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A Missing Link in Cancer Clinical Trials:
Diverse Population
Kevin Joy, Michigan Health, August 2017

Cancer affects everyone, no matter their background or ethnicity. Yet cancer clinical trials — research studies designed to test the safety and effectiveness of potential new treatments — don’t always represent the full scope of the population.

That’s because there is a shortage of diverse clinical trial participants, a deficit that can affect efforts to treat and cure the disease in all patients, no matter their gender, race or ethnicity.

“When we study certain conditions, certain cancers, and we only use one population, we find out a lot about that population,” says John M. Carethers, M.D., chair of internal medicine at Michigan Medicine, “but it says nothing about other populations.” For clinical trials to be most effective, diversity is key. Certain types of cancer are more prevalent in black or Hispanic Americans; some cancers behave differently in younger versus older people. Increasing the number of people involved means researchers could get a clearer handle on how best to help everyone. Some clinical trials involve comparing two types of treatment or trying a new use for a drug already approved by the Food and Drug Administration for a different cancer. Others involve drugs that are being administered to people for the first time after rigorous laboratory testing. Each method can help researchers determine if a medication works more effectively than the current standard treatments. Still, “We won’t know until we compare it head-to-head,” says Lori Pierce, M.D., a Michigan Medicine radiation oncologist.

To view the full story follow this link: A Missing Link in Cancer Clinical Trials: Diverse Populations
How Statins Could be More Effective in Treatment of Ovarian Cancer

*Keele University, Science Daily, July 2017*

Previous laboratory studies have largely been positive and shown statins to be active against cancer cells but, in contrast, when statins have been tested in real human patients with cancer, they have largely been ineffective. Published this week in *Scientific Reports*, the new research provides an explanation for this paradox and recommends the improved design for a new clinical trial.

Dr Alan Richardson, who led the research at Keele and co-authored the paper, explained, “We believe we have found the answer to the paradox: for statins to be effective as a cancer therapy, the right statin needs to be used, it needs to be delivered at the right dose and interval, and diet needs to be controlled to reduce sources of geranylgeraniol, which can limit the statin’s effect on cancer cells.”

The researchers at Keele University identified that a particular statin called pitavastatin is uniquely suited to target ovarian cancer cells because it combines a suitably long metabolic half-life (allowing it to continually inhibit tumour growth) with a structure which makes it a potent inhibitor of tumour growth in mice. However, it was also found that diet can limit the effectiveness of pitavastatin. Retrospective clinical studies of human patients taking statins to reduce cholesterol have also shown some reduced risk of dying of cancer.

To view the full article follow this link: [How Statins could be more effective in treatment of ovarian cancer](#)

Complexities in Interpreting Genetic Test Results

*Lauren Jackson and Katelyn Roberts, Michigan Cancer Genetics Alliance, August 2017*

As genetic testing becomes more prevalent in our society, the difficulties in interpreting these results become more commonplace. And with the increasing popularity of direct-to-consumer genetic testing, individuals are circumventing health professionals in attempting to discover personal health information. In doing so, these individuals and the physicians they eventually see are faced with interpreting complex test results and are often burdened by confusion and anxiety regarding unclear information. A specific example of potentially confusing genetic test result is the identification of mosaicism.

Germline mosaicism is described as the presence of more than one cell line in an individual. Mosaicism is a rare, but significant, finding in panel gene testing for hereditary cancer syndromes. One such example is a person who is mosaic for a TP53 gene mutation. This gene is associated with Li-Fraumeni syndrome, which is a hereditary cancer syndrome with a lifetime cancer risk of approximately 70% for males and close to 100% for females. Since we have two copies of every gene, we would expect to see a mutation in 50% of the copies of the TP53 gene in the sample. If we see the mutation in less than 50% of the sample, the next difficulty is determining whether it represents germline mosaicism or an acquired hematological disorder. Mutations in the TP53 gene are also seen in individuals with leukemia and other disorders that impact white blood cells, which are the same cells that are being used in testing for hereditary cancer syndromes in a peripheral blood specimen. Therefore, a germline mutation or mosaicism can be incorrectly suspected when an underlying hematological disorder is actually present. A consult with hematology, testing in a second tissue source, such as a skin biopsy, or family studies may be necessary to help differentiate between a germline (inherited) or an acquired mutation.

Laboratories make their own decisions regarding what information they report when mosaicism is identified during analysis. If they do report the information, genetics professionals can aid patients and their physicians in understanding these results and can elucidate next steps.
Understanding the Risks of Supplements and Herbal Remedies for Prostate Cancer

Matthew Solan, Harvard Men’s Health Watch, July 2017

Coping with prostate disease is never easy. You may find that established treatments are not always particularly effective and you may want to try other more natural methods for prostate cancer, such as herbs and supplements. But you should use them with caution, and always check with your doctor before taking any new type of medication.

An estimated one-third of American men with prostate cancer use at least one form of complementary medicine therapy, including herbs and supplements. Some studies have suggested herbs and supplements might help with prostate cancer treatment and support. But the main concern is that some herbs and supplements can interact with each other, or with your prescribed medications. For example, they may enhance the effects of some medications or negate any benefit.

Other herbs, like saw palmetto, which some men take for benign prostatic hyperplasia (enlarged prostate) and melatonin supplements, which some men take in hopes it will slow the progression of prostate cancer, may increase their risk of bleeding when taken with other drugs like aspirin, ibuprofen, naproxen, anticoagulants, or antiplatelet medications.

Another issue is that it’s not 100% clear if herbs and supplements might protect against prostate cancer or slow its growth. There are also concerns they may even increase your risk.

To view the full article follow this link: Understanding the risk of supplements and herbal remedies for prostate cancer

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2017 MCC Meetings

Board Meetings (12 pm – 3 pm):
Wed, Sept 27

Annual Meeting (Lansing):
Wed, Nov 8

For more information: 877-588-6224

Register Online for the 2017 MCC Annual Meeting

MCC Website

Be sure to visit the MCC website to find provider and patient resources