Targeted
Alpha Therapy

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Prevention, Diagnosis, Treatment
Prostate Cancer Incidence

1.1 million men worldwide

World Health Organization, GLOBOCAN 2012
Prostate Cancer Mortality

307,000 deaths
6.6% total men deaths

WHO, GLOBOCAN 2012
Targeted Therapy

Selective killing tumor cells
Limited side effects (healthy tissue)
Clinical Testings

Complete response

Life expectation considerably increased

Before treatment
Dec. 2014

After 4 treatments
Sept. 2015
Case Study 1 – Argentina

Secure supply of $^{225}\text{Ac}$ (IAEA TCP) - Production

Training

Know-How transfer

Hosting staff at JRC
Case Study 2 – South Africa

Knowledge Transfer in the Hospitals

Education to use of radio isotopes

Building capacity to treat prostate cancer

Establishing Regional Training Centre in Africa
Case Study 2 – South Africa

$^{225}\text{Ac-PSMA617}$: Pretoria experience

April 2017
PSA = 2280 ng/ml

July 2017
PSA = 205 ng/ml

$1 \times 225\text{Ac-PSMA (10 MBq)}$
Looking forward to the future

Follow-up Clinical trials
Specific Regulations
Pharmaceutical Industry Involvement
THANK YOU