

Accepted Manuscript

Preliminary Assessment of the Diagnostic Performances of a New Rapid Diagnostic Test for the Serodiagnosis of Human Cystic Echinococcosis

Ambra Vola, Francesca Tamarozzi, Rahmah Noordin, Muhammad Hafiznur Yunus, Sam Khanbabaie, Annalisa De Silvestri, Enrico Brunetti, Mara Mariconti



PII: S0732-8893(18)30120-2
DOI: doi:[10.1016/j.diagmicrobio.2018.04.007](https://doi.org/10.1016/j.diagmicrobio.2018.04.007)
Reference: DMB 14579

To appear in:

Received date: 23 November 2017
Revised date: 29 March 2018
Accepted date: 10 April 2018

Please cite this article as: Ambra Vola, Francesca Tamarozzi, Rahmah Noordin, Muhammad Hafiznur Yunus, Sam Khanbabaie, Annalisa De Silvestri, Enrico Brunetti, Mara Mariconti, Preliminary Assessment of the Diagnostic Performances of a New Rapid Diagnostic Test for the Serodiagnosis of Human Cystic Echinococcosis. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Dmb(2018), doi:[10.1016/j.diagmicrobio.2018.04.007](https://doi.org/10.1016/j.diagmicrobio.2018.04.007)

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.

TITLE: Preliminary Assessment of the Diagnostic Performances of a New Rapid Diagnostic Test for the Serodiagnosis of Human Cystic Echinococcosis

Running title: Assessment of a new RDT for human CE

Ambra Vola¹, Francesca Tamarozzi², Rahmah Noordin³, Muhammad Hafiznur Yunus³, Sam Khanbabaie³, Annalisa De Silvestri⁴, Enrico Brunetti^{1,5}, Mara Mariconti^{5*}

¹ Division of Infectious Tropical Diseases, IRCCS San Matteo Hospital Foundation, 27100 Pavia, Italy

² Center for Tropical Diseases, Sacro Cuore-Don Calabria Hospital, 37024 Negrar, Verona, Italy

³ Institute for Research in Molecular Medicine (INFORMM), Universiti Sains Malaysia, 11800 Penang, Malaysia

⁴ SC Biometria e Statistica, Fondazione, IRCCS San Matteo Hospital Foundation, 27100 Pavia, Italy.

⁵ Department of Clinical, Surgical, Diagnostic and Paediatric Science, University of Pavia, 27100 Pavia, Italy

* Mara Mariconti, Department of Clinical, Surgical, Diagnostic and Pediatric Science, University of Pavia, Viale Brambilla 74, 27100 Pavia, Italy

Email: maramaricont@libero.it

Phone: 0382502799

ABSTRACT (49 words)

Rapid Diagnostic Tests for cystic echinococcosis (CE) are convenient to support ultrasound diagnosis in uncertain cases, especially in resource-limited settings. We found comparable diagnostic performances of the experimental Hyd Rapid Test and the commercial VIRapid HYDATIDOSIS Test, used in our diagnostic laboratory, using samples from well-characterized hepatic CE cases.

KEYWORDS: Cystic echinococcosis, rapid diagnostic test, immunochromatography, serology, *Echinococcus granulosus*, diagnosis

TEXT (999 words)

Cystic echinococcosis (CE) is a neglected zoonosis prioritized by the World Health Organization for control efforts¹ caused by the tapeworm *Echinococcus granulosus* species complex, transmitted between canids and livestock in a predator-prey cycle. CE is distributed worldwide, especially in rural livestock-raising areas, with an estimated 1.2 million people infected². Humans are accidental hosts where the cystic parasite larva develops mainly in the liver. The diagnosis of CE is based on imaging, however the broad differential diagnosis of echinococcal cysts on imaging may pose considerable clinical management problems³. Serology should have a confirmatory role in doubtful cases, but tests performances are variable and unsatisfactory, especially for the diagnosis of early CE1 and inactive CE4- CE5 stages.

The recent introduction of Rapid Diagnostic Tests (RDTs) for the serodiagnosis of CE, recently reviewed by Tamarozzi et al is particularly advantageous to rapidly complement inconclusive imaging, both in endemic

Download English Version:

<https://daneshyari.com/en/article/8737167>

Download Persian Version:

<https://daneshyari.com/article/8737167>

[Daneshyari.com](https://daneshyari.com)