

A prospective, randomised study onto the effect on survival of hormonal treatment versus hormonal treatment plus external radiotherapy of the prostate in patients with primary metastatic (bone) prostate cancer.

Timeline

- Start date of study: May 2004
- Start date recruitment: June 2004
- End date recruitment: August 2014
- End date of study: August 2017

Study Objectives

Primary Outcome:

Overall survival i.e. life expectancy.

Secondary Outcome:

Biochemical progression and quality of life (24 months).

In Brief

For patients with prostate cancer, the accepted treatments in the various stages of the illness include both external radiotherapy and hormonal treatment.

The standard treatment for patients with primary prostate cancer with bone metastasis is hormonal according to the guidelines of the European Association of Urology. However, there are indications, that also in the case of a metastasized process combined local (radiotherapy) and systemic (hormone) treatment are of added value to the survival.

The aim of this study is to evaluate this hypothesis in patients with a primary metastasized (bone) prostate cancer.

The HORRAD is a prospective, comparative, open study whereby the patients are randomised into two groups:

- Group 1: hormone treatment by means of an analogous LHRH (Pamorelin) every 3 months and an anti-androgen (Casodex 50 mg 1dd 1) for 4 weeks, to start -2 weeks before the first administration of the analogous LHRH.
- Group 2: hormone treatment by means of an analogous LHRH (Pamorelin) every 3 months and an anti-androgen (Casodex 50 mg 1dd 1) for 4 weeks, to start 1-2 weeks before the first administration of the analogous LHRH, combined with local external radiotherapy (70 Gray) of the prostate.

Please find the full description of the trial on the [NederlandsTrial Register](#)

Study Publication

Liselotte M.S. Boevé, Maarten C.C.M. Hulshof, André N. Vis, Aeilko H. Zwinderman, Jos W.R. Twisk, Wim P.J. Witjes, Karl P.J. Delaere, R. Jeroen A. van Moorselaar, Paul C.M.S. Verhagen, George van Andel: The Effect on Survival of Androgen Deprivation Therapy Combined with Concurrent Radiation Therapy to the Prostate Compared to Androgen Deprivation Therapy Alone in Patients with Primary Bone Metastatic Prostate Cancer in a Prospective Randomized Clinical Trial: Data from the HORRAD Trial.

Published online. European Urology Sept. 2018. <https://doi.org/10.1016/j.eururo.2018.09.008>

List of participating centres, including investigators and recruited number of patients

Site	Local investigator	Recruited patients
OLVG, Amsterdam	G. van Andel	65
Zuyderland MC, Heerlen	K.P.J. Delaere	49
Erasmus MC, Rotterdam	P.C.M.S. Verhagen	45
CWZ Hospital, Nijmegen	H. Vergunst	38
AMC, Amsterdam	M.C.C.M. Hulshof	35
Deventer Hospital, Deventer	G.A.E.M. Buijs	27
Gelderse Vallei Hospital, Ede	A.C. Viddeleer	26
UMCG Groningen	F. van den Bergh	16
MC Alkmaar, Alkmaar	S.D. Bos	16
Streekziekenhuis Koningin Beatrix, Winterswijk	H.M. Bruins	14
Gelre Hospital, Apeldoorn	W. IJzerman	12
St. Antonius Hospital, Nieuwegein	H.H.E. van Melick	11
Slingeland Hospital, Doetinchem	A.D.H. Geboers	9
VieCuri, Venlo	A.H.P. Meier	8
Tergooi Hospital, Hilversum	A.E. Boeken Kruger	7
RKZ Hospital, Beverwijk	N.P.M.J. Bosch	7
Maasstad Hospital, Rotterdam	D.C.D. de Lange	7
Jeroen Bosch Hospital, Den Bosch	H.P. Beerlage	6
Westfriesgasthuis, Hoorn	F.A.G. Bloem	6
Amphia Hospital, Breda	P. van den Broeke	5
Vlietland Hospital, Schiedam	J. Willemsen	4
Nijmegen UMC, Nijmegen	P.F.A. Mulders	4
St. Elisabeth Hospital, Tilburg	P.J.M. Kil	4
VUMC, Amsterdam	R.J.A. van Moorselaar	4
Hospital Amstelveen, Amstelveen	J.W. Noordzij	4
Diakonessenhuis, Utrecht	J.R. Spermon	2
Maastricht Kliniek, Maastricht	F. van Gils	1
Laurentius Hospital, Roermond	M.J.F.M. de Bruin	1

Protocol Committee

Dr. G. van Andel, Urologist

Dr. M.C.C.M. Hulshof, radiotherapist

Dr. P.C.M.S. Verhagen, Urologist

Dr. W.P.J. Witjes, MD-Epidemiologist

Prof. Dr. A.H. Zwinderman, Statistician

Contact

EAU Central Research Office

PO Box 30016, 6803 AA Arnhem, The Netherlands

Email: researchfoundation@uroweb.org, Phone: +31 (0) 26 38 90 677