

1996, IFRT from 1996 to 2001, and INRT from 2001. Exclusion criteria were age <16 years, non-ABVD-like chemotherapy, >4 cycles of chemotherapy, use of PET to guide treatment, or co-morbidities that precluded accurate staging or treatment.

Results: At diagnosis, the median age was 32 (16–81) years, 52% were male, Ann Arbor stage was IA in 29% and IIA in 71%, and 10% had extra-nodal disease. Chemotherapy consisted of 2 cycles of ABVD-like chemotherapy in 95%, 3 cycles in 3% and 4 cycles in 2%. Three radiotherapy treatment groups were identified: EFRT in 127 (39%), IFRT with 10 cm margin in 96 (30%), and INRT with 5 cm margin in 102 (31%). Median follow-up for living patients was 73 (14–207) months. The median time to relapse was 3.1 (0.8–8.8) years. A total of 12 relapses occurred (4%): 4 after EFRT (3%); 5, IFRT (5%); and 3, INRT (3%) ($P=0.9$). Loco-regional relapse (LRR) occurred in 5 patients: 3 in the EFRT, 2 in the IFRT and none in the INRT groups. Of note, no marginal recurrences occurred after INRT. Distant-only relapses were less common after EFRT (1 vs 3, IFRT vs 3, INRT).

At 5 years, progression-free survival (PFS) was 97%, and overall survival (OS) was 95%. At 10 years, PFS and OS were 95% and 89%, respectively. **Conclusion:** Reduction in field size appears to be safe, without an increased risk of LRR in patients receiving INRT.

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ORAL

Phase II trial of oral vorinostat (suberoylanilide hydroxamic acid, SAHA) in relapsed diffuse large B-cell lymphoma (DLBCL)

M. Crump¹, B. Coiffier², E.D. Jacobsen³, L. Sun⁴, J.L. Ricker⁴, H. Xie⁵, S.R. Frankel⁶, S.S. Randolph⁵, B.D. Cheson⁶. ¹Princess Margaret Hospital, Medical Oncology and Hematology, Toronto, Canada; ²Centre Hospitalier Lyon-Sud, Hematology, Lyon, France; ³Dana Farber Cancer Institute, Medical Oncology, Boston, USA; ⁴Merck Research Laboratories, Clinical & Quantitative Sciences, Whitehouse Station, USA; ⁵Merck Research Laboratories, Clinical Oncology, Whitehouse Station, USA; ⁶Georgetown University Hospital, Hematology/Oncology, Washington DC, USA

Background: The histone deacetylase inhibitor (HDACI) vorinostat (ZolinzaTM) was approved in the US in October 2006 for the treatment of cutaneous manifestations in patients (pts) with cutaneous T-cell lymphoma who have progressive, persistent or recurrent disease on or following 2 systemic therapies. Oral vorinostat has demonstrated activity in pts with DLBCL in a Phase I trial.

Methods: An open-label, Phase II trial of oral vorinostat 300 mg bid (initially 14 d every 3 wks; amended to 3 d per wk) until progressive disease (PD) or intolerable toxicity was conducted. Pts with measurable, relapsed/refractory DLBCL and adequate hematologic, hepatic and renal function, who had received ≥ 2 prior systemic therapies were eligible. Exclusion criteria included: prior HDACI treatment, allogeneic transplant, or failure on >3 prior therapies. The primary end point was the objective response rate (ORR) measured by CT/PET. Assessment of response duration (DOR), time to progression (TTP), time to response (TTR) and safety were secondary end points.

Results: Eighteen pts (median age, 66 y [range, 59–86 y]) who had received a median of 2 prior systemic therapies were enrolled from May 2005 to March 2006 at 8 centers. Initially, 7 pts received 300 mg bid 14 d every 3 wks, however 4 had DLT (Gr 3 muscle spasms; Gr 4 thrombocytopenia, $n=3$). On the amended schedule (300 mg bid 3 d per wk), no pts had DLT, but 1 achieved a complete response (TTR=85 d; DOR=331+ d). The ORR was 5.6%. One pt had stable disease for 301 d. Sixteen pts discontinued for PD and the median TTP for all pts was 44 d. The median number of treatment cycles was 2 (range, 1–19+). Two pts received >6 cycles (126 d). Common drug-related adverse experiences (AE; mostly Gr 1/2) were diarrhea (61%), fatigue (50%), nausea (39%), anemia (33%) and vomiting (33%). Three pts had dose reduction (from 300 to 200 mg bid 14 d every 3 wks) and none discontinued for drug-related AE. Drug-related AE \geq Gr 3 included thrombocytopenia ($n=3$; 300 mg bid 14 d every 3 wk) and asthenia ($n=2$; 300 mg bid 3 d per wk). Two pts died on study of causes unrelated to drug: PD + GI hemorrhage (d 40) and acute myocardial infarction (d 95).

Conclusion: Vorinostat showed limited activity in pts with relapsed DLBCL and is well tolerated at 300 mg bid 3 d per wk or 200 mg bid 14 d every 3 wks. The optimal dose and schedule as well as predictive response biomarkers require further investigation.

