



Advances in Cancer Screening

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The first thing I wish to tell you is that hope is here, and advances in science are revolutionizing the testing for genetic predisposition (CancerNext - Expanded with +RNA Insight by [Ambry Genetics](#)) and early cancer screening/detection ([Galleri by GRAIL](#)). The next thing I need to tell you is that I have no affiliations with either of these companies to sway my approval towards them, or that would not allow me to choose another option in the future.

Only 5-10% of cancers have an association with an inheritable cancer predisposition gene. The CancerNext – Expanded assay from Ambry Genetics tests for 77 of these genes, and when added to the +RNA Insight (to improve specificity), this is the test I recommend to anyone with a personal history of cancer, at least 2 family members with cancer, of Ashkenazi Jewish ancestry, or if you personally are suspicious (especially if you are not clear on your genetic heritage, ie adopted, etc). The gene profiling will continue to evolve, but clearly this is a one-time test (your genes don't change) that is often covered by insurance and hopefully will provide you a level of reassurance that you have no cancer predisposition genes. If you do have one or more of these genes, genetic counsellors can help you. Furthermore, genetic predisposition knowledge means increasing your awareness of organic lifestyle and provides greater motivation to make the changes you probably knew you needed to make.

Early detection of cancer is what our next test is about! Over 70% of cancer-related mortality has no screening test available, and of the common cancers we do have tests for, the screening tests leave a lot to be desired. Measuring PSA for prostate cancer legendarily leads to overdiagnosis and unnecessary treatment, and the mammogram is nearly useless until age 60 and 98/100 abnormal mammograms are for noncancerous lesions.

The Galleri test by GRAIL is the first commercially available cell-free DNA (also known as circulating tumor allele fraction) test able to pick up on nearly 50 cancer types. Furthermore, by analyzing the abnormal methylation pattern, this test provides your physician a high degree of specificity as to the tumor origin. In screening a general population of those over 50 years old, 1-2% will be found to have cancer. Thus, this test will, most likely, become the primary cancer screening test, of any kind, used in the not-so-distant future. I recommend this simple blood test (cost \$899 through our office, usually about \$949) to anyone who can afford it who has elevated cancer risk (see

above) and/or have equivocal findings on other screening tests, or simply unexplainable symptoms at any age.

I hope you find these advances in cancer screening exciting, and I look forward to seeing what's next in this supremely important field!

Your Journey to Health and Healing,
Gary E Foresman MD