Management of prostate cancer presents unique challenges because of the disease's variable natural history. Accurate risk stratification at the time of diagnosis in clinically localized disease is crucial in providing optimal counseling about management options. To accurately distinguish pathologically indolent tumors from aggressive disease, risk groups are no longer sufficient. Rather, multivariable prognostic models reflecting the complete information known at time of diagnosis offer improved accuracy and interpretability. After diagnosis, further testing with genomic assays or other biomarkers improves risk classification. These postdiagnostic risk assessment tools should not supplant shared decision making, but rather facilitate risk classification and enable more individualized care.

Copyright © 2017 Elsevier Inc. All rights reserved.

**KEYWORDS:** Genomic assays; Gleason score; Nomograms; Prostate cancer; Risk assessment; Risk models; Treatment

PMID: 29107271 DOI: 10.1016/j.ucl.2017.07.003

[Indexed for MEDLINE]