

BRIAN HELFAND: Precision medicine or personalized medicine is unique at North Shore. This is because we have believed that it is part of the screening process. We want to find out about a man or woman's risk of certain diseases before they even begin. Prostate cancer has become the prototypical of these disease processes, and that really relates to prostate cancer as one of the most heritable or genetic of all known cancers.

As such, it really is the opportune time to intervene and assess a man's risk. We have a large team of researchers as well as translational researchers and geneticists who really have brought our findings from bench to bedside. Many of the tests that we have developed, including our genetic risk score, truly assess a man's risk of developing prostate cancer and aggressive disease.

This is done simply by a blood test that assesses not only a panel of known genes and that assesses for gene mutations, such as those within BRCA1 and 2, which are familiar to most people, but it also assesses the presence of single nucleotide polymorphisms or SNPs, that have been associated with increased prostate cancer risk.

Our genetic risk score, which is available for prostate cancer and other diseases, assesses the presence of these variations or single nucleotide polymorphisms and creates a score that accurately assesses a man's risk. So if we know that a man has increased risk of prostate cancer and/or aggressive disease, those men are being screened earlier and potentially more frequently.

And as such, when we do find prostate cancer in these men, these genetic findings are in part of our decision-making process. And that also reflects that our multidisciplinary team uniquely incorporates genetic counselors as well as medical geneticists who help not only counsel them on the risks of prostate cancer, but the risk of developing other related cancers as well as the risks to their family members.