Table 1. Effects of fenretinide on dark-adaptometry

	Standard dose	High dose + vitamin A supplementation
Cone threshold*	4.5 ± 0.1	4.3 ± 0.6
Time to cone–rod break (min)	12.3 ± 6.7	4.8 ± 1.5†
Rod threshold*	3.6 ± 0.7	2.6 ± 0.4†

*Expressed as log U picostilbs (psb).
Normal values are, respectively: <5 log U psb, <9 min, <3.5 log U psb.
†$P < 0.05$ compared with standard dose (t-test).

5 cases, mitomycin-C, 2 cases. The median interval between the last instillation and the beginning of the phase IIa study was 13 months (range 8–39).

Toxicity other than diminished dark adaptability was mild and consisted of skin dryness, 2 cases; eye dryness, 2 cases; ungeual distrophy, 1 case; increase in triglicerides, 1 case; increase in gamma glutamyl transpeptidase (γGT) 1 case; diarrhoea, 1 case. The effects on dark-adaptometry [4] of the combination regimen compared with the standard dose of 200 mg are reported in Table 1. Normalisation of time to cone–rod break and final rod threshold (the most sensitive indicator of rod retinal function) was observed with the new regimen.

Interestingly, there was a reduction in the rate of recurrences (number of recurrences/person-months of follow-up) when the total 4-HPR intervention period (200+400 mg) was compared with the preretinoid period: 0.025 (5/196) versus 0.094 (21/223), respectively ($\chi^2 = 9.81$, $P < 0.01$). Since 4-HPR enhances immunoresponse both *in vitro* [6] and *in vivo* [7], an interaction with BCG treatment cannot be excluded.

In conclusion, the results of this pilot study suggest that treatment with high dose 4-HPR plus vitamin A supplementation is feasible, relatively non-toxic even in a cohort of elderly patients and, more importantly, can prevent the occurrence of diminished dark adaptation. Since ophthalmologic alterations have so far prevented investigation of this compound at doses higher than 300 mg [8–10], our study provides evidence that vitamin A supplementation is the simplest, most logical way to overcome this secondary effect. Further studies are required to elucidate whether the addition of vitamin A may interfere at the molecular level with the mechanism of action of 4-HPR, which is presently still unknown.

1. Olsen PR, Wolf H, Schroeder T, Fischer A, Højgaard K. Urothelial atypia and survival rate of 500 unselected patients with primary transitional cell tumour of the urinary bladder. *Scand J Urol Nephrol* 1988, **22**, 257–263.
2. Moon RC, McCormick DL, Metha RG. Inhibition of carcinogenesis by retinoids. *Cancer Res* 1983, **43**, 2469s—2475s.
3. Band PR, Deschamps M, Israël L. Retinoid chemoprevention timing and dose intensity. *Cancer Invest* 1989, **7**, 205–210.
4. Decensi A, Torrisi R, Polizzi A, *et al.* Effect of the synthetic retinoid fenretinide on dark adaptation and the ocular surface. *J Natl Cancer Inst* 1994, **86**, 105–110.
5. Decensi A, Bruno S, Costantini M, *et al.* Phase IIa study of fenretinide in superficial bladder cancer, using DNA flow cytometry as an intermediate end point. *J Natl Cancer Inst* 1994, **86**, 138–140.
6. Dillehay DL, Walia AS, Lamon EW. Effects of retinoids on macrophage function and IL-1 activity. *J Leukocyte Biol* 1988, **44**, 353–360.
7. Villa ML, Ferrario E, Trabattoni D, *et al.* Retinoids, breast cancer and NK cells. *Br J Cancer* 1993, **68**, 845–850.
8. Kaiser-Kupfer MI, Peck GL, Caruso RC, Jaffe MJ, Di Giovanna JJ, Gross EG. Abnormal retinal function associated with fenretinide, a synthetic retinoid. *Arch Ophthalmol* 1986, **104**, 69–70.
9. Modiano MR, Dalton WS, Lippman SM, Joffe L, Booth AR, Meyskens FL Jr. Ocular toxic effects of fenretinide. *J Natl Cancer Inst* 1990, **82**, 1063.
10. Kingston TP, Lowe NJ, Winston J, Heckenlively J. Visual and cutaneous toxicity which occurs during N-(4-hydroxyphenyl)retinamide therapy for psoriasis. *Clin Exp Dermatol* 1986, **11**, 624–627.

Acknowledgement—This study was partially supported by a grant of the Associazione Italiana per la Ricerca sul Cancro (AIRC).

Correction

Influence of dexniguldipine-HCl on rhodamine-123 accumulation in a multidrug-resistant leukaemia cell line: comparison with other chemosensitisers—This paper by R. Boer, S. Haas and A. Schödl was published in *The European Journal of Cancer*, Vol. 30A, No. 8, pp. 1117–1123, 1994. Owing to an editorial error, a mistake was published in this paper. On p. 1119, third paragraph, lines 1–4, the reference to Figure 4 is incorrect, and should be Figure 6. Therefore, the paragraph should read "Figure 5 shows the respective concentration–response curves at pH 7.8 for quinidine, cyclosporin A and SDZ PSC 833 and in Figure 6 the data for amiodarone, dipyridamole and verapamil are presented". We apologise to the authors for this error.