

**PLEASE NOTE:** *This trial has been registered retrospectively.*

## Trial Description

### Title

**A Phase IIB study of the tetramodal therapy of T2-T4 Nx M0 bladder cancer with hyperthermia combined with chemoradiotherapy following TUR-BT**

### Trial Acronym

[---]\*

### URL of the trial

[---]\*

### Brief Summary in Lay Language

For most patients with muscle-invasive disease, radical cystectomy is considered standard treatment. Radical cystectomy includes removal of the bladder, perivesical tissues, prostate, and seminal vesicles in men and the uterus, tubes, ovaries, anterior vaginal wall, and urethra in women and may or may not be accompanied by pelvic lymph node dissection. Sophisticated techniques for urinary diversion have been developed in recent years, which have led to considerable progress in improving patients' quality of life, however, bladder preserving therapy could improve this further. The primary objective of the study is to evaluate the efficacy of hyperthermia in addition to standard treatment with surgery and chemoradiotherapy. The endpoints to be evaluated include primary tumor response as well as treatment-related side effects, bladder function and quality of life. Over the past 20 years, this combined approach has been investigated in prospective series including over 1000 patients, from single centers and co-operative groups. Five year overall survival rates in the range of 50-60% have been reported, and approximately three quarters of surviving patients maintained their bladder. Pelvic irradiation (Monday-Friday) starts 4-6 weeks after transurethral tumor resection of the bladder tumour. The hyperthermia and chemotherapy will be delivered once a week. The entire duration of treatment is 6-7 weeks.

### Brief Summary in Scientific Language

For most patients with muscle-invasive bladder cancer, radical cystectomy is considered standard treatment. No prospective, randomized trial comparing radical cystectomy versus bladder preserving treatment has been published. However trimodality treatment, including transurethral resection of bladder tumor (TUR-BT), radiation therapy (RT), and chemotherapy is an established alternative to primary cystectomy in high risk superficial (T1) and muscle-invasive bladder cancer. Over the past 20 years, this approach has been investigated in prospective series including over 1000 patients, from single centers and co-operative groups. Five year overall survival rates in the range of 50-60% have been reported, and approximately three quarters of surviving patients maintained their bladder. The

**primary objective of the study is to evaluate the efficacy of tetramodal treatment (including TUR-BT, chemoradiotherapy and hyperthermia) for patients with invasive bladder cancer T2-4 who are medically inoperable or who decline cystectomy. Secondary objectives of the study are to evaluate complete response rates 6 months after completion of therapy, preservation of bladder function at 1 and 2 years, toxicity, QoL (evaluated by EORTC questionnaires), progression free survival at 2 years and overall survival at 2 years.**

## Organizational Data

- DRKS-ID: **DRKS00006287**
- Date of Registration in DRKS: **2014/07/09**
- Date of Registration in Partner Registry or other Primary Registry: [---]\*
- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **2011/076 , Kanon Aargau  
Kantonale Ethikkommission  
Bachstrasse 15  
5001 Aarau**

## Secondary IDs

## Health condition or Problem studied

- ICD10: **C67 - Malignant neoplasm of bladder**

## Interventions/Observational Groups

- Arm 1: **Hyperthermia combined with chemoradiotherapy following TUR-BT. Pelvic irradiation (Monday-Friday) starts 4-6 weeks after transurethral tumor resection of the bladder tumour. The hyperthermia and chemotherapy will be delivered once a week. The entire duration of treatment is 6-7 weeks.**

## Characteristics

- Study Type: **Interventional**
- Study Type Non-Interventional: [---]\*
- Allocation: **Single arm study**
- Blinding: [---]\*
- Who is blinded: [---]\*
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Study Type: **Interventional**

Study Type Non-Interventional: [---]\*

Allocation: **Single arm study**

Blinding: [---]\*

Who is blinded: [---]\*

Control: **Uncontrolled/Single arm**

- Purpose: **Treatment**
- Assignment: **Single (group)**
- Phase: **N/A**
- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

### Primary Outcome

**Complete response 6 weeks after treatment**

### Secondary Outcome

**sustained CR 6 months after completion of therapy, functional bladder preservation at 1 and 2 years, grade III-IV acute/late toxicities according to CTCAE, Quality of Life according to EORTC QLQ - C30 and QLQ - BLM 30, progression free survival at 2 years after registration, overall survival at 2 years after registration,**

### Countries of recruitment

- CH **Switzerland**

### Locations of Recruitment

- Medical Center **Kantonsspital Aarau, Aarau**
- Medical Center **Kantonsspital Graubünden, Chur**

### Recruitment

- Planned/Actual: **Actual**
- (Anticipated or Actual) Date of First Enrollment: **2013/04/11**
- Target Sample Size: **40**
- Monocenter/Multicenter trial: **Multicenter trial**
- National/International: **National**

### Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **18 Years**
- Maximum Age: **no maximum age**

### Additional Inclusion Criteria

**before patient registration/randomization, written informed consent must be given according to ICH/GCP, and national/local regulations. urothelial (transitional cell) cancers of the bladder, T2 -T4, Nx, M0, except T2 R0 tumours, age at least 18 years, KPS at least 70 , medically inoperable patients, patients who decline radical cystectomy, fertile patients must use effective contraception during and for 12 months after study treatment, no pelvic radiotherapy during the last 12 months for non-malignant disease, any pelvic radiotherapy for malignant disease \_ no active intractable or uncontrollable infection no prior or concurrent malignancy (less than 5 years prior to enrolment in study) except non-melanoma skin cancer, cervix carcinoma in situ, prostatic intraepithelial neoplasia), no contraindications to radiotherapy (for example connective tissue disorders such as scleroderma), no pre-existing uncontrolled cardiac disease, NYHA III-IV or persisting cardiac, arrhythmia under therapy, no myocardial infarction within the past 12 months, no cardiac pacemaker, no pelvic metal implants (with exception of non-clustered marker clips), absence of any psychological, familial, sociological or geographical condition potentially hampering compliance with the study protocol and follow-up schedule; those conditions should be discussed with the patient before registration in the trial**

### Exclusion criteria

**pelvic radiotherapy during the last 12 months for non-malignant disease, any pelvic radiotherapy for malignant disease, active intractable or uncontrollable infection, prior or concurrent malignancy (less than 5 years prior to enrolment in study) except non-melanoma skin cancer, cervix carcinoma in situ, prostatic intraepithelial neoplasia), pre-existing uncontrolled cardiac disease, NYHA III-IV or persisting cardiac, arrhythmia under therapy, myocardial infarction within the past 12 months, cardiac pacemaker, pelvic metal implants (with exception of non-clustered marker clips), psychological, familial, sociological or geographical condition potentially hampering compliance with the study protocol and follow-up schedule**

### Addresses

#### ■ Primary Sponsor

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E-mail: [---]\*

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#### **Kantonsspital Graubünden**

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URL: [---]\*

### **Sources of Monetary or Material Support**

- **Public funding institutions financed by tax money/Government funding body (German Research Foundation (DFG), Federal Ministry of Education and Research (BMBF), etc.)**

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### **Status**

- Recruitment Status: **Recruiting ongoing**
- Study Closing (LPLV): [---]\*

### **Trial Publications, Results and other documents**

*Please note:*

*There are additional attributes available concerning this trial. To open an extended view please [click here](#).*