

OPPORTUNITY/0916/SME-II/0004	Accelerating the Commercialisation of Non-Invasive Tests for Liquid Biopsy of Solid Tumour Cancers	Philippos Patsalis	NIPD GENETICS PUBLIC COMPANY LIMITED		997.887,68 €	698.521,38 €	<p>Patient testing and diagnosis is a cornerstone of modern medicine enabling informed choices on disease risk, identification, and treatment. However, such testing intrinsically requires biological material, which can involve highly invasive procedures to obtain. We are on the cusp of a new age in patient testing with the development and provision of non-invasive tests using blood samples for complex disease testing in several major fields in medicine including prenatal diagnosis, transplantation medicine, and cancer. While advances have been demonstrated in research settings, there is the urgent need to translate these methods into commercially available tests, which poses a significant challenge for companies undertaking such efforts.</p> <p>It is estimated that over 14 million people worldwide are diagnosed with cancer each year. In 2012, over 583000 deaths were caused by lung, colorectal, breast, and prostate cancer accounting for over 45% of all cancer-related deaths in Europe. Current diagnostic methods rely on molecular and histopathology results derived from invasive tissue biopsy, which has several inherent drawbacks including being time-intensive, costly, and painful to the patient as well as not always possible to obtain. However, circulating tumour DNA found in plasma may provide a novel non-invasive means for early cancer detection, diagnosis, and monitoring not otherwise possible with conventional testing.</p> <p>We at NIPD Genetics have developed and commercialized a non-invasive prenatal test (NIPT) with the provision of VERACITY using a proprietary method, and following our recent receipt of a Seal of Excellence from a SME Instrument Phase 2 submission, our intent is to use this call as a second opportunity to successfully translate our innovations in NIPT and accelerate our efforts from the lab to the market with the development of a liquid biopsy assay that provides safe and accurate non-invasive testing for lung, colorectal, breast, prostate, and ovarian cancer.</p>
OPPORTUNITY/0916/SME-II/0005	Hyperion Polymer Production Online Software	Symeon Kassianides	Hyperion Systems Engineering LTD		1.141.200,00 €	700.000,00 €	<p>HyPPOS is a decision support tool designed to provide to process industries for the first time, on-line/real-time, operations-specific analysis & classification of processes combined with Batch Tracking information. It is designed to establish a new paradigm in process industries with the application of Big Data capture and Data Analytics that leverages Artificial Intelligence techniques in an industrial setting – a big step towards the “digitisation” of industry and the realization of the EU’s “Industry 4.0” strategy.</p> <p>HyPPOS is a market-driven solution conceived from customer feedback and evolved during the implementation and deployment of customized Batch Tracking and OLPA solutions for specific customers in the Polymer industry. These customers stressed that the industry needs a robust solution that can be developed and deployed rapidly and provide long service with minimal support and maintenance requirements. HyPPOS addresses these market needs.</p> <p>Hence, the initial entry market targeted by HyPPOS is the polymers manufacturing industry. Customers who have deployed our current prototypes indicate savings of up to 40% in production losses, a 0.5% to 1.5% increase in revenue and a 25% reduction in equipment changeover time. All these have a positive impact on production efficiency, waste reduction, profitability and competitiveness. Our feasibility study indicates that the size of the immediately addressable polymers market for the HyPPOS solution, is more than €170 million.</p> <p>Moreover, Hyperion plans to adapt and deploy the HyPPOS framework to new verticals in process industries where Batch Tracking is a critical legislative and compliance requirement, such as pharmaceuticals (in Year 3) and food processing (in Year 5) and also produce a “light” version for SME’s in the polymer industry.</p>
OPPORTUNITY/0916/SME-II/0007	A Blockchain leveraged, AI/Machine Learning, highly Immersive and “Gamified” messaging platform	Geoffrey Magistrate	WHIPPER LIMITED		998.320,00 €	698.824,00 €	<p>Whipper is a gamified global communications platform for both brands and individuals, that leverages deep learning and natural language processing in a proprietary manner, unlocking a truly unique way to communicate with consumers and friends in real time. This innovative platform is based on a unique combination of text, speech and artificial intelligence technologies. The Whipper team constitute executives that have headed some of the world’s most successful digital companies such as Amazon, Netflix, Deutsche Bank, and Viber. Whipper will not only be taken up for chat and business communication but has the potential to be adopted for augmented reality, virtual reality, live events and wearables. The platform can also be applied in interactive television, real time voice to voice translation, body tracking and machine learning. The results of this project will have the potential for further exploitation in the European and global market and consequently to disrupt the digital goods marketplace.</p>