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RESPONSE TO LETTER

Response to: "Challenges in DPYD Test Implementation in Patients Treated with Fluoropyirimidines, is DPYD Genotype Arriving on Time?" [Response to Letter]

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Dear editor

I read the comments of Marta López López–Cepero et al on our publication regarding the pharmacogenetic diagnostic service in oncology.[1] The issue they raised is indeed important, and we share their concern, ie that the possibility that DPYD genotyping is sometimes not performed in time may compromise the efficacy and safety of treatment. We think that to minimize this risk it is important that there is close collaboration and communication between clinicians and the laboratory; it is necessary that the test request is planned in advance, in order to have the result before starting therapy, also respecting the *turnaround time* (TAT) of the test, or should an emergency arise, that the clinician alerts the laboratory immediately, such that the test within the required time. In our clinical practice, the TAT of DPYD genotyping is 10 working days, unless further investigations are necessary or unless technical problems occur, and in most cases the result is provided before this deadline, especially in emergency cases. In particular, the average number of days to obtain genotyping results was 4±3 (mean ± standard deviation) for 2017, 2018 and 2019; 5±3 for 2020 and 6±3 for 2021. This is made possible by the methodology of the test consisting of the detection of known variants using Real-Time PCR methods, therefore a rapid and easy-to-use assay. As stated in our publication, choosing the most appropriate technology is essential not only for accurate genotyping but also to optimise time in small to medium-sized laboratories.

We absolutely agree with the conclusion of the authors, that

> there is a need for increased awareness among oncologists regarding the significance of the test, as much as, develop resources available to support clinicians to implement this testing in their practice;

In fact, as highlighted in the Europe-wide survey conducted by "The Working Group on the Implementation of DPD-deficiency Testing in Europe",[2] the major hurdles to the implementation of DPD deficiency testing include lack of reimbursement, poor knowledge and consideration by oncologists (medical oncologists do not always understand how to interpret and apply pharmacogenetic results in clinical practice) and absence of clear guidelines. So, also in this perspective, the concept of the importance of collaboration between clinicians and the laboratory, underlined before, returns.

Disclosure

The authors declare no conflict of interest in this communication.

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