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**INTRAVESICAL HYPERTHERMIA AND
MITOMYCIN-C FOR CARCINOMA
IN SITU OF THE URINARY BLADDER:
EXPERIENCE OF THE EUROPEAN
SYNERGO® WORKING PARTY**

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Objectives To study the results of chemotherapy combined with intravesical hyperthermia in patients with mainly BCG-failing carcinoma in situ (CIS).

Methods Patients with histologically confirmed CIS were included retrospectively. Outpatient thermochemotherapy treatment was done with mitomycin-C (MMC) and the Synergo® system SB-TS 101 (temperature range between 41 and 44°C), weekly for 6–8 weeks, followed by 4–6 sessions every 6–8 weeks.

Results Fifty-one patients were treated between 1997 and 2005 from 15 European centers. Thirty-four were pretreated with BCG. Mean age was 69.9 years. Twenty-four patients had concomitant papillary tumors. The mean number of hyperthermia/MMC treatments per patient was 10.0. Of the 49 evaluable patients 45 had a biopsy and cytology proven complete response. In two patients CIS disappeared, but they had persistent papillary tumors. Follow-up of 45 complete responders showed 22 recurrences after a mean of 27 months (median 22): T2 (4), T1 (4), T1/CIS (1), CIS (5), Ta/CIS (2), Ta (5) and Tx (1). Side effects (bladder complaints) were generally mild and transient.

Conclusions In patients with primary or BCG-failing CIS, treatment with intravesical hyperthermia and MMC appears a safe and effective treatment. The initial complete response rate is 92%, which remains approximately 50% after 2 years.