Evaluating the Effect of Pre-TURBT Intravesical Instillation of Mitomycin C (MMC) Mixed With TC-3 Gel in Patients with Non Muscle Invasive Bladder Cancer (NMIBC)

Published: 15-10-2013
Last updated: 23-04-2024

Evaluation of the effect of pre-TURBT intravesical instillations of MMC mixed with TC-3 Hydrogel on bladder lesion(s) of NMIBC patients.a. Comparison of the effect of pre-TURBT instillations with MMC mixed with TC-3 Hydrogel on bladder lesion(s) to...

Ethical review	Not approved
Status	Will not start
Health condition type	Renal and urinary tract neoplasms malignant and unspecified
Study type	Interventional

Summary

ID

NL-OMON38450

Source
ToetsingOnline

Brief title
Pre-TURBT TheraCoat bladder instillation

Condition

- Renal and urinary tract neoplasms malignant and unspecified
- Bladder and bladder neck disorders (excl calculi)

Synonym
Non-Muscle Invasive Bladder Cancer (NMIBC), superficial bladder cancer

Research involving
Human

Sponsors and support

Primary sponsor: Sintesi Research
Source(s) of monetary or material Support: TheraCoat

Intervention

Keyword: MMC, NMIBC, TC-3 Gel, TheraCoat

Outcome measures

Primary outcome

Cystoscopic and pathological effect (evaluated at TUR-BT visit) of pre-TURBT intravesical instillations with 40mg of MMC mixed with 60cc TC-3 Hydrogel on bladder lesion(s) of NMIBC patients.

Demonstration of Pre-TURBT TC-3 gel-MMC instillation safety and adverse event rate.

(pag 22-24 of the protocol)

Secondary outcome

Comparison of the cystoscopic and pathological effect of pre-TURBT instillations with MMC mixed with TC-3 Hydrogel on bladder lesion(s) to that of pre-TURBT MMC in water instillation.

Comparison of one year tumor recurrence rate between both treatment groups.

Demonstration that blood levels of MMC following Pre-TURBT TC-3 gel-MMC

instillation are below the toxic level (400ng/ml) known in the art for IV MMC

administration..

(pag 25 of the protocol)

Study description

Background summary

Non-muscle invasive urothelial bladder cancer (BC) is the second most common malignancy of the urinary tract and has a high burden on our health care infrastructure [Siegel R, 2011]. In 2008 BC was the eighth most common cause for cancer specific mortality in Europe and the European Union age standardized mortality rate is 8 per 100.000 for men versus 3 per 100.000 for women. [Ferlay J, 2010] About 75% of patients with BC present with non-muscle invasive BC. This category encloses BC that is confined to the mucosa (stage Ta, carcinoma in situ (CIS)) or submucosa (stage T1). Due to this high frequency, coupled with the relapsing nature of the disease, BC has a tremendous effect on our health care infrastructure. [Sievert 2009] Unlike muscle invasive BC (>= stage 2).

Low grad NMIBC needs chemotherapy after TURBT. in 95% of the cases MMC is used for this purpose. The results of MMC are suboptimal. Despite multiple instillations patients have a high chance to recur.

Voor de laaggradige NMIBC wordt er in 95% gespoeld met Mitomycine-C (MMC). De effecten hiervan zijn beperkt en ondanks meerdere spoelingen met MMC is de kans op een recidief aannemellijk. MMC wordt in de blaas gebracht middels een catheterisatie en patiënten dienen daarna de urine+MMC een uur op te houden. Daarna wordt alles uitgeplast.

TheraCoat TC-3gel combined with MMC attaches to the bladder wall. The exposure of MMC on NMIBC is therefore much longer than in regular MMC instillations.
(pag 6-19 of the protocol)

Study objective

Evaluation of the effect of pre-TURBT intravesical instillations of MMC mixed with TC-3 Hydrogel on bladder lesion(s) of NMIBC patients.
a. Comparison of the effect of pre-TURBT instillations with MMC mixed with TC-3 Hydrogel on bladder lesion(s) to that of pre-TURBT MMC in water instillation

with a comparable dose.
b. Comparison of the long term effect of pre-TURBT instillations with both treatment groups desccribed in the above paragraph (a)- as expressed by one year recurrence rate
c. Demonstrating the safety of bladder instillations with MMC mixed with TC-3 Hydrogel in NMIBC patients.

