**9421** POSTER

**Optimizing Management of Sunitinib Treatment in a Worldwide Treatment-use Trial of Patients (Pts) With Advanced Gastrointestinal Stromal Tumour (GIST)**

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**Background:** Using data from a treatment-use study of the oral multitargeted tyrosine kinase inhibitor sunitinib (the main objective of which was to make sunitinib available to GIST pts otherwise unable to obtain it, for example, due to ineligibility for other sunitinib clinical trials), we analyzed outcomes achieved using different patterns of treatment management.
**Materials and Methods:** This ongoing, open-label study (NCT00094029; Pfizer) assesses sunitinib safety and efficacy in pts with advanced imatinib-resistant/intolerant GIST. The starting dosing schedule (SDS) was 50 mg/day in 6-week cycles (4 weeks on treatment, 2 weeks off). Due to the nature of the study, in the event of toxicities, sunitinib administration was sometimes managed as it is in clinical practice, rather than by adhering strictly to the protocol-specified dosing schedule. The present ad-hoc analyses evaluated dosing and outcomes of pts, dichotomizing those who received either (1) the strict SDS (SSDS: no changes in dose level or schedule from the SDS) or (2) flexible dosing (FD: changes made to the SDS in dose level or schedule). Dosing delays or interruptions were used in both groups to manage toxicities.
**Results:** As of March 2011, 1131 pts had been enrolled and 1124 received at least one dose of sunitinib: 599 on the SSDS and 525 with FD. Groups were generally well balanced for baseline characteristics, but there were higher proportions of women (46% vs 35%) and Asians (23% vs 13%) in the FD than the SSDS group, respectively. Pts on FD remained on treatment longer than those on the SSDS (median 9 vs 3 cycles started). Dosing interruptions were reported in 73% of FD pts and 39% of SSDS pts, lasting for a median of 5% and 7% of days on treatment in the two groups. Clinical outcomes appeared to be superior with FD vs the SSDS: median time to tumour progression (TTP; 95% CI) was 12.6 (11.1–14.0) vs 5.2 months (4.4−5.5) and median overall survival (OS; 95% CI) was 23.4 (21.5–26.8) vs 11.1 months (10.1–12.5). A higher percentage of pts on FD experienced adverse events (AEs), and this may have led to the use of FD. For example, the incidences of the most common treatment-related AE of any grade, fatigue, were 57% vs 29%, while those of the most common grade 3/4 AE, hand-foot syndrome, were 20% vs 3%. AE incidence adjusted for duration of treatment will be presented.
**Conclusions:** Pts with GIST who received sunitinib using a FD approach to manage AEs remained on treatment longer than those who received the SSDS and exhibited better clinical outcomes (longer TTP and OS).

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**Topoisomerase-based Chemotherapy in Adults With Relapsed or Refractory Pediatric-type Sarcoma – a Retrospective Analysis of the German AIO Sarcoma Group/BMBF SAREZ Registry**

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**Background:** The objective was to assess the efficacy and safety of topoisomerase-based (TOPO) regimens in adult patients (pts) with pediatric-type sarcoma who failed induction chemotherapy.
**Materials and Methods:** Pts with tumours belonging to the Ewing's sarcoma family of tumours, osteosarcomas, embryonal and alveolar RMS, synovial or desmoplastic small round cell, refractory or relapsed after at least one prior induction chemotherapy, inoperable, locally advanced or metastatic, with progressive disease and adequate organ functions were treated with TOPO-inhibitor based regimens, consisting of topotecan, irinotecan, or etoposide combined with cyclophosphamide or carboplatin.
**Results:** 45 pts, median age 29 yrs (16−59), 16 female, 29 male, had previously received induction treatment according to (inter)national study protocols. TOPO regimens consisted of topotecan + cyclo (n = 36), single-agent irinotecan (2), etoposide + carbo (2) and topotecan + carbo (5), and were applied as 2nd-line treatment in 38 pts and $\geqslant$ 3rd-line in 7 pts. 27 pts had refractory disease (evidence of tumour progression within 6 mo of induction chemo); 10 pts had early relapses (6−24 mo) and 8 pts late relapse (>24 mo). Pts received a median of 3 cycles (range, 1−6). Grade 3−4 CTC toxicity consisted mainly of hematologic side effects as well as nausea/vomiting and fatigue, 1 TRD occurred. Anti-tumour activity (n = 43): 2 CR (4.7%), 5 PR (11.6%) and 12 SD (27.9%). Median duration of CR/PR/SD was 759d (1061–1362)/ 381 (100–1785)/160 (61–468), respectively. Pts with refractory disease had a lower chance to attain a response (CR/PR/SD) to treatment ($p = 0.001$). The 3/6-mos PFR were 42% and 23% for all pts; however, 16% of pts achieved survival $\geqslant$ 24 mo. Factors associated with improved survival were response to treatment (2 CR) and PR + secondary surgery.
**Conclusions:** The TOPO regimens with proven activity in pediatric pts show moderate effectivity in our adult pts with refractory or relapsed pediatric-type sarcoma. Adults with refractory small cell sarcoma appear to have a similar dismal outcome as pts with common adult-type histology, even though a subset of pts did achieve prolonged survival.

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**Prolonged Intraarterial Regional Chemotherapy of Osteosarcoma of Long-tubular Bones of Lower Extremities**

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**Background:** To estimate the treatment results of osteosarcoma by method of prolonged catheter chemotherapy.
**Material and Methods:** Prolonged intraarterial regional chemotherapy (PIRCT) was performed on 88 patients with osteosarcoma of tubular bones of lower extremities in general oncology department. Of them, 55 were men, 33 − women. Middle age was ranged within 19 years old. Under local anaesthesia on Seldinger method the catheterization was being made by "Cobra" type catheter, which has 5f size of thigh artery on affected extremity. The place of catheterization was established depending on expression of parametric infiltrates and existence of extensor contraction of knee-joint, in impossibility of catheter establishment on affected side, it was established on opposite contralateral side, and under rontgenologic (angiography) control it was being moved to the level of bifurcation aorta. In further catheter has been moved through bifurcation into external iliac to frontal branch of thigh artery. Thigh artery was being determined by staining. Catheter was left in this zone. Catheter was fixed to the skin of thigh with silk (for preventing of displacement and way out of catheter from vessel). We have used infusator of medicinal agents "??? -1" (Russia) which has been connected up to the distal ending of catheter with special system for administration of medicinal agents.
**Results:** From 1 to 4 courses of chemotherapy by CAP scheme: cyclophosphan 800 mg/m$^2$ one day i/v, docsorubicine 60 mg/m$^2$ 48 hourly continuous intraarterial infusion, cisplatin 100 mg/m$^2$ 6 hourly intraarterial infusion on the base of hyper aquation in 3 days have been performed depending on efficacy of treatment and absence of contraindications. The patients were keeping the bed regimen in 3 days. Tumour localized in distal part of thigh-bone in 47 patients, in proximal part of shine-bone in 30 patients, and in 11 patients in splint bone. The diagnose was verified histologically for all patients. The assessment of treatment efficacy was carried out by standard of WHO (1979). The following results have been taken: the full effect was noted in14 patients (15.9%), partial effect in 41 (46.6%), stabilization process in 27 (30.7%), and progressive tumour process in 6 (6.8%). Saved operations were performed in 49 patients (55.7%), and crippling operations in 39 patients (44.3%) from 88 operated patients. Adjuvant chemotherapy has been performed by CAP scheme in all patients during post operative period.
**Conclusion:** PIRCT allowed to get objective results in 55 (62.5%) patients, to perform saved operations in 49 (89.1%) of them.