

DECIPHER PROSTATE BIOPSY PUBLICATIONS

Clinical Validation

Berlin, A., Murgic, J., Hosni, A., Pintilie, M., Salcedo, A., Fraser, M., ... Chua, M. L. K. (2018). Genomic classifier for guiding treatment of intermediate-risk prostate cancers to dose-escalated image-guided radiotherapy without hormone therapy. *International Journal of Radiation Oncology, Biology, Physics*. <https://doi.org/10.1016/j.ijrobp.2018.08.030>

Kim, H. L., Ping, L., Huang, H.-C., Deheshi, S., Marti, T., Knudsen, B., ... Bismar, T. A. (2018). Validation of the Decipher Test for predicting adverse pathology in candidates for prostate cancer active surveillance. *Prostate Cancer and Prostatic Diseases*. <https://doi.org/10.1038/s41391-018-0101-6>

Klein, E. A., Haddad, Z., Yousefi, K., Lam, L. L. C., Wang, Q., Choeurng, V., ... Magi-Galluzzi, C. (2016). Decipher Genomic Classifier Measured on Prostate Biopsy Predicts Metastasis Risk. *Urology*, 90, 148–152. <https://doi.org/10.1016/j.urology.2016.01.012>

Lee, H. J., Yousefi, K., Haddad, Z., Abdollah, F., Lam, L. L. C., Shin, H., ... Kane, C. J. (2016). Evaluation of a genomic classifier in radical prostatectomy patients with lymph node metastasis. *Research and Reports in Urology*, 8, 77–84. <https://doi.org/10.2147/RRU.S99997>

Nguyen, P. L., Deheshi, S., Davicioni, E., Buerki, C., Lotan, T. L., Chelliserry, J., ... Pollack, A. (2017). Ability of a Genomic Classifier to Predict Metastasis and Prostate Cancer-specific Mortality after Radiation or Surgery based on Needle Biopsy Specimens. *European Urology*, 72(5), 845–852. <https://doi.org/10.1016/j.eururo.2017.05.009>

Nguyen, P. L., Martin, N. E., Choeurng, V., Palmer-Aronsten, B., Kolisnik, T., Beard, C. J., ... Feng, F. Y. (2017). Utilization of biopsy-based genomic classifier to predict distant metastasis after definitive radiation and short-course ADT for intermediate and high-risk prostate cancer. *Prostate Cancer and Prostatic Diseases*, 20(2), 186–192. <https://doi.org/10.1038/pcan.2016.58>

Spratt, D. E., Zhang, J., Santiago-Jimenez, M., Dess, R. T., Davis, J. W., Den, R. B., ... Nguyen, P. L. (2018). Development and validation of a novel integrated clinical-genomic risk group classification for localized prostate cancer. *Journal of Clinical Oncology*, 36(6), 581–590. <https://doi.org/10.1200/JCO.2017.74.2940>

Xu, M. J., Kornberg, Z., Gadzinski, A. J., Diao, D., Cowan, J. E., Wua, S. Y., ... Feng, F. Y. (2018). Genomic Risk Predicts Molecular Imaging-detected Metastatic Nodal Disease in Prostate Cancer. *European Urology Oncology*. <https://doi.org/doi.org/10.1016/j.euo.2018.11.002>

DECIPHER BIOPSY PUBLICATIONS CONT.

Feasibility

Knudsen, B. S., Kim, H. L., Erho, N., Shin, H., Alshalalfa, M., Lam, L. L. C., ... Simko, J. P. (2016). Application of a Clinical Whole-Transcriptome Assay for Staging and Prognosis of Prostate Cancer Diagnosed in Needle Core Biopsy Specimens. *Journal of Molecular Diagnostics*. <https://doi.org/10.1016/j.jmoldx.2015.12.006>

Radtke, J. P., Takhar, M., Bonekamp, D., Kesch, C., Erho, N., du Plessis, M., ... Hadaschik, B. A. (2017). Transcriptome Wide Analysis of Magnetic Resonance Imaging-targeted Biopsy and Matching Surgical Specimens from High-risk Prostate Cancer Patients Treated with Radical Prostatectomy: The Target Must Be Hit. *European Urology Focus*. <https://doi.org/10.1016/j.euf.2017.01.005>

Stoyanova, R., Pollack, A., Takhar, M., Lynne, C., Parra, N., Lam, L. L. C., ... Ishkanian, A. (2016). Association of multiparametric MRI quantitative imaging features with prostate cancer gene expression in MRI-targeted prostate biopsies. *Oncotarget*. <https://doi.org/10.18632/oncotarget.10523>

