

February 2016

[Biocept at the Forefront of Liquid Biopsy](#)

“Liquid-biopsy technology bloomed about two years ago on the discovery that tumors and cancers can send their genetic waste material down the bloodstream. Today, the liquid-biopsy field, mainly centered in the San Diego area, has risen to \$100 million and could skyrocket to \$12 billion if the expectation becomes reality. The expectation is that liquid biopsies are more accurate than tissue biopsies. “

[How Preventable Is Cancer?](#)

“Most of us worry, at least sometimes, about doing the right things to prevent cancer. Should I cut out bacon? Run faster? Drink less coffee? Or drink more? As we struggle to make sense of the rapidly changing and sometimes conflicting claims about cancer risk factors, we're motivated by a crucial assumption: that cancer can in fact be prevented. But how preventable is it, really?”

[Local Oncologist Publishes Research on Lung Cancer](#)

“Dr. J. Thaddeus Beck, of Highlands Oncology Group (Highlands), Northwest Arkansas' leading cancer research group, recently collaborated with research published in the *The Lancet Oncology*.”

[microRNA Could Be the Key to Mesothelioma Development](#)

“Recently, microRNAs have received lots of attention as a significant scientific and medical discovery. They appear to play a major role in reprogramming a cell to undergo uncontrolled cell division, causing growth of cancerous tumors. Now, researchers believe the microRNA drives the development of lung cancer.”

[Genetic information might help us understand lifestyle risks for disease](#)

“When you read articles claiming that there are a number of genes that predict a disease, usually this information comes from genome-wide association studies (GWAS). These hypothesis-free analyses use large numbers of people, and look for associations between a disease and genetic variations in many hundreds of thousands of locations across the genome.”

[OncoMed Presents Updated Phase 1b Data for Tarextumab in Small Cell Lung Cancer](#)

“OncoMed Pharmaceuticals Inc. a clinical-stage company developing novel anti-cancer stem cell and immuno-oncology therapeutics, announced updated survival data from a Phase 1b clinical trial of tarextumab (anti-Notch2/3, OMP-59R5) for the treatment of small cell lung cancer.”

[Autoantibody Panel Differentiates Lung Cancer From Benign Nodules](#)

“A set of autoantibodies was found to be associated with lung adenocarcinoma when compared to smoker control patients, according to a new study. A separate autoantibodies set also can differentiate lung cancer from benign nodules that return a positive CT scan test, offering a potential way to reduce CT scan false positives.”

[Can Marijuana Cure Cancer? Here's How Cannabinoids Can Help Treat Cancer](#)

“For ages, marijuana has been used as treatment for a flurry of health problems, ranging from pain relief to epilepsy to glaucoma, according to the *New York Times*. However, concrete scientific evidence supporting marijuana's medical efficacy is hard to come by, and this gray area extends into marijuana's association with causing and preventing cancer. “

[Saliva Test for Lung Cancer](#)

“A new "liquid biopsy" that can detect biomarkers of lung cancer in saliva is moving closer to becoming a reality. This noninvasive method is able to detect circulating tumor DNA in saliva and has the potential to dramatically cut waiting time for biopsy results, as well as reduce cost and inconvenience to patients.”

[Targeted treatment for lung cancer](#)

“Lung cancer is the uncontrolled growth of abnormal cells that start off in one or both lungs - usually in the cells that line the air passages. These cells, instead of developing into healthy lung tissue, divide rapidly and form tumours. Smoking is the leading cause of lung cancer, among other factors such as exposure to tobacco smoke and carcinogens such as radon and asbestos. Lung cancer is one of the most common types of cancer in the world.”

[Are we getting close to the 'death' of cancer?](#)

“When President Richard Nixon signed the National Cancer Act of 1971, he started the War on Cancer. Some 45 years and more than \$100 billion later, are we winning? In his book, "The Death of Cancer," Vincent DeVita Jr., former director of the National Cancer Institute, says definitively “yes.”

[Scientists Discover New Clues About How Running May Guard Against Cancer](#)

“If you had only 20 or 25 minutes to make yourself feel a bit less like a sack of wet flour, running is the only way to go. I say this anecdotally, but there's a Library of Babel's worth of "running is good, really good" data to back me up. It's great for mental health, cognitive functioning, aging, and just generally like every single one of your physiological systems. Running is A+ #1 forever.”

[Graphic Cigarette Warnings Seen to Trigger Decision-Making Brain Areas](#)

“Researchers with Georgetown University Medical Center and Truth Initiative recently reported that graphic anti-smoking images on cigarette packs produced brain activity in areas involved in memory, emotion, and decision-making, and may motivate people looking at them to consider the health consequences of cigarettes.”

[Researchers Find Protein That Could Combat Chemo Resistance in Lung Cancer and Mesothelioma](#)

“Pleural mesothelioma, an asbestos-caused cancer that affects the lining of the lungs, is highly aggressive and does not always respond to cancer treatments. Both lung cancer and mesothelioma have proven to be chemo-resistant at times, rendering many of the chemotherapy treatments inadequate. Now, researchers report they have identified a signaling protein in epidermal growth factor receptor positive lung cancer patients that could be targeted to conquer that resistance.”

[UCLA scientists develop method to predict diseases by testing saliva](#)

“UCLA scientists found evidence that a single drop of saliva can diagnose and predict cancer, post-traumatic stress disorder, major depressive disorder and other health problems.”