(pag 19 of the protocol)

Study design

An open lable randomized controlled active comparator double-arm trial.
(pag 19 of the protocol)

Intervention

The study will be a prospective open lable comparative study. 100 patients with NMIBC who meet the inclusion/exclusion criteria will be recruited for the study following the initial diagnostic cystoscopy.
The subjects will be screened for inclusion into the trial. Only patients who meet the inclusion/ exclusion criteria will be recruited to the study. The patients will be randomized for treatment into one of the groups:
• Group A: 40 mg MMC mixed with 60cc TC-3 hydrogel. (n= 50). Six times weekly.
• Group B: 40 mg MMC mixed with 40cc water. (n= 50). Six times weekly.
Patients will be randomized into one of the two groups: A and B in 1:1 ratio.
The final planned sample size is 100, 50 per each group.

(pag 20 of the protocol)

Study burden and risks

By giving the informed consent, patients will receive 6 times weekly MMC+TC-3gel or MMC+water (regular format; depending on the randomization). after 8-10 weeks a TURBT will follow (normal procedure). After that patients will be followed up for regular oncologic follow-up and for study purposes (combined in one appointment) for one year.

Besides above mentioned, there will be a screening moment of one hour prior to inclusion.

Possible risks that are associated with this study:

• After instillation of the TC-3gel de urine flow can be disrupted by a complete or partial obstruction of the higher urinary tract due to the TC-3 gel. Multiple patients allready received TC-3gel and never has this risk been observerd. However, in case the urine flow gets interrupted the bladder will be

instillated immediately with cold water which resolves the TC-3gel directly.
• Because de TC-3gel will be cold when instillated to the bladder this could give some discomfort due to the temperature
• MMC has some own side effects like: urge, urinary tract infection and peeling of hands and feet.

The risks that are mentioned above are estimated as "low".

Contacts

Public
Sintesi Research

Via Ripamonti 89
Milano 20141
IT
Scientific
Sintesi Research

Via Ripamonti 89
Milano 20141
IT

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Inclusion criteria
1. Patient is 21 years of age or older
2. Patient has signed Informed Consent Form and is willing and able to abide by the protocol

3. Single or multiple tumors (n<=7)
4. Recurrent tumor
5. No prior history of HG and/or T1 and/or Tis
6. At least one Tumor >= 1mm as evaluated visually by the investigator
7. Largest tumor diameter <= 30mm as evaluated visually by the investigator
8. Cystoscopic appearance of papillary Low grade tumor
9. The patient had upper urinary tract evaluation in the previous year excluding urothelial carcinoma, hydronephrosis or Renal Cell Carcinoma or other renal cancers
10. Good performance status (Karnofsky performance status 70% or greater)
11. No active urinary tract infection as confirmed by urine culture
12. If the patient is a female of childbearing potential she is using an acceptable/effective method of contraception
13. If the patient is a female of childbearing potential she has a negative pregnancy test at screening

Exclusion criteria

Exclusion criteria
1. Carcinoma In Situ (CIS)
2. Over 7 lesions
3. Lesion is larger than 30mm in diameter
4. First presentation of bladder tumor
5. "High Grade" urine cytology
6. Tumor located in prostatic urethra
7. Previous systemic chemotherapy or pelvic radiotherapy
8. Pregnant or breastfeeding patient
9. Previous treatment with BCG within the last 24 months
10. The patient did not have at least 3 months cystoscopically confirmed tumor-free interval between the last tumor recurrence and screening
11. Treatment with intravesical chemotherapy within the 3 last months
12. The patient has/had any bladder tumor with histology other than TCC
13. Contraindication to MMC
14. The patient has a history of urinary retention or a PVR>=250cc by bladder scan or ultrasound (PVR test may be repeated up to 3 times)
15. The patient has a bleeding disorder or a screening platelet count <50X109/L
16. The patient has screening hemoglobin <10mg/dL
17. The patient has a history of Acquired Immunodeficiency Syndrome or HIV positive
18. The patient has a condition or a concurrent severe and/or uncontrolled medical or psychiatric disease (e.g. uncontrolled diabetes, compensated congestive heart failure (NYHA III and over), myocardial infarction within 6 months of study, unstable or uncontrolled hypertension or an active uncontrolled infection), which could compromise participation, compliance with scheduled visits and/or completion
19. The patient participated in an investigational protocol within the past 90 days
20. The patient has life expectancy of <3 years
21. The patient had another malignancy or received therapy for any malignancy in the last

five years except for:
• Non-melanoma skin tumors
• stage 0 (in situ) cervical carcinoma
22. The patient has documented vesico-ureteral reflux or an indwelling ureteral stent
23. The patient has the tumor in the bladder diverticulum

Study design

Design

Study phase:	2
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	10
Type:	Anticipated

Medical products/devices used

Generic name:	TheraCoat Instillation TC-3 Gel
Registration:	Yes - CE intended use

Ethics review

Not approved

Date:	15-10-2013
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
ClinicalTrials.gov	NCT01803295
CCMO	NL44406.091.13