

## Ceapro seeks global partners for diabetes edible wafer test

Canadian firm Ceapro is working towards expanding sales of its diabetes test meal product – CeaProve – beyond Canada, and is seeking international partners to market and distribute the product in Europe, the US, Japan, India and China. The firm claims that CeaProve could aid in earlier and more reliable screening of diabetes than currently available methods – potentially allowing those at risk to take early preventative measures. During 2006, the firm will be demonstrating the test throughout Canada to a watchful global audience of potential collaborators.

The first-of-its-kind test involves the patient consuming 10-12 specially-calibrated wafers, each containing a specific amount of protein, fats and complex carbohydrates, followed by a fingerstick blood glucose measurement. CeaProve will be used to screen individuals for IGT – impaired glucose tolerance – a condition that precedes diabetes by 5-10 years, said the firm.

### Reversing prediabetes

"At the very least, early intervention can delay the onset of diabetes," Sarah Lord, Ceapro's clinical services manager told *Clinica*. "But early prediabetes can actually be reversed, via the use of intensive lifestyle counselling, where patients are advised to make changes in diet and adopt exercise regimes that can significantly reduce their risk," she added.

In fact, up to 58% of prediabetes cases can be reversed in this way, according to a study published in the *New England Journal of Medicine* (February 7 2002). The fasting plasma glucose test (FPG), which is commonly used in clinics today, can only diagnose diabetes at a much later stage, when patients usually have gone past "the point of no return".

"There is a test currently used to screen for prediabetes – the oral glucose tolerance test (OGTT) – but it is not performed by doctors routinely, other than in pregnancy," said Dr Lord. Instead of wafers, the patient is given a drink containing 75g of glucose, after which a blood glucose measurement is taken. However, in studies, the OGTT has also been shown to generate data that are "not as reliable" as those of CeaProve, claimed Dr Lord.

In addition, the OGTT causes some "powerful" side effects, such as nausea and vomiting, because it drives blood sugar up very quickly. "Our test is easier on the system, as it provides a more gradual rise in blood sugar, and hence fewer side effects," she said. "This is probably due to the oat starch in our product, which delivers a more reproducible blood sugar response."

The CeaProve test requires participants to undergo an 8-10-hour or overnight fast prior to the test, as with OGTT. A fingerstick instrument is then used to measure the patient's

fasting plasma glucose level. The patient then consumes a meal of 10-12 CeaProve wafers with a large glass of water over 10 minutes. 50 minutes after consumption, a further fingerstick analysis is performed to assess if patients show IGT after the meal, and hence prediabetes.

Initially, the firm will be using the test for screening purposes only – a procedure that does not require regulatory approval from Health Canada, the country's regulatory agency. Its first application will be as part of the company's "know your numbers" marketing campaign, a corporate screening programme whereby Ceapro will be working with companies that wish to offer diabetes screening to employees as part of their "workplace wellness" health packages.

The campaign is described as a "diabetes and heart disease prevention and management programme", which will involve early screening using the CeaProve test, in conjunction with blood pressure, cholesterol and waist circumference. If a participant is found to be at risk, Ceapro will then encourage them to take part in a risk reduction programme and follow-up monitoring, in an attempt to decrease their risk of developing full-blown diabetes, and also heart disease.

Ceapro is also working with the local and central government on initiatives aimed at reducing the incidence of diabetes across the country via early intervention, and the provision of better education about the disease.

### Potential tax break incentive

In addition, the firm hopes to negotiate with the government "some sort of incentive, maybe a tax break", that can be offered to employers if they chose to use the CeaProve programme as part of their workplace wellness schemes.

Following the implementation of "know your numbers", the firm hopes to expand the use of the test into clinics, and also for use in pharmacies, where a qualified healthcare professional will carry out the test for visiting customers.

In the future, the firm hopes that the test will also be approved for use in confirmatory diagnosis and monitoring of prediabetes.

Ceapro, which recently won the Frost & Sullivan 2006 product innovation award, predicts a large market for CeaProve. The worldwide diabetes epidemic is expanding the already-large market base: 95 million screening and diagnosis and 153 monitoring tests for the disease are currently being performed worldwide each year, said the firm. Ceapro hopes that the "know your numbers" campaign, and wider spread adoption of CeaProve in Canada will more clearly demonstrate the test's capabilities to potential international distributors. [claire.m.thomas@informa.com](mailto:claire.m.thomas@informa.com)

## UK hospital and tech transfer firm form cancer deal

UK technology transfer and development firm Cancer Research Technology (CRT) has formed a deal with Hammersmith Hospitals NHS Trust, in London, to develop phased array high-intensity focused ultrasound (HIFU) for treating cancer.

HIFU therapy uses ultrasound energy to heat and destroy tumour tissue whilst leaving surrounding healthy tissue intact. In general, current HIFU applications are limited by treatment times of several hours' duration, which is impractical for routine therapy, the London-based firm claims. The phased array approach could target larger

volumes of tissue than is possible using most existing HIFU technologies. This should result in dramatically reduced treatment times, making HIFU clinically and economically viable, believes the company, which is wholly owned by Cancer Research UK.

Under the new agreement, Cancer Research UK will fund both the development of a prototype phased array HIFU device and proof-of-concept studies to be carried out at Hammersmith Hospital. CRT will lead the commercialisation of the technology in consultation with the hospital.