

Cystic Echinococcosis (CE) is a neglected zoonotic disease caused by the larval stage of the tapeworm *Echinococcus granulosus sensu lato* (s.l.). The purpose of this work was to evaluate a new kit in comparison with others 2 commercial diagnostic kits. Evaluations were performed according to OIE and Italian-Accreditation-Body (ACCREDIA) procedure (Regulation UNI-CEI-EN-ISO/IEC 17025).



CHORUS Echinococcus IgG recently developed

ELISA Echinococcus IgG routine analysis

ECHINOCOCCUS WB IgG confirmatory test

A total of 26 sera belonging to 14 human patients affected by Cystic Echinococcosis (CE), and 12 free healthy donors were tested using the three kits in duplicate analyses. Agreement between results was calculated by Cohen coefficient (K) according to Byrt table. Afterward, for sensitivity estimation, 2 CE positive sera were two fold serially diluted, total protein quantified by Pierce™ BCA Protein Assay Kit (Thermo Scientific™), finally, each dilution point was analyzed by the three kits.

OPERATORS PERFORMANCE				REPEATABILITY ACCURACY AND PRECISION				
CE clinically patients		OPERATORE 1 e 2		OPERATORE 1 e 2		OPERATORE 1 e 2		TOT
		DIESE - CHORUS Echinococcus IgG		DRG - ELISA Echinococcus IgG		LDBIO - WB IgG ECHINOCOCCUS		
Neg 12	Pos 14	Neg 17	Pos 9	Neg 16	Pos 10	Neg 16	Pos 10	26
K COHEN: 1.00		K COHEN: 1.00		K COHEN: 1.00		K COHEN: 1.00		

Discordance of results could be explained by stadium and localization of the cysts.

METHOD PERFORMANCE		REPEATABILITY ACCURACY AND PRECISION: INTRA-ASSAY			
DIESE - CHORUS Echinococcus IgG	K COHEN 1.00	DRG - ELISA Echinococcus IgG	K COHEN 1.00	LDBIO - WB IgG ECHINOCOCCUS	K COHEN 0.791

REPEATABILITY ACCURACY AND PRECISION: INTER-ASSAY				
CE clinically patients	DIESE - CHORUS Echinococcus IgG	DRG - ELISA Echinococcus IgG	LDBIO - WB IgG ECHINOCOCCUS	K COHEN Fair: 0.427-0.568
/	DIESE - CHORUS Echinococcus IgG	DