Embrace Next Generation Flow: A complete solution from sample preparation to expert-guided automated reporting

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Multicolor flow cytometry is a unique tool that allow us to immunophenotype millions of single cells in a very short amount of time providing a comprehensive picture of the cellular components of a biological tissue and, yet, remained highly unstandardized for a long time. Nevertheless, in the last years, the EuroFlow consortium developed and standardized fast, accurate, and highly sensitive flow cytometric tests aiming the diagnosis, prognostic classification and evaluation of treatment effectiveness during follow-up of hematological malignancies.

Despite this knowledge was made freely available for everyone to adopt, having to manage the purchase, stock and QC of multiple reagents from different companies may be a barrier for some laboratories to effectively implement the methodology proposed. Cytognos, being a company that shares the same values of EuroFlow, embraced the task of providing a ready to use and easy to implement solutions based on that knowledge.

Here we will present our Next Generation Flow solution to the assessment of minimal residual disease in multiple myeloma, covering all the aspects from sample preparation, to the sample acquisition and ending in the expert-guided automated reporting of results. To achieve this, our solution provides access to ready to use reagents created under the EuroFlow guidelines and validation process, a new flow cytometer designed for long time performance stability and rare event detection and innovative automated analysis tools implemented in Infinicyt software. All of this implemented with the full technical support of our team of application specialists.