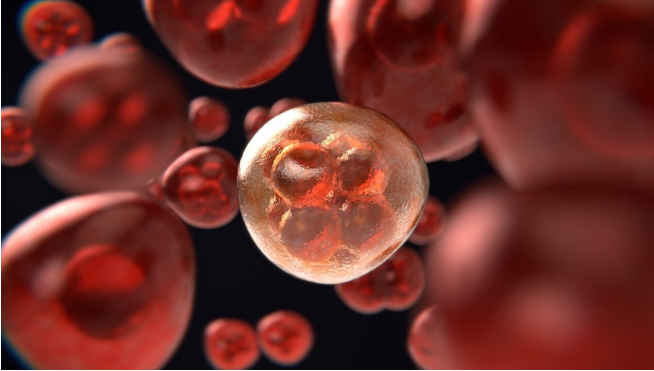


A step toward cancer prevention

17 August 2020, by Bill Snyder



risk individuals for cancer prevention.

More information: Jungyoon Choi et al. Evaluating polygenic risk scores in assessing risk of nine solid and hematologic cancers in European descendants, *International Journal of Cancer* (2020). [DOI: 10.1002/ijc.33176](https://doi.org/10.1002/ijc.33176)

Provided by Vanderbilt University

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Cancer incidence and cancer mortality are rising rapidly throughout the world. While the reasons are complex, efforts are underway to identify high-risk individuals who would benefit most from cancer screening.

Wei Zheng, MD, Ph.D., and colleagues have applied polygenic risk scores (PRS), which summarize the combined effect of multiple genomic variants, to predict risk for common cancers including those of the prostate, breast and colon.

Now they have applied the technique to evaluate nine less common cancers, including melanoma, glioma and chronic lymphoid leukemia, which account for approximately 24% of cancer deaths globally.

Using genome-wide association studies data gathered from 400,807 participants of European descent in the UK Biobank, the researchers determined through PRS that 63% of participants had a greater than twofold elevated risk for at least one of the cancers.

Their findings, published recently in the *International Journal of Cancer*, further demonstrate the potential for PRS to identify high-

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