DECIPHER PROSTATE RP PUBLICATIONS

Clinical Validation

Cooperberg, M. R. R., Davicioni, E., Crisan, A., Jenkins, R. B. B., Ghadessi, M., & Karnes, R. J. J. (2015). Combined value of validated clinical and genomic risk stratification tools for predicting prostate cancer mortality in a high-risk prostatectomy cohort. *European Urology*. <https://doi.org/10.1016/j.eururo.2014.05.039>

Dalela, D., Santiago-Jiménez, M., Yousefi, K., Karnes, R. J., Ross, A. E., Den, R. B., ... Abdollah, F. (2017). Genomic classifier augments the role of pathological features in identifying optimal candidates for adjuvant radiation therapy in patients with prostate cancer: Development and internal validation of a multivariable prognostic model. *Journal of Clinical Oncology*, 35(18), 1982–1990. <https://doi.org/10.1200/JCO.2016.69.9918>

Den, R. B., Santiago-Jimenez, M., Alter, J., Schliekelman, M., Wagner, J. R., Renzulli, J. F., ... Shah, N. L. (2016). Decipher correlation patterns post prostatectomy: Initial experience from 2 342 prospective patients. *Prostate Cancer and Prostatic Diseases*. <https://doi.org/10.1038/pcan.2016.38>

Den, R. B., Yousefi, K., Trabulsi, E. J., Abdollah, F., Choeurng, V., Feng, F. Y., ... Karnes, R. J. (2015). Genomic classifier identifies men with adverse pathology after radical prostatectomy who benefit from adjuvant radiation therapy. *Journal of Clinical Oncology*, 33(8), 944–951. <https://doi.org/10.1200/JCO.2014.59.0026>

Erho, N., Crisan, A., Vergara, I. A., Mitra, A. P., Ghadessi, M., Buerki, C., ... Jenkins, R. B. (2013). Discovery and Validation of a Prostate Cancer Genomic Classifier that Predicts Early Metastasis Following Radical Prostatectomy. *PLoS ONE*, 8(6). <https://doi.org/10.1371/journal.pone.0066855>

DECIPHER PROSTATE RP PUBLICATIONS CONT.

Clinical Validation Cont.

- Faisal, F. A., Sundi, D., Tosoian, J. J., Choeurng, V., Alshalalfa, M., Ross, A. E., ... Schaeffer, E. M. (2016). Racial Variations in Prostate Cancer Molecular Subtypes and Androgen Receptor Signaling Reflect Anatomic Tumor Location. *European Urology*, 70(1), 14–17. <https://doi.org/10.1016/j.eururo.2015.09.031>
- Freedland, S. J., Choeurng, V., Howard, L., De Hoedt, A., du Plessis, M., Yousefi, K., ... Den, R. B. (2016). Utilization of a Genomic Classifier for Prediction of Metastasis Following Salvage Radiation Therapy after Radical Prostatectomy. *European Urology*, 70(4), 588–596. <https://doi.org/10.1016/j.eururo.2016.01.008>
- Glass, A. G., Leo, M. C., Haddad, Z., Yousefi, K., Du Plessis, M., Chen, C., ... Weinmann, S. (2016). Validation of a Genomic Classifier for Predicting Post-Prostatectomy Recurrence in a Community Based Health Care Setting. *Journal of Urology*, 195(6), 1748–1753. <https://doi.org/10.1016/j.juro.2015.11.044>
- Jeffrey Karnes, R., Bergstralh, E. J., Davicioni, E., Ghadessi, M., Buerki, C., Mitra, A. P., ... Jenkins, R. B. (2013). Validation of a genomic classifier that predicts metastasis following radical prostatectomy in an at risk Patient population. *Journal of Urology*, 190(6), 2047–2053. <https://doi.org/10.1016/j.juro.2013.06.017>
- Karnes, R. J. J., Choeurng, V., Ross, A. E. E., Schaeffer, E. M. M., Klein, E. A. A., Freedland, S. J. J., ... Trock, B. J. J. (2018). Validation of a Genomic Risk Classifier to Predict Prostate Cancer-specific Mortality in Men with Adverse Pathologic Features. *European Urology*. <https://doi.org/10.1016/j.eururo.2017.03.036>
- Klein, E. A. A., Yousefi, K., Haddad, Z., Choeurng, V., Buerki, C., Stephenson, A. J. J., ... Davicioni, E. (2015). A genomic classifier improves prediction of metastatic disease within 5 years after surgery in node-negative high-risk prostate cancer patients managed by radical prostatectomy without adjuvant therapy. *European Urology*. <https://doi.org/10.1016/j.eururo.2014.10.036>
- Klein, E. A., Santiago-Jiménez, M., Yousefi, K., Robbins, B. A., Schaeffer, E. M., Trock, B. J., ... Ross, A. E. (2017). Molecular Analysis of Low Grade Prostate Cancer Using a Genomic Classifier of Metastatic Potential. *Journal of Urology*, 197(1), 122–128. <https://doi.org/10.1016/j.juro.2016.08.091>
- Prensner, J. R., Zhao, S., Erho, N., Schipper, M., Iyer, M. K., Dhanasekaran, S. M., ... Feng, F. Y. (2014). RNA biomarkers associated with metastatic progression in prostate cancer: A multi-institutional high-throughput analysis of SChLAP1. *The Lancet Oncology*, 15(13), 1469–1480. [https://doi.org/10.1016/S1470-2045\(14\)71113-1](https://doi.org/10.1016/S1470-2045(14)71113-1)
- Ross, A. E., Den, R. B., Yousefi, K., Trock, B. J., Tosoian, J., Davicioni, E., ... Schaeffer, E. M. (2016). Efficacy of post-operative radiation in a prostatectomy cohort adjusted for clinical and genomic risk. *Prostate Cancer and Prostatic Diseases*, 19(3), 277–282. <https://doi.org/10.1038/pcan.2016.15>
- Ross, A. E. E., Johnson, M. H. H., Yousefi, K., Davicioni, E., Netto, G. J. J., Marchionni, L., ... Schaeffer, E. M. M. (2016). Tissue-based Genomics Augments Post-prostatectomy Risk Stratification in a Natural History Cohort of Intermediate- and High-Risk Men. *European Urology*. <https://doi.org/10.1016/j.eururo.2015.05.042>

