PHASE II MARKER LESION STUDY OF 6-WEEK INTRAVESICAL GEMCITABINE INSTILLATION IN PATIENTS WITH LOW-RISK SUPERFICIAL BLADDER CANCER

Brausi Maurizio 1, Giussani Laura 2, Altieri Vincenzo 3, Rigatti Patrizio 4, Gontero Paolo 5, Bertelli Lorenzo 6, Rossi Andrea 6, Langer Frank 7, Russo Francesca 6, Bono Aldo2

1 Divisione di Urologia AUSL, Modena, 2 Divisione di Urologia Ospedale di Circolo e Fondazione Macchi, Varese, 3Clinica Urologia Azienda Universitaria Policlinico Federico II , Napoli, 4Clinica Urologia Università Vita e Salute, Ospedale S. Raffaele, Milano, 5Clinica di Urologia Ospedale Maggiore della Carità, Novara, 6Eli Lilly Italia; 7Eli Lilly EuMed

Purpose:
The purpose of this study was to evaluate antitumor activity, measured by response rate, in patients with low-risk superficial bladder cancer treated with neoadjuvant intravescical gemcitabine.
Experimental procedures:
The study had a Simon 2-stage design. Thirteen patients were to be recruited for stage I; in the event of ≥4 responses, a further 30 patients were to be recruited for stage II.
Fourteen Caucasian patients (11 men and 3 women, mean age ±SD 66±10.8 years) with primary, low-risk, solitary bladder tumor ≤2 cm diameter, diagnosed by urethrocystoscopy or bladder sonography, were given 2000 mg gemcitabine intravesically once a week for 6 weeks. Two weeks after completion of therapy, patients were submitted to cystoscopy and transurethral resection or cold biopsies, as appropriate, and the response rate was assessed in terms of endoscopic, histological and urine cytological findings. Adverse events were reported expressing their severity as maximum CTC grades (WHO criteria).
Results:
All 14 patients completed the study. The response rates were as follows:
complete response 2 patients (14.3%); no response 11 patients (78.6%);
progressive disease 1 patient (7.1%) (lesion increased from 2.0 x 2.0 cm to 4.0 x 4.0 cm 54 days after first treatment).
No serious adverse events were reported and no patients discontinued treatment because of adverse events. Five adverse events due to therapy were reported in 4 patients: Grade 2 pollakiuria, Grade 1 nausea and vomiting, Grade 1 urinary tract infection and Grade 1 bladder spasm.
The laboratory test abnormalities were Grade 1 reductions in hemoglobin (n=4; 28.6%), platelet counts (n=3 21.4%) and neutrophil counts (n=1 7.1%)
Conclusions:
As the pre-set threshold response rate was not achieved, the study was not continued to stage II. Neoadjuvant gemcitabine (2000 mg intravesically once a week for 6 weeks) was well tolerated and did not raise any safety concerns in patients with low risk, single superficial bladder cancer.