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Published in: Biodiscovery

DOI 10.3897/biodiscovery.20.e14563

Publication date: 2017

**Document Version** Publisher's PDF, also known as Version of record

Link to publication in Discovery Research Portal

Citation for published version (APA): Kuzmanova, E., Spanou, M., Leckié, E., & Zhelev, N. (2017). Validation of a novel HPLC-based serum thymidine kinase assay for breast cancer detection. Biodiscovery, 20, [e14563]. https://doi.org/10.3897/biodiscovery.20.e14563

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**Conference Abstract** 

# Validation of a novel HPLC-based serum thymidine

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# kinase assay for breast cancer detection

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Academic editor: Daniella Zheleva

Received: 16 Jun 2017 | Accepted: 28 Jun 2017 | Published: 05 Jul 2017

Citation: Kuzmanova E, Spanou M, Leckie E, Zhelev N (2017) Validation of a novel HPLC-based serum thymidine kinase assay for breast cancer detection. BioDiscovery 20: e14563. https://doi.org/10.3897/biodiscovery.20.e14563

# Abstract

Thymidine kinase (TK) has been validated as a serum-derived, tumour-associated marker for a number of malignancies and estimation of TK activity in serum has proved useful for clinical diagnosis and monitoring of therapy. However, the use of this biomarker in the clinical practice is constrained by the lack of an automatable easy-to-perform assay. We have developed and validated a novel HPLC-based assay for measuring TK activity in biological samples. This assay is cheaper, easy to perform and does not depend on the use of expensive antibodies or isotopes. In addition, it has comparable sensitivity with the radioenzymatic assay used in the clinical practice. The assay has been evaluated with samples from breast cancer patients.

# Keywords

Thymidine kinase, tumour-associated marker, breast cancer

# Presenting author

Elena Kuzmanova

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