DECIPHER PROSTATE RP PUBLICATIONS CONT.

Clinical Validation Cont.

Ross, A. E., Feng, F. Y., Ghadessi, M., Erho, N., Crisan, A., Buerki, C., ... Schaeffer, E. M. (2014). A genomic classifier predicting metastatic disease progression in men with biochemical recurrence after prostatectomy. *Prostate Cancer and Prostatic Diseases*, 17(1), 64–69. <https://doi.org/10.1038/pcan.2013.49>

Spratt, D. E., Yousefi, K., Deheshi, S., Ross, A. E., Den, R. B., Schaeffer, E. M., ... Feng, F. Y. (2017). Individual patient-level meta-Analysis of the performance of the decipher genomic classifier in high-risk men after prostatectomy to predict development of metastatic disease. *Journal of Clinical Oncology*, 35(18), 1991–1998. <https://doi.org/10.1200/JCO.2016.70.2811>

Spratt, D. E. E., Dai, D. L. Y. L. Y., Den, R. B. B., Troncoso, P., Yousefi, K., Ross, A. E. E., ... Davis, J. W. W. (2018). Performance of a Prostate Cancer Genomic Classifier in Predicting Metastasis in Men with Prostate-specific Antigen Persistence Postprostatectomy. *European Urology*. <https://doi.org/10.1016/j.eururo.2017.11.024>

Tosco, L., Laenen, A., Gevaert, T., Salmon, I., Decaestecker, C., Davicioni, E., ... Joniau, S. (2018). Neoadjuvant degarelix with or without apalutamide followed by radical prostatectomy for intermediate and high-risk prostate cancer: ARNEO, a randomized, double blind, placebo-controlled trial. *BMC Cancer*. <https://doi.org/10.1186/s12885-018-4275-z>

Van den Broeck, T., Moris, L., Gevaert, T., Tosco, L., Smeets, E., Fishbane, N., ... Joniau, S. (2019). Validation of the Decipher Test for Predicting Distant Metastatic Recurrence in Men with High-risk Nonmetastatic Prostate Cancer 10 Years After Surgery. *European Urology Oncology*. <https://doi.org/10.1016/j.euo.2018.12.007>

Van den Broeck, T., Moris, L., Gevaert, T., Tosco, L., Smeets, E., Fishbane, N., ... P, V. (2018). Validation of the Decipher Test for Predicting Distant Metastatic Recurrence in Men with High-risk Nonmetastatic Prostate Cancer 10 Years After Surgery. *European Urology Oncology*. <https://doi.org/https://doi.org/10.1016/j.euo.2018.12.007>

