

Contactor Details	Type/ size of legal entity	Place of performance of contract activities	Logo
Main contractor Agilent Technologies Belgium S.A. / N.V. Pegasus Park, De Kleetlaan 5 bus 9, 1831 Diegem, Belgium Contact person: Céline Huynen celine.huynen@agilent.com	Large company	% of contract value allocated to main Supplier: 75,38 % % of activities for the contract performed by the main Supplier in EU Member States or countries associated with Horizon 2020: 44%	Agilent
Subcontractor 1: Helixio Biopôle Clermont-Limagne, 2 Rue Michel Renaud, 63360 Saint-Beauzire, France Contact person: Véronique Vidal vvidal@helixio.com	SME	% of contract value allocated to subcontractor: <1 % % of activities for the contract performed by subcontractor in EU Member States or countries associated with Horizon 2020: 100%	
Subcontractor 2: SeqOne 22 Rue Durand, Montpellier, France Contact person: Alexander Kurze alexander.kurze@seqone.com	SME	% of contract value allocated to subcontractor: 11,81 % % of activities for the contract performed by subcontractor in EU Member States or countries associated with Horizon 2020: 100%	Seq@ne
Subcontractor 3: Qiagen GmbH Innovationsstraße, 40724 Hilden, Germany Contact person: Claire Tillyer Claire.Tillyer@qiagen.com	SME	% of contract value allocated to subcontractor: 11,81 % % of activities for the contract performed by subcontractor in EU Member States or countries associated with Horizon 2020: 100%	QIAGEN



Project abstract

The Agilent prototype solution most important features are:

- Content modularity and scalability: Our solution can be adopted both by laboratories equipped with low-throughput sequencers and by larger ones interested in analysis on a higher number of markers for translational research studies or genetic profiling in the context of clinical studies. The scalability in terms of number of samples and throughput that we have thought of is perfectly suited to the weekly diagnostic routine of the laboratory.
- Speed, efficiency and simplification in library preparation: superior efficiency of the target capture process in just 5 hours of preparation. Lowering the sequencing costs but also reporting times in line to provide the patient with the right treatment indications. The prototype tested in Phase 2 will be enabled on walkaway automated platform Magnis NGS Prep System in Phase 3, simplifying the entire workflow and reducing operator intervention to a minimum, to improve laboratory productivity, to increase reproducibility and reduce the risk of errors.
- Significant reduction of sequencing costs: combining our innovative library preparation and target capture technology with the use of next generation sequencers capable of reaching levels of quality and sensitivity not achievable with the most widespread sequencing technology on the market, making the test usable by all European reimbursement systems and/or by private systems.

We believe our solution represents disruptive innovation in terms of using new products and technologies that have never been tested in a clinical research context, combining them in an optimized workflow for plasma samples. Furthermore, the proposed solution makes possible and easily and quickly adaptation to the discovery of new biomarkers. We demonstrated that the content of the panels can in fact be updated in a very short time without impacting the quality of the final results or the sensitivity of the test. Samples can be processed from DNA qualification to Report generation in 3 days. The final output is a simple report showing the relevant indication to help the clinicians to take decisions for the treatment of the patient.

In Phase 3 special attention will be put on the finetuning of the analytical pipeline to ensure the maximum specificity and sensitivity are achieved on real clinical samples. In addition, TMB and MSI functionality will be added as these represent today one of the unmet needs of testing on plasma samples. To do so we will collaborate with software partners. This represents for us a key milestone and one of the most relevant aspect that will drive the success of the Phase 3.

With OncNGS project, Agilent could leveraged the availability of experts in different European countries from the organization and build an unprecedent team made of motivated people willing to contribute to this project.

Previous EU funding

Is the project based on / a continuation of R&D activities that were previously funded by the EU?: NO



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