

WOMEN'S INITIATIVE



2019 FINALIST FOR LATIN AMERICA

LIZA VELARDE

Delee - MEXICO

www.delee.bio

"My cofounders and I all experienced the misfortune of relatives receiving poorly applied cancer therapies. We realised there was almost no way to evaluate the evolution in patients in a continuous way."

In 2018, cancer caused over 80,000 deaths in Mexico. Sadly, it's the same story across the globe: the WHO ranks cancer as the 2nd cause of mortality worldwide, with an estimated 9.5 million fatalities. Cancer specialists concur that up to 90% of these are caused by metastasis, when cells from the primary tumour spread around the body to form secondary cancers in other locations.

One way to detect metastasis is through the presence of Circulating Tumour Cells (CTCs), which travel in the blood stream after being shed from a tumour. Led by 26 year-old Liza Velarde, the team at Delee has developed a CTC detection technology involving a simple blood test. "Our system can isolate the CTCs from other blood cells," Liza explains. "This allows doctors to monitor the progress of the disease and adjust therapy accordingly."

LAB-ON-A-CHIP TECHNOLOGY

Tested in a lab setting, the technology has successfully isolated CTCs of breast, prostate and colorectal cancer. Delee's System for Circulating Tumour Cell Isolation, which uses lab-on-a-chip technology to reduce cost, is competitively priced at 20% lower than other devices. Once this capital equipment has been purchased, each disposable blood test to be analysed by the system costs \$100. "It's an all-in-one technology that can identify, count and deliver viable CTCs, ready for molecular testing," says Liza. "The results give doctors information on the characteristics of the tumour cells and allows for personalised treatment." Moreover, it can be mass manufactured anywhere in the world and takes under 10 minutes to process each sample.

The first tests on prostate cancer patients are currently underway at Hospital Universitario in Monterrey, where Delee is based. While not ready for commercialisation until clinical tests and FDA approval have been finalised, Delee's CTC isolation system has already gleaned pre-sales confirmations totalling \$1.2 million. The company has forged partnerships with notable oncologists and cancer researchers in Mexico and with Stanford University in the US. To boost its development, Delee is looking to start raising Series A funding in spring this year.

"Our goal at Delee is to provide better, affordable technologies for detection and monitoring of recurrent diseases in low-income areas."

PITCHING HIGH

An international business graduate turned entrepreneur, Liza's first dreams were to work in beauty and fashion. But when her co-founders approached her to launch Delee, their motivation struck a chord. "We had all experienced the misfortune of relatives receiving poorly applied cancer therapies," Liza explains. "We realised there was almost no way to evaluate the disease's evolution in patients in a continuous way."

To build Delee, they signed up for an entrepreneurial workshop while Liza was still at university. After attending a lecture by Heineken CEO Jean-François van Boxmeer, Liza approached him for help. "He was on his way up to the Tec de Monterrey Dean Offices on the 14th floor and told me to come with him. By the 9th floor I had finished my first real elevator pitch!" The CEO donated funds that helped Delee build its first prototype.

As always with the medical field, time is of the essence for Delee. CTCs are currently a highly active field of research and others are in the race to develop a solution. Where Delee is confident it is making a difference, is in its low-cost solution to ensure the greatest worldwide impact.

"The biggest challenge about being an entrepreneur? That there's no rule book or guide.

Every day is a new challenge, and no school prepares you for this!

You need leadership skills, creativity and drive."