Yamoah, K., Johnson, M. H., Choeurng, V., Faisal, F. A., Yousefi, K., Haddad, Z., ... Schaeffer, E. M. (2015). Novel biomarker signature that may predict aggressive disease in African American men with prostate cancer. *Journal of Clinical Oncology*, 33(25), 2789–2796. <https://doi.org/10.1200/JCO.2014.59.8912>

Zhao, S. G., Evans, J. R., Kothari, V., Sun, G., Larm, A., Mondine, V., ... Feng, F. Y. (2016). The landscape of prognostic outlier genes in high-risk prostate cancer. *Clinical Cancer Research*, 22(7), 1777–1786. <https://doi.org/10.1158/1078-0432.CCR-15-1250>

DECIPHER PROSTATE RP PUBLICATIONS CONT.

Clinical Use

Den, R. B., Santiago-Jimenez, M., Alter, J., Schliekelman, M., Wagner, J. R., Renzulli, J. F., ... Shah, N. L. (2016). Decipher correlation patterns post prostatectomy: Initial experience from 2,342 prospective patients. *Prostate Cancer and Prostatic Diseases*. <https://doi.org/10.1038/pcan.2016.38>

Clinical Utility

Badani, K. K., Thompson, D. J., Brown, G., Holmes, D., Kella, N., Albala, D., ... Hornberger, J. (2015). Effect of a genomic classifier test on clinical practice decisions for patients with high-risk prostate cancer after surgery. *BJU International*. <https://doi.org/10.1111/bju.12789>

Badani, K., Thompson, D. J. S., Buerki, C., Davicioni, E., Garrison, J., Ghadessi, M., ... Hornberger, J. (2013). Impact of a genomic classifier of metastatic risk on postoperative treatment recommendations for prostate cancer patients: a report from the DECIDE study group. *Oncotarget*. <https://doi.org/10.18632/oncotarget.918>

Gore, J. L., du Plessis, M., Santiago-Jiménez, M., Yousefi, K., Thompson, D. J. S., Karsh, L., ... Lin, D. W. (2017). Decipher test impacts decision making among patients considering adjuvant and salvage treatment after radical prostatectomy: Interim results from the Multicenter Prospective PRO-IMPACT study. *Cancer*, 123(15), 2850–2859. <https://doi.org/10.1002/cncr.30665>

Lobo, J. M., Dicker, A. P., Buerki, C., Davicioni, E., Karnes, R. J., Jenkins, R. B., ... Showalter, T. N. (2015). Evaluating the clinical impact of a genomic classifier in prostate cancer using individualized decision analysis. *PLoS ONE*. <https://doi.org/10.1371/journal.pone.0116866>

Lobo, J. M., Trifiletti, D. M., Sturz, V. N., Dicker, A. P., Buerki, C., Davicioni, E., ... Showalter, T. N. (2017). Cost-effectiveness of the Decipher Genomic Classifier to Guide Individualized Decisions for Early Radiation Therapy After Prostatectomy for Prostate Cancer. *Clinical Genitourinary Cancer*. <https://doi.org/10.1016/j.clgc.2016.08.012>

Michalopoulos, S. N., Kella, N., Payne, R., Yohannes, P., Singh, A., Hettinger, C., ... Hornberger, J. (2014). Influence of a genomic classifier on post-operative treatment decisions in high-risk prostate cancer patients: results from the PRO-ACT study. *Current Medical Research and Opinion*. <https://doi.org/10.1185/03007995.2014.919908>

Nguyen, P. L., Shin, H., Yousefi, K., Thompson, D. J., Hornberger, J., Hyatt, A. S., ... Feng, F. Y. (2015). Impact of a Genomic Classifier of Metastatic Risk on Postprostatectomy Treatment Recommendations by Radiation Oncologists and Urologists. *Urology*. <https://doi.org/10.1016/j.urology.2015.04.004>

DECIPHER PROSTATE RP PUBLICATIONS CONT.

Analytical Validation

Abdueva, D., Wing, M., Schaub, B., Triche, T., & Davicioni, E. (2010). Quantitative expression profiling in formalin-fixed paraffin-embedded samples by Affymetrix microarrays. *Journal of Molecular Diagnostics*. <https://doi.org/10.2353/jmoldx.2010.090155>