

A219

**Analysis of recurrence rates two years after the treatment of superficial bladder cancer patients with intravesical EOquin™ (apaziquone, EO9)**

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Despite the failure of the indoloquinone bioreductive drug EO9 to demonstrate clinical efficacy following systemic administration, a recent phase I/II clinical study has indicated that intravesically administered EO9 has ablative activity against non-muscle invasive bladder cancer marker lesions. Complete response (CR) was observed in 8 out of 12 patients. We report observed recurrence rates over a 2-year median follow-up following EO9 treatment compared to the history of recurrences prior to EO9 therapy. All patients had multiple recurrences treated by transurethral resection (TUR) followed by chemotherapy (predominantly mitomycin) and/or immunotherapy (BCG) prior to EO9 instillation. The time to recurrence following the last TUR preceding this study was 4-29 months (median 8.4). Within the two-year period prior to EO9 treatment, the median number of tumours and the recurrence rate per year (RR) among the 12 cases were 6.50 and 1.42 respectively. Following EO9 treatment, 4 (50%) patients with CR developed recurrences at 9, 18, 20 and 23 months respectively. In patients with CR the median number of tumours and RR improved from 6.5 and 1.4 (2 years before EO9) to 0.5 and 0.17 respectively during 2-year post EO9 follow-up. Notably, 3/4 of the responding patients in the dose escalation cohort (treated at weekly increasing doses) relapsed compared to 1/4 in the fixed-dose cohort (treated with 4 mg/40ml dose). While small numbers in the study preclude definitive conclusions to be drawn regarding efficacy of EO9 in prophylaxis of non-muscle invasive bladder cancer recurrence, absence of early relapses in this high-risk population is encouraging.