progressing advanced NET who were SSA-naive had longer median PFS when treated with octreotide LAR alone compared to patients who had prior SSA, supporting the antitumour effects of octreotide LAR demonstrated in the PROMID trial.
Study supported by Novartis.

**6572** POSTER

**Effect of Everolimus + Octreotide LAR in Patients With Advanced Lung Neuroendocrine Tumours − Analysis From RADIANT-2**

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**Background:** The lung is the second most common site of occurrence of neuroendocrine tumours (NET). No approved antitumour agents are available for the treatment of lung NET. An antitumour effect of everolimus, an oral mTOR inhibitor, in human bronchial carcinoid tumour cells in vitro has been reported. In the RADIANT-2 trial (NCT00412061; ESMO 2010 Abstract LBA8), everolimus plus octreotide LAR (E+O) provided a clinically meaningful 5.1-mo prolongation of median progression-free survival (16.4 mo E+O vs 11.3 P+O; HR, 0.77; 95% CI, 0.59–1.00; $P = 0.026$) vs placebo plus octreotide LAR (P+O) in pts with advanced NET and a history of flushing or diarrhea. Exploratory analysis of PFS by tumour site demonstrated that E+O was beneficial across all primary tumour site patient subgroups, including lung NET. An analysis of pts with lung NET and their response to E+O is presented.
**Materials and Methods:** 429 pts (ITT population) with low- or intermediate-grade advanced NET were randomly assigned to either everolimus 10 mg/d plus octreotide LAR 30 mg intramuscularly q28d (n = 216) or placebo plus octreotide LAR (n = 213). The primary endpoint was PFS per central review (RECIST v1.0). Baseline demographics, disease characteristics, biomarker levels, and tumour response to treatment were analyzed for the subset of pts with lung NET.
**Results:** 44 pts with lung NET were identified: 33 in the everolimus arm and 11 in the placebo arm. Baseline demographics and disease characteristics of lung NET pts were similar to those of the overall patient population. Among the lung NET pts, a higher proportion of pts receiving E+O vs P+O were >65 years (42% vs 18%), were diagnosed $\geqslant$2 years earlier (76% vs 55%), and had elevated baseline CgA (>2 $\times$ ULN) and 5-HIAA (>median) (52% vs 36%). Median PFS for pts with lung NET was 13.63 mo in the E+O group vs 5.59 mo in the P+O group (HR, 0.72; 95% CI, 0.31–1.68; $P = 0.228$). More E+O than P+O lung NET pts experienced some degree of tumour shrinkage consistent with the findings in the overall study population (67% vs 27% for lung NET, 75% vs 45% for overall population).
**Conclusions:** Everolimus plus octreotide LAR improved PFS in pts with advanced low-/intermediate-grade lung NET similar the overall population despite the poor prognosis of these pts. The imbalance in the frequency of this important baseline prognostic factor favoring the P+O arm should be considered when interpreting the overall results of the trial.
Study supported by Novartis.

**6573** POSTER

**Effect of Everolimus Treatment on Markers of Angiogenesis in Patients With Advanced Pancreatic Neuroendocrine Tumours (pNET) − Results From the Phase III RADIANT-3 Study**