[Lung Cancer Survival Without Treatment](#)

“Over the years I've had many people ask me what their lung cancer survival would be without treatment. A few have asked because they have chosen not to pursue treatment. But more were interested for another reason. They wanted to know the survival advantage, in terms of time, that treatment was giving them. A 2010 study set out to answer this question, but first we need to talk about why someone would forego treatment”

[Lung Cancer Drug Bavituximab Flops in Phase 3 Study](#)

“Peregrine Pharmaceuticals has announced that it is discontinuing its phase 3 SUNRISE trial of bavituximab in patients with previously treated, locally advanced or metastatic nonsquamous non-small-cell lung cancer (NSCLC). The decision to stop the trial was based on the recommendation of the study's independent data monitoring committee following a prespecified interim analysis.”

[The threat of a simple cough](#)

“A symptom as simple as a cough may be an early sign of lung cancer when it becomes persistent, according to oncologists. Some people would tend to dismiss the cough until it worsens or develops other symptoms such as shortness of breath, anorexia and weight loss. It's often only when patients start coughing up blood that they decide to have themselves checked. By then, the worst possible result is that they have Stage IV lung cancer.”

[Biotech Startup to Produce New Device for Early Detection of Lung Cancer](#)

“Yihuo Bio, a U.S.-based biotechnology startup, has announced plans to build research-and-development centers and factories in China before June and produce a new device for the early detection of lung cancer, China Daily reported.”

[Lung Cancer Question-and-Answer Session With Gregory Masters, MD](#)

“Gregory A. Masters, MD, is an attending physician at the Helen F. Graham Cancer Center and serves as an associate professor at the Thomas Jefferson University Medical School. Dr Masters is a lung cancer specialist, and also has interest in esophageal, gastrointestinal, head and neck cancers, thoracic oncology, and palliative

care. He believes addressing the stigmatization many patients with lung cancer experience is an important component of care.”

[Advanced cancer screening technology may improve individualized cancer treatments](#)

“Despite a growing interest in developing non-invasive methods to identify rare cancer cells or cancer cell DNA in blood, current techniques remain complicated and often prohibitively expensive. UCLA researchers have pioneered a more effective approach to these “liquid biopsies” that has the potential to offer a streamlined and low-cost solution for people with cancer.”

[New Momentum Research Award Targets Lung Cancer in Women](#)

“The American Lung Association and the Bonnie J. Addario Lung Cancer Foundation are collaborating to create a new research award to fund innovative and transformational research with the potential for high clinical impact in diagnostic and treatment options for lung cancer in women. The Momentum Research Award: Defeating Lung Cancer in Women is a two-year, \$250,000 award designed to drive understanding of gender differences in lung cancer incidence, pathophysiology, treatment outcomes and prognoses.”

[Study Finds that in Patients with Previous Lung Cancer, PET Scans Don't Improve Survival](#)

“Researchers from the University of Michigan (U-M) reported that positron emission tomography (PET) scans, often used to detect and monitor cancer recurrence, do not improve survival in cancer patients. The study, “Use of Positron Emission Tomography to Detect Recurrence and Associations With Survival in Patients With Lung and Esophageal Cancers,” was published in the *Journal of the National Cancer Institute*.

[Data Demonstrating Extremely High Sensitivity of Biocept's Blood-Based Liquid Biopsy in Detecting Lung Cancer Mutations Presented at UCSD Moores Cancer Center Translational Oncology Symposium](#)

“Biocept, Inc. a leading molecular diagnostics company commercializing and developing biomarkers used in liquid biopsies to improve the detection and treatment of cancer, announces that findings demonstrating the ability to reliably detect actionable genetic alterations used in the diagnosis, monitoring and treatment of patients with lung cancer using its blood-based biopsy was presented in a poster at the UCSD Moores Cancer Center Industry/Academia Translational Oncology Symposium held this week in San Diego. The poster, titled “High Sensitivity Detection of Rare EGFR Mutations with ctDNA Using Target-Selector Assays,” included data showing a high degree of concordance of Biocept's assay with results from invasive tissue biopsy.”

[Metabolism 'rewiring' can lead to aggressive lung cancer](#)

“Scientists have discovered that lung cancers with extra copies of a cancer causing gene-defect ‘rewire’ their energy supply, helping them to survive and making them more likely to spread.”

[Guidance System For The Cancer Moon Shot](#)

“You can't get to your destination, if you don't know where you are going. The Cancer Moon Shot has taken on the goal of rapidly accelerating progress toward curing cancer. Primary thrusts of this initiative include optimizing big data and combining immunotherapies with more traditional cancer treatments. However, in order to treat cancer, it is necessary to find it. Even better is finding cancer early, when the odds of Moon Shot treatment success are greatest.”

[U.S. Researchers to Study a Lung Cancer Vaccine Developed in Cuba](#)

“On March 21, 2016, Barack Obama will become the first U.S president to visit the island nation of Cuba since Calvin Coolidge did so in 1928. The trip not only serves to signify an official thawing in U.S.-Cuba relations, but will also trigger a meaningful exchange of information for the first time in the 55 years since the United States placed a commercial, economic, and financial embargo on Cuba. One important Cuban medical advancement that U.S. doctors are excited to study is CimaVax, a lung cancer vaccine.”