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ORAL

Oblimersen plus fludarabine/cyclophosphamide (FC) significantly increases complete remission and overall survival in non-refractory patients (Pts) with relapsed chronic lymphocytic leukemia (CLL): results from a prospective randomized phase 3 trial

S. Novick¹, S. O'Brien², J. Moore³, T. Boyd⁴, L. Ding¹, K. Rai⁵.

¹Genta Incorporated, Clinical Development, Berkeley Heights NJ, USA;

²MD Anderson Cancer Center, Leukemia Department, Houston TX, USA;

³Duke University Medical Center, Division of Medical Oncology, Durham NC, USA;

⁴Yakima Regional Cancer Care Center, Medical Oncology, Yakima WA, USA;

⁵Long Island Jewish Medical Center, Hematology/Oncology, New Hyde Park NY, USA

Background: Oblimersen (Genasense[®] [G]) decreases Bcl-2, an anti-apoptotic factor linked to pathogenesis and progression in CLL. Addition of G to fludarabine and cyclophosphamide (FC) significantly increased the primary endpoint of the rate of complete and nodular partial response (CR/nPR: 17% vs. 7%; $P=0.025$) and durability (median not reached; estimated 36+ mos vs. 22 mos; $P=0.035$) of these response in pts with relapsed or refractory CLL who had prior F. To identify pts deriving maximal benefit, we conducted additional analyses on prospectively defined non-refractory pts who remained sensitive (S) to F.

Methods: Eligible pts were treated with up to six 28-day cycles of FC (25 mg/m²/d and 250 mg/m²/d \times 3 d) with or without G (3 mg/kg/d \times 7 d by CIV, beginning 4 days before FC). Clinical and bone marrow data were blindly reviewed and graded by NCI-WG criteria. CT or ultrasound was required to confirm CR/nPR in pts with pre-existing abnormalities. All randomized pts have been followed >3 years or until death or withdrawal of consent.

Results: Out of 241 pts in the study, 101 (FCG = 51, FC = 50) were in the S population. Demographics were exceptionally well-balanced, including age (median 64 years, each arm), time from diagnosis (66 and 69 mos, respectively) and prior treatment history (mean 6 cycles F, each). Among S pts, G disproportionately increased the CR/nPR rate (25% vs 6% in the FC group, $P=0.016$) and significantly increased overall survival (estimated 39+ mos vs. 33 mos; $P=0.05$). No difference was observed in time-to-progression (both ITT and S analyses). Among grade 3–4 events in the S population, pts in the FCG group had significantly less neutropenia and anemia ($P=0.03$), and no significant increase in thrombocytopenia or non-hematologic toxicities. Patients in the G arm had fewer opportunistic infections and secondary malignancies. No S pts experienced tumor lysis and/or cytokine release or autoimmune events.

Conclusions: The addition of G to FC significantly increased CR/nPR in pts with relapsed CLL. Pts who were not F-refractory derived maximal benefit with significant increases in CR/nPR and survival and significantly less myelosuppression.

6005

ORAL

Are we changing the survival of follicular lymphomas? Patterns of outcome in the patients treated at the Oncology Institute of Southern Switzerland from 1979 to 2006

E. Zucca¹, A. Conconi², M. Motta¹, L. Wannesson¹, E. Gracia¹, V. Belisario Filho¹, D. Rodriguez Abreu¹, M. Ghielmini¹, F. Cavalli¹. ¹Oncology Institute of Southern Switzerland, Department of Medical Oncology, Bellinzona, Switzerland; ²Amedeo Avogadro University of Eastern Piedmont, Department of Medical Sciences & IRCAD, Novara, Italy

Background: The natural history of follicular lymphoma (FL) was believed not to have changed over the last 30 years of the previous century. Median survivals of about 10 years were reported from many centres and the disease was considered incurable. Several new treatment options have been developed in the last decade, but it still remains to be clarified whether patterns of outcome in FL patients have changed.

Patients and Methods: We analyzed the outcome of the 258 patients with FL treated at the Oncology Institute of Southern Switzerland (IOSI) from 1979 to 2006. Three diagnostic eras were taken into consideration according to the major changes in the available therapeutic armaments: 1979 to 1989 ("alkylating agents' era", $N=73$), 1990 to 1999 ("aggressive regimens and G-CSF era", $N=118$), and 2000 to 2007 ("rituximab era", $N=67$). Median survival times, Kaplan-Meier survival curves, and relative survival rates were calculated.

Results: The median age of the entire group was 57 years (range 21–92). The distribution of the main prognostic factors (including age, stage, international prognostic index, LDH and beta-2 microglobulin levels) was similar in the three eras. A significant improvement in the cause-specific survival of all patients with FL was observed between the three eras by log-rank test ($p=0.018$). The median cause-specific survival was 12.5 years for patients with FL diagnosed between 1979 and 1989 but was not reached in the two more recent groups. Estimated cause-specific survival rate at