

## Prostate cancer: prognostic impact of adenosine-generating CD73

Traditionally, most cancers were treated with surgery, radiotherapy or chemotherapy (or a combination of these options). Using the immune system to fight cancer has long been the objective of many researchers, but convincing success in the clinic appeared only recently, mostly with the emergence of so-called “immune checkpoint inhibitors”, a type of therapy which reverses the immune escape mechanisms developed by cancer cells. We identified that production of adenosine by the ecto-enzyme CD73 constitutes a novel immune checkpoint that suppresses anti-tumor immunity. In our recent study, we report the clinical impact of CD73 expression in human prostate cancer. Interestingly, we found that high levels of CD73 in normal adjacent prostate tissue were associated to shorter biochemical recurrence-free survival (BCR). This appears to be caused by decreased immune surveillance by CD8+ T-cells. CD73 expression level was an independent prognostic factor in prostate cancer patients. Reversing the immune suppressive effects of CD73 represents a promising strategy to treat cancer. Anti-CD73 therapy is currently being evaluated in phase 1 clinical trial in solid tumors (identifier: NCT02503774).

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### Publication

[CD73 Expression Is an Independent Prognostic Factor in Prostate Cancer.](#)

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*Clin Cancer Res. 2015 Aug 7*