

AMSTERDAM, Sept. 29, 2013 /PRNewswire/ -- Caris Life Sciences announced today data from two studies presented at the 2013 European Cancer Congress (ECC 2013), which demonstrate the potential of evidence-guided molecular profiling to immediately improve the treatment of patients with hard-to-treat cancers, including cancers of unknown primary (CUP) origins as well as rare tumors and cancers that have been refractory to treatment.

## **Molecular Profiling in Carcinoma of Unknown Primary (CUP)**

Results from the study, 'Biotheranostic profiling of CUP: paradigm shift in the management of CUP', show that molecular profiling may positively influence patient outcomes when the primary site of the patient's tumor is unknown by providing oncologists with critical new information to help them select optimal treatment.<sup>1</sup>

Using a variety of profiling technologies to assess the biomarkers associated with the potential for drug response, the researchers were able to find targets for which there are existing cancer drugs in 77% of the tumors profiled.<sup>1</sup>

Zoran Gatalica, MD, DSc, Medical Director, Caris Life Sciences and an Adjunct Professor of Pathology, Creighton University School of Medicine, reported that his team's research has shown that investigating the biology of a CUP patient's tumor is a potentially effective way of developing an actionable treatment plan for most patients.

"Previous attempts to characterize cancer of unknown primary (CUP) have only managed to provide a statistical likelihood of a potential primary organ site, and for the most part have not addressed the question of which treatments are likely to be effective," said Dr. Gatalica. "We set out to do just that in a large group of over 1,350 CUP patients. This is the largest group to date to have their tumor biomarker profiles characterized."

"We believe that our research, based on the Caris Molecular Intelligence™ service, signals a paradigm shift in the treatment of CUP," added Dr. Gatalica. "With this strategy, physicians can build a treatment plan based on changes in cancer cells which are known to be associated with the potential for benefit from specific drugs. We could be looking at the evolution of a new standard of care for these patients who badly need new options."

As recent advances in translational medicine and molecular profiling have shown, different cancers may share the same molecular pathways, providing the biological basis for using the same targeted therapy in different cancer types, irrespective of primary site.

"A CUP diagnosis is challenging for patient and clinician and a search for the primary site, to define treatment options, is often distressing and fruitless. Using predictive biomarker information directly from the tumor offers doctors powerful insights into the best treatment options for CUP patients," said John Symons, Director of the CUP Foundation. "Where available, this new approach to treating patients diagnosed with CUP is very promising and demonstrates the value of embracing innovative profiling techniques."

## **Molecular Profiling in Rare Cancers and Cancers Refractory to Treatment**

A second study presented at ECC 2013 successfully demonstrated the potential clinical utility of the Caris Molecular Intelligence service in selecting treatment for 30 heavily pre-treated and 10 rare cancer patients. In this Australian cohort, molecular profiling-guided therapy resulted in clinical benefit for three quarters of patients with rare cancers and over half of heavily pre-treated patients, in whom clinical benefit was defined as complete response, partial response or where stable disease was considered clinical benefit.<sup>3</sup>

"While requiring further clinical validation, these data lend support to the use of evidence-guided tumor profiling in identifying therapy options for patients with advanced refractory and rare solid tumors who have limited treatment options and poor prognosis," concluded lead investigator Andrew Dean

, M.D., who is affiliated with St John of God Hospital in Subiaco and Sir Charles Gairdner Hospital in Nedlands, Western Australia

"Doctors treating patients with rarer cancers face a huge challenge in identifying which treatments are most likely to succeed," said Andrew Wilson Webb, CEO, Rarer Cancers Foundation. "Molecular profiling can shed new light on this challenge, significantly improving the chance that patients will benefit from treatment and, just as importantly, avoiding the use of highly toxic therapies which won't help them."

## **About Caris Molecular Intelligence (MI)**

Caris Molecular Intelligence™ is an evidence-based tumor profiling service, which aims to help physicians select the best available therapy for each patient. It examines a broad range of established biomarkers using the best available technologies and with the help of a proprietary database, associates drugs that are more or less likely to benefit each individual patient. Using the MI Profile™ report, physicians are able to more easily translate the results from published clinical studies into individualized treatment plans.

Most frequently, Caris Molecular Intelligence™ is used in metastatic disease and in unresectable primary tumors. It is most suitable for use when the patient has exhausted available treatment options; and in rare or aggressive tumors, where there is limited evidence to guide care.

Caris Molecular Intelligence™ is performed on paraffin-embedded tumor samples usually obtained from a recent biopsy or tumor resection. Archived specimens can also be used, although as cancer changes over time and with therapy, archived samples are not preferred.

The Caris MI Profile™ report provides oncologists with critical information to help them develop an individualized cancer treatment plan for each of their difficult to treat cancer patients. Tumor profiling with Caris MI has been shown to identify potentially clinically actionable targets in common and rare cancer types.<sup>4</sup>

Caris Molecular Intelligence has been available since 2005, and to date, over 50,000 cancer patients have received the Caris Molecular Intelligence service. In the UK, the service is available privately and negotiations with the NHS for more widespread adoption are ongoing.

## About Caris Life Sciences

Caris Life Sciences is a leading biosciences company focused on fulfilling the promise of personalized medicine. Caris' specialty oncology reference laboratory offers more than 70 clinically relevant molecular profiling tests, correlating molecular data generated from a patient's tumor with biomarker/drug associations derived from the world's leading clinical cancer literature. With an industry-leading 50,000-plus patients profiled and counting, this service uses the most advanced and clinically-relevant technologies to provide physicians with information to aid in the selection of personalized cancer treatments. Caris is also developing a series of blood tests based on the company's proprietary Carisome® platform — a blood-based testing technology for diagnosis, prognosis, and theranosis of cancer and other complex diseases. Headquartered in Dallas, Texas, Caris Life Sciences offers services throughout the U.S., Europe, Australia, and other international markets. To learn more, please visit [www.carislifesciences.com](http://www.carislifesciences.com).

## References

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# Evidence-Guided Molecular Profiling Offers New Hope for Oncologists Managing Difficult-to-Treat Cancer

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