Single Center Experience of Everolimus (Ev) Treatment in Pretreated Metastatic Well Differentiated Gastrointestinal (GNET) and Pancreatic Neuroendocrine Tumors (PNET)

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**Background:** Ev has been approved for advanced G1-G2 PNET and it has been studied in GNET. We evaluate Ev efficacy in metastatic G1-G2 P- /G-NET with progressive disease after previous treatments, analyzing our single center experience.

**Methods:** Between September 2006 and February 2013, 29 patients (pt) were treated with Ev, administered at 10 mg/die, for advanced disease: we treated 14 GNET pt - primary site was: small bowel tract (9 pt), colon (1 pt), stomach (1 pt) - and 15 PNET pt. All pt experienced disease progression after somatostatine analogs (SSA), or successive line of therapy (5 pt received Ev in II line, 8 pt in III line, 3 pt in >III line), including chemotherapy, Peptide Receptor Radionuclide Therapy, interferon. Pt received SSA during Ev treatment.

**Results:** In GNET group disease control (CR+PR+SD) was reached in 7 pt, 2 pt, 3 pt, 1 pt in I, II, III, >III line of treatment respectively. In PNET group disease control was reached in 5 pt, 3pt, 5 pt, 1 pt in I, II, III, >III line of treatment respectively. Treatment period was 14,18 months (1,93-31,83+) in GNET group, 9,56 months (1,17-66,5+) in PNET group, Median PFS was 14,93 months (2,13-67,9+) in all pt, 18,27 months (2,21-66,5+) in GNET group, 15,7 months (2,13-67,9+) in PNET group. In GNET group median PFS was 18,48 , 15,35 , 9,9 , 3,37 months in I, II, III, >III line of treatment respectively. In PNET group median PFS was 19,9 , 23,00 , 10,17 , 8,43 months in I, II, III, >III line of treatment respectively. Grade 3-4 adverse events observed were mucositis (10%), asthenia (10%), pneumonia (6%), thrombocytopenia (3%).

**Conclusions:** Ev treatment demonstrated comparable efficacy in terms of response rate and PFS both in GNET and PNET after SSA failure and successive lines of treatment with manageable toxicities.