

Methylation of PITX2 DNA feasible in prostate biopsies

December 13 2016



(HealthDay)—For patients with prostate cancer (PCa), methylation of

the paired-like homeodomain transcription factor 2 (*PITX2*) gene is feasible for individualized risk assessment in prostate core biopsies before surgery, according to a study published online Dec. 8 in the *Journal of Molecular Diagnostics*.

Barbara Uhl, from the University Hospital Bonn in Germany, and colleagues examined whether *PITX2* methylation is feasible for individualized [risk assessment](#) in prostate core biopsies before surgery. *PITX2* was measured using a quantitative, methylation-specific real-time [polymerase chain reaction](#) (PCR) in three cohorts: matched samples of neoplastic and non-neoplastic tissue from 24 PCa patients; a cohort of 300 patients with PCa after radical prostatectomy; and core biopsy specimens from 32 PCa patients and 31 patients with benign prostatic disease.

The researchers found that in patients with PCa, *PITX2* methylation discriminated between neoplastic and non-neoplastic tissue (P *PITX2* methylation correlated with clinicopathologic parameters in the second cohort, and *PITX2* hypermethylation predicted an elevated risk of biochemical recurrence. Overall, 720 of 753 [prostate biopsies](#) were applicable for analysis; *PITX2* methylation was increased in tumor-positive biopsies and correlated with the International Society of Urological Pathology grade groups.

"This study indicates that the *PITX2* methylation assay is feasible in prostate biopsies and might add valuable prognostic information for risk assessment in a presurgical diagnostic setting," the authors write.

More information: [Full Text \(subscription or payment may be required\)](#)

Copyright © 2016 [HealthDay](#). All rights reserved.

Citation: Methylation of PITX2 DNA feasible in prostate biopsies (2016, December 13) retrieved 28 February 2023 from <https://medicalxpress.com/news/2016-12-methylation-pitx2-dna-feasible-prostate.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.