Accepted Manuscript

Title: Practical fluorimetric assay for the detection of anticancer drug SN-38 in human plasma

Authors: Stefano Tartaggia, Maria Domenica Alvau, Anna Meneghello, Bruno Casetta, Federico Polo, Giuseppe Toffoli

PII: S0731-7085(18)30541-7

DOI: https://doi.org/10.1016/j.jpba.2018.06.032

Reference: PBA 12036

To appear in: Journal of Pharmaceutical and Biomedical Analysis

Received date: 4-3-2018 Revised date: 18-6-2018 Accepted date: 19-6-2018

Please cite this article as: Tartaggia S, Alvau MD, Meneghello A, Casetta B, Polo F, Toffoli G, Practical fluorimetric assay for the detection of anticancer drug SN-38 in human plasma, *Journal of Pharmaceutical and Biomedical Analysis* (2018), https://doi.org/10.1016/j.jpba.2018.06.032

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



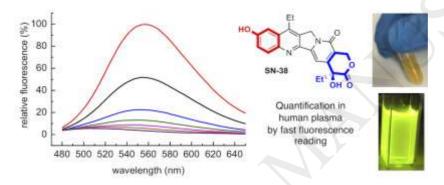
ACCEPTED MANUSCRIPT

Practical Fluorimetric Assay for the Detection of Anticancer Drug SN-38 in Human Plasma

Stefano Tartaggia,^{a,*} Maria Domenica Alvau,^a Anna Meneghello,^a Bruno Casetta,^a Federico Polo,^{a,*} Giuseppe Toffoli^a

^aExperimental and Clinical Pharmacology Unit, National Cancer Institute – Centro di Riferimento Oncologico, Via Franco Gallini 2, I-33081, Aviano, Italy); Phone: +39 0434 659816; E-mail: stefano.tartaggia@cro.it; federico.polo@cro.it.

GRAPHICAL ABSTRACT



Highlights

- SN-38 is the active metabolite of anticancer drug irinotecan and displays a strong fluorescence emission.
- A fluorimetric assay for the quantification of SN-38 in denatured human plasma was developed.
- A linear range between 10 and 500 ng mL⁻¹ with intra- and inter-day precision and accuracy within the 15% tolerance range were obtained.
- The comparison of the fluorescent assay for SN-38 with HPLC-MS showed a good agreement between the two techniques.

Download English Version:

https://daneshyari.com/en/article/7625745

Download Persian Version:

https://daneshyari.com/article/7625745

<u>Daneshyari.com</u>