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**Background:** The mammalian target of rapamycin (mTOR) is a cytoplasmic protein kinase that regulates cellular metabolism, growth, proliferation, and angiogenesis. Inhibition of mTOR is thought to inhibit angiogenesis through a mechanism distinct from VEGF inhibitors and has been shown to reduce endothelial cell proliferation in vitro and tumour vascularization in vivo. In the RADIANT-3 trial (NCT00428597), everolimus, an oral inhibitor of mTOR, significantly prolonged progression-free survival (PFS) in patients with advanced pNET (Yao et al., NEJM, 2011). We determined the effects of everolimus treatment on levels of several angiogenic biomarkers in patients in the RADIANT-3 trial.
**Materials and Methods:** Patients with progressive, advanced low- or intermediate-grade pNET were randomly assigned to everolimus 10 mg/d orally (n = 207) or placebo (n = 203). Serum samples were collected and analyzed for VEGF, PLGF, bFGF, sVEGFR1, and sVEGFR2 at baseline and on day 1 of cycles 2 through 4. Treatment effect on change from baseline over time was analyzed using a repeated-measures model adjusting for other prognostic factors.
**Results:** Everolimus vs placebo resulted in a significant reduction of sVEGFR2 ($P < 0.001$) and PLGF ($P = 0.04$). No significant changes in sVEGFR1 ($P = 0.62$), bFGF ($P = 0.13$), or VEGF ($P = 0.35$) were observed. Everolimus compared with placebo was associated with a consistent reduction in the mean fold change from baseline in sVEGFR2 (everolimus vs placebo, respectively: cycle 2, 0.75 vs 0.95; cycle 3, 0.73 vs 0.92; cycle 4, 0.69 vs 0.90; $P < 0.001$ each cycle). This effect was independent of potential prognostic factors, including WHO by histologic grade. Everolimus compared with placebo was associated with a reduction in the mean fold change from baseline in PLGF; however, the overall magnitude of the reduction was small (everolimus vs placebo, respectively: cycle 2, 0.93 vs 1.00 [$P < 0.001$]; cycle 3, 0.98 vs 1.00 [$P = 0.32$]; cycle 4, 1.00 vs 1.01 [$P = 0.34$]).
**Conclusions:** Everolimus demonstrates a significant antiangiogenic effect in patients with advanced pNET. These data confirm previous findings from studies with everolimus in patients with RCC.
Study supported by Novartis.

**6574** POSTER

**Thirty-four Cases of Advanced Ampullary Carcinoma Receiving Non-surgical Treatment − Experience at a Single Center**

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**Background:** Ampullary carcinomas are a fairly disease entity, and little information regarding these tumours, particularly non-surgical treatment, is available. Only one previous report describing 29 patients with advanced ampullary adenocarcinoma treated using cisplatin-based combination chemotherapy has been made (Kim ST et al. Med Oncol.2010). The aim of the present study was to clarify the clinical behavior, treatment strategy, and outcome of ampullary carcinoma treated using a non-surgical approach.
**Methods:** This study retrospectively reviewed data from patients with advanced ampullary carcinoma who receive non-surgical treatment between 1997 and 2010.
**Results:** We identified 34 patients (male/female, 19/15; median age, 62.5 yrs, ranging from 45−79 yrs). Patients characteristics were as follows: adenocarcinoma/neuroendocrine cell carcinoma/undifferentiated carcinoma accounted for 28, 5, and 1, respectively; PS of 0, 1 and 2−4 for 23, 11 and 0, respectively; Stage IV and recurrence accounted for 17 each; and metastatic sites were the liver, lung, lymph nodes, peritoneum and pleura in 22, 7, 21 1 and 1, respectively. The treatment group consisted of chemotherapy (n = 30), TACE (n = 1) and best supportive care (n = 3). The chemotherapy group were treated with 5-FU+CDDP (n = 3), CDDP+Epirubicin+5-FU (n = 1), UFT+Doxorubicin (n = 5), S-1 (n = 3), GEM (n = 11), GEM+CDDP (n = 6) and CDDP+ETP (n = 1). When the data for the adenocarcinoma group who received chemotherapy were analyzed, the over-all response rate was 7.7%. The median progression-free survival was 3.2 months (3.2 months in the 5-FU containing regimen group: 5-FU group vs. 3.8 months in the GEM containing regimen group: GEM group) and the median over-all survival time was 8.2 months (8.0 months in the 5-FU group vs. 9.1 months in the GEM group). There was no statistically significant difference between the 5-FU group and the GEM group.
**Conclusions:** The treatment outcome in patients with advanced ampullary carcinoma was poor. As com-pared with 5-FU-based regimen, the GEM-based regimen showed a favorable outcome, but the difference was not statistically significant.

**6575** POSTER

**Biliary Tract Carcinomas − a Retrospective Analysis of First Line Chemotherapy Based on Platinium Compounds and Second Line Based on 5 Fluororacil**

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**Purpose:** The goal of this study was to examine the survival and safety in patients with metastatic unresecable biliary tract carcinomas (BTC) treated in first line chemotherapy by the association of gemcitabine with