defined by A<sub>cy</sub>/A<sub>sp</sub> < 0.9) in five of seven patients (eight of ten samples; mean A<sub>cy</sub>/A<sub>sp</sub> 0.43 versus 0.95). Inhibitory effects of IL-12 on spontaneous in vitro apoptosis ( $A_{cy}/A_{sp}$  < 0.9) were observed in three of seven patients (five of ten samples; mean A<sub>cy</sub>/A<sub>sp</sub> 0.57 versus 1.2). IL-12 mediated inhibition of spontaneous cell death occurred only in patients showing a simultaneous IL-4 induced protection from in vitro apoptosis (p ≤ 0.0385). Three of four patients who developed progressive disease according to NCI criteria within twelve months after sample collection presented with both IL-4 and IL-12 mediated inhibition of in vitro apoptosis. In contrast, no significant inhibition of apoptosis by IL-12 alone, or both IL-12 and IL-4 was observed in patients with prolonged stable disease. The significance of our observation for the accumulation of malignant B lymphocytes in vivo is unclear. An increased susceptibility against IL-12 mediated inhibitory effects may be postulated for those B-CLL cells responding to IL-4. Whether the clinical outcome of patients with maintained versus lost in vitro responsiveness to inhibitory cytokine effects can help to define biological subgroups of B- CLL will be the subject of further studies.

1201 POSTER

## The vedex regimen: An effective and well tolerated palliative treatment for non-Hodgkin's lymphoma (NHL)

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Objectives: To evaluate the efficacy and toxicity of a novel weekly palliative chemotherapy regimen with vincristine 1 mg, epirubicin 30 mg/m2 and dexamethasone 20 mg (VEDex) in relapsed NHL.

Patients and Methods: This was a retrospective study of 49 patients with NHL. The median age was 68 years (range of 34 to 88 years). 17 patients (34.7%) had low grade disease resistant to conventional alkylating therapy and 3 patients (6.1%) had transformed NHL. 29 (59.2%) had relapsed high grade NHL; of these 22 had poor performance status which precluded high dose chemotherapy and 7 were heavily pre treated. Responding patients received a total of 8 cycles of treatment but treatment could be repeated at a later stage if required.

Results: The overall response rate was 67.3%, 10 patients (20.4%) achieved a complete response and 23 (46.9%) a partial response. A further 16 patients (32.7%) had stable disease. 23 patients (46.9%) reported complete resolution of symptoms and 15 (30.6%) had partial resolution of symptoms. Grade III neutropenia was seen in 7 patients (14.3%) and grade IV in 1 (2%). Other significant toxicity's included nausea and vomiting grade II (4.1%), grade III (4.1%) and alopecia grade III (2%). Peripheral neuropathy of greater than grade I was not reported. The median survival from onset of treatment was 6 months. No patients died of treatment related toxicity.

Conclusion: VEDex is an effective and well tolerated palliative treatment for patients with relapsed NHL who have a poor performance status or who are heavily pre treated.

1202 POSTER

# The comparison of somatostatin receptor and 67-gallium scintigraphy in the staging of malignant lymphomas

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Purpose: We conducted a prospective blinded study comparing somatostatin receptor (SS-R) scintigraphy with gallium (GA) scintigraphy for staging of patients with malignant lymphomas.

Methods: SE-R scintigraphy was performed in 7 Hodgkin and 13 non-Hodgkin's lymphoma patients after i.v. injection of [111-In-DTPA-D-Phe-1]-octreotide (220 MBq). One week later high dose GA scintigraphy (296 MBq) was performed. The blindly read scans were compared with standard staging procedures.

Results: 16/20 patients were true positive and four were false negative on SS-R scintigraphy. On GA scintigraphy 9/20 patients were true positive and 11 false negative. With standard staging procedures 58 lesions could be identified. The sensitivity for SS-R scintigraphy was 40/58 (69%); 28/35 (80%) in the supra-diaphragmatic region and 9/18 (50%) in the infradiaphragmatic region. The sensitivity for GA scintigraphy was 28/58 (48%); 19/35 (54%) in the supra-diaphragmatic region and 9/18 (50%) in the infradiaphragmatic region. SS-R scintigraphy visualized 13 previously unknown lesions, four of these lesions were also visualized by GA scintigraphy.

Conclusion: The interpretation of the SS-R scan was easier because of its lower background radioactivity. The results of SS-R scintigraphy are at least comparable to GA scimigraphy.

1203 POSTER

### IDEC-C2B8-induced B cell depletion is not associated with significant immune suppression or Infection

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Purpose: Short course (22 day) therapy with the chimeric monoclonal anti-CD20 antibody IDEC-C2B8 (rituximab) has resulted in a 50% ORR in evaluable patients with relapsed low-grade or follicular non-Hodgkin's lymphoma. Analysis of integrated safety data was performed to evaluate risk related to B cell depletion.

Methods: Of 282 pts from 5 single agent trials, 217 received 375 mg/mZ/IVqwk  $\times$ 4.

Results: Median circulating B lymphocyte counts dropped to zero following the 1st dose of IDEC-C2BS. CD3, CD4, CD8, and NK cell counts remained unchanged. B cell recovery began at 6–9 months and was complete by 12 months. Mean IgG and IgA levels remained normal. Mean IgM dropped transiently. 12% of pts had >50% drop in either IgG, IgA or IgM. Patients with low immunoglobulins were no more likely to develop infection. Only 2% of pts required hospitalization for infections (-1% vital, no fungal or parasitic) during treatment and 2% during the one year follow up period.

Conclusion: IDEC-C2B8 has significant clinical activity and the associated B cell depletion does not appear to increase the risk of immunosuppression or infection.

1204 POSTER

## Rescue treatment with etoposide, platinum, ifosfamide and dexamethasone for non-Hodgkin's lymphoma

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Approximately 50% of the patients with non-Hodgkin lymphoma (NHL) will relapse after first line treatments. We describe the results of the EPID rescue combination.

Methods: 32 patients (pts) with refractory or relapsed NHL were treated with the regimen: Etoposide 100 mg/m² on days 1, 2, 3 + Platinum 100 mg/m² divided in 3 days + Ifosfamide 5 g/m² divided in 3 days + Mesna 60% of the daily Ifosfamide dose and Dexamethasone 20 mg  $\times$  3 days. The pts median age was 51 years. All pts received previously 1–2 chemotherapy regimens, the most common were CHOP and VACOP-B. Histology characteristics: high lymphoma in 27 pts and low-grade with transformation in 5 pts., bulky tumors in 80%.Results: After 140 delivered cycles 31 pts were evaluable for response and 32 for toxicity. Response rate: complete in 38.7% (12 pts) and 41.9% (13 pts) for an overall response of 80.6%. The median DFS was 13 months (range 2–42 months) with a median overall survival of 20 months (range 2–48 months). Toxicity in 140 cycles was: Grade (G) 3 neutropenia 12.5%, G4 19%, thrombo cytopenia G3 3.2%, G4 7.5%. Two pts died after septicemia and thrombocytopenia. Dehydration and electrolyte imbalance G4 in two pts.

Conclusion: The EPID regimen was highly effective with a prolonged survival rate. The most important toxicity was treatable neutropenia. We suggest the use of EPID scheme with colony stimulating factors.

1205 POSTER

#### A decade of clinical investigation in elderly patients with non-Hodgkin's lymphoma: Results as reported in the literature

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Purpose: To explore the trends in the treatment of elderly patients with non-Hodokin's lymphoma reported in last 10 years.

Methods: All relevant publications in MEDLINE, and the proceedings of the ECCO, ESMO, ASH, and ASCO meetings from 1987 to 1996 were categorized in 24 items, including study design (retrospective, phase II or (III), treatment (conservative or aggressive), characteristics of patients and IPI prognostic factors, response, survival, and toxicity.

Results: In 64 reports, we found 43 chemotherapy regimens and 90 treatment arms. The reports were retrospective in 22% of the cases, phase II trials in 64%, and randomized clinical trials in 14%. Most of the randomized