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Life-Science Success:
Janssen Special Award

genkyotex
the nox company

Therapeutic targeting of NADPH Oxidase 4 (Nox4) in prostate cancer

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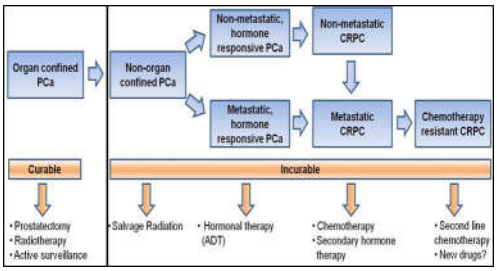
Need for NEW treatment strategies for prostate cancer

Despite improvements in screening programmes & development of new drugs, prostate cancer remains the 2nd leading cause of male cancer-related death in Western societies

⇒ urgent need for new treatment strategies

Current systemic treatment options target androgen-dependent growth of tumour cells

⇒ ultimately therapy resistance and development of recurrent tumours



Alternative therapeutic strategy:
targeting intimately connected neighbouring "stromal" cells that support tumour cell function

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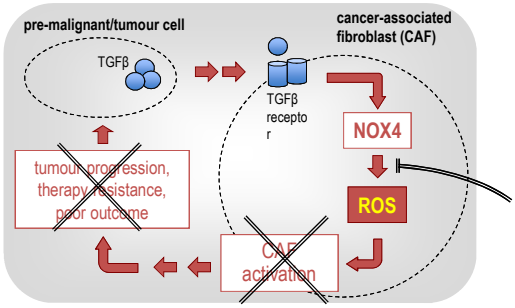
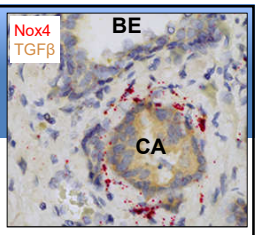
Nox4: central to tumour-driven corruption of the tissue microenvironment





Nox4 gene expression associated with aggressive PCa and poor prognosis

Aim: therapeutic potential of Nox4 inhibition as stromal-targeted strategy?

STATUS/OUTLOOK – ***see poster for details***

- efficacy of Nox4 inhibitor in PCa in final phase of pre-clinical validation (tissue culture, animal models)
- currently in talks with Genkyotex to conduct clinical trials of Nox4 inhibitor for BPH and PCa

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Innovation & translational success

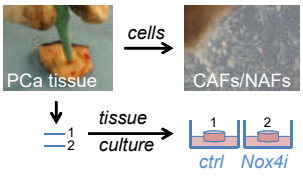
"Model systems are like model students, they do exactly what you want them to do" Charles Weissmann, Biogen

1. **Patient-orientated experimental approach**:

   all experiments employ primary patient-derived tissue

   ⇒ closely mimic patient situation (*relevance*)

   ⇒ broad spectrum of patients (*data reproducibility*)



2. **Stromal targeting as a novel therapeutic strategy**:

   - blocking essential bidirectional communication between stroma and the tumour cells

   ⇒ complement current therapies, which do not specifically target stromal component of disease

   - in contrast to tumour cells, CAFs are genetically stable

   ⇒ development of mutations that confer therapy resistance less likely

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