

EXECUTIVE SUMMARY



Company name	Bioheat90
Vision	We want to become the European leader in lung cancer early detection
Mission	We aim to reduce mortality caused by lung cancer by promoting and encouraging early detection with a low invasive and efficient diagnostic tool.
Value proposition	Prevention is the key for the well-being. We provide a diagnostic kit capable to detect the presence of lung cancer by using few blood drops: the kit is low invasive, with results available within the hour and does not require any laboratory skills.
Why?	Lung cancer remains a big burden in Portugal by causing the death of 4000 people each year. Lung cancer do not cause symptoms until the disease is very advanced and at that point, treatments are not curative. Early detection would play a big role in patients' survival (with surviving rates up to the 80% in stage I), however due to invasive and time-consuming diagnostic procedures, the field has not been exploited.
How?	Liquid biopsy is a minimally invasive technique that permits the recognitions of cancer cell fragments circulating in body fluid, such as the blood. The tools used to perform liquid biopsy are protein recognizing proteins, also known as antibodies.
The market and the competitors	Liquid biopsy market has been growing quickly and it has been forecasted to grow up to \$4.4 billion in 2025 from the \$720 millions of 2016. This has been very attractive for most of the companies and investors. Different kits for lung cancer early diagnosis have been approved and launched. <i>Owlstone medical</i> , <i>EarlyCTD</i> , <i>Oncoblot</i> are just few examples. However, all of the available kits still require the help of a laboratory expert and thus, cannot give results within the hour. This gives our product a great advantage above the other competitors.
To whom?	Although our final target is a broad screening population, we believe that the hospital and the doctors will be the fit target to launch the kit in the next three years. By selling the kits to hospital, thus with the main focus in collaborating with pneumologist and oncologist, not only we will promote early screening but also, we will help private hospitals and, eventually, the national health system saving \$1.5B spent in lung cancer healthcare costs.
Why us?	We are team of specialist in cancer research, antibody production and translational research. The wide knowhow has been strengthened by an already 2-year solid collaboration, that led us not only validating the already patented antibody, but also to prove its ability into the recognition specific lung cancer protein, highly expressed during the disease development.
Where are we?	500k have been already invested in the study of the therapeutic target. These studies helped us validating the target protein for liquid biopsy, highly expressed in lung cancer patients and confirming the high specificity in the protein recognition of the in-house produced antibody
What are we asking?	We are asking for 800k to be invest in the next three years for prototyping, producing and distributing the kits in 25 Portuguese private hospitals and for sustaining further studies on the patented antibody on specific cancer-staging recognition.