OUTCOME IN A LARGE, UNSELECTED, MULTI-CENTER COHORT OF GASTROENTEROPANCREATIC NEUROENDOCRINE TUMORS FROM THE GERMAN NET REGISTRY

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**INTRODUCTION/OBJECTIVES:** Clinically meaningful classification of neuroendocrine tumours (NET) has been both difficult and incoherent throughout the last decades. As novel and effective therapeutic modalities come into focus appropriate classification and therapeutic stratification become more important. In a nationwide survey the German registry for gastrointestinal NET analyzed NET with special focus on the prognostic significance of anatomical and histopathological criteria.

**AIMS & METHODS:** The registry collects data of NET-patients (pts) from 28 German institutions and analyzes epidemiological, histopathological and clinical data as well as information on overall and NET-specific outcome.

**RESULTS:** 2009 NET-pts (964 female) with a mean follow-up of 34.5 months and a mean age of 56.2 years at initial diagnosis were included. Primary tumours were found in the pancreas (34%), jejunioileum (22%), stomach (6%), duodenum (5%), colorectum (6%), appendix (4%), other organs (10%) or were unknown (13%). 293 (15%) pts died during the observation period. 1-, 2-, 5- and 10 year overall survival rates (YSR) were 93%, 89%, 78% and 63%. 1080 pts presented without (limited disease, LD) and 900 pts with (extensive disease, ED) metastases at initial diagnosis. 5-YSR were 88% for LD and 66% for ED ( $p < 0.001$  by log rank-testing). While in LD 5-YSR were similar in pancreatic (89%) and jejunioileal (91%) NET ( $p = 0.58$ ) they were significantly poorer in ED for pancreatic (64%) as compared to jejunioileal (80%) NET ( $p = 0.001$ ). 5-YSR according to WHO-classification were 96%, 79%, 48% for well differentiated endocrine tumors (WDET), carcinomas (WDEC) or poorly differentiated endocrine carcinomas (PDEC) resp.; these differences were also highly significant ( $p < 0.001$ ). NET-grading according to Ki67-index (as proposed by ENETS) showed significantly poorer survival for G3-NET when compared to G1- and G2-NET independent from LD (5-YSR: 67%) or ED (5-YSR: 25%;  $p < 0.001$ ). However, G1 represented a significantly better group than G2 only in ED-pts (LD: G1-5-YSR: 89%, G2: LD-5-YSR: 93%,  $p = 0.366$ ; ED: G1-5-YSR: 86% and G2-5-YSR: 74%,  $p = 0.025$ ).

**CONCLUSION:** In this large multicentric cohort both clinical staging, WHO-classification and grading according to Ki67-index proved to be of highly significant prognostic value. These criteria should be used for meaningful prognostic and therapeutic stratification of gastrointestinal NET.

**I confirm having declared any potential Conflict of Interest for ALL authors listed on this abstract:** Yes

**Disclosure of Interest:** None Declared

**Keywords:** neuroendocrine tumor, pathologic classification, prognostic stratification