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Letter to the Editor

Progress Report on Vindesine Treatment of Melphalan-resistant Multiple Myeloma

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SINCE 1979 we treated patients with melphalan-resistant multiple myeloma with a vindesine–prednisone combination.

For three consecutive weeks vindesine was administered weekly (2 mg/m^2) followed by prednisone (100 mg orally for 5 days/week). These cycles were repeated after therapy-free intervals of 3 weeks. Response was evaluated after two cycles.

In a pilot study concerning eleven patients we obtained a 55% response rate (two 'responses' and four 'improvements') [1]. Since then a total of 34 evaluable melphalan-resistant patients have been treated. Criteria for admission to the study [1], clinical staging [2] and response evaluation [3] remained unchanged. Two patients had stage II disease (intermediate tumour load) and 32 patients had stage III disease (high tumour load). Response was obtained in five patients and improvement in four patients, while the majority was unresponsive (18 patients). Seven patients showed progressive disease. The response rate thus decreased from 55 to 27% (9 out of 34 patients).

In the responding/improved patients the vindesine–prednisone treatment was continued. The duration of response and the final outcome in the patients is shown in Table 1. Noteworthy are the rapid return of disease activity (most likely indicating drug resistance) in patients 1, 2, 6 and 7 and the death due to infections in patients 3, 8 and 9. Toxicity consisted of alopecia (15%) and fingertip paresthesias (50%), both reversible in the majority of patients, despite continued treatment. Haematological side-effects were mild: leukopenia was infrequently observed with a nadir of 1.1×10^9/l. The death of three responding patients due to an infection (none of them with a leukopenia) probably resulted from severe immune depression, which could well be an effect of the prednisone dose.

It must be concluded that although we demonstrated a definite anti-tumour effect of vindesine, the small response rate and the short duration of response as well as the increased susceptibility for fatal infections indicate that the vindesine–prednisone combination is not suitable for this particular group of patients. However, the demonstrated anti-tumour effect, in fact comparable with previous regimens [4, 5] in melfalan-resistant myeloma, warrants a trial with vindesine in a multiple-drug regimen.

Table 1. *Duration of the response in the 'responding' patients* (1–5) *and 'improvement' patients* (6–9)

No.	Duration of response/ improvement (weeks)	End of response indicated by:
1	30	disease progression
2	18	disease progression
3	14	died of pneumonia
4	14	died of unknown cause
5	54	still responding
6	19	disease progression
7	13	disease progression
8	12	died of pneumonia
9	42	died of Gram-negative septicaemia

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REFERENCES

1. HOUWEN B, OCKHUIZEN TH, MARRINK J, NIEWEG HO. Vindesine therapy in melphalan-resistant multiple myeloma. *Eur J Cancer* 1981, **17**, 227–232.
2. DURIE BGM, SALMON SE. A clinical staging system for multiple myeloma. *Cancer* 1975, **36**, 842–854.
3. ALEXANIAN R, BONNET J, GEHAN E *et al.* Combination chemotherapy for multiple myeloma. *Cancer* 1972, **30**, 382–389.
4. ALEXANIAN R, SALMON SE, BONNET J, GEHAN E, HAUT A, WEICH J. Combination chemotherapy for multiple myeloma. *Cancer* 1977, **40**, 2765–2771.
5. BERGSAGEL DE, COWAN HE, HASSELBACK R. Plasma cell myeloma: response of melphalan resistant patients to high-dose cyclophosphamide. *Can Med Assoc J* 1972, **107**, 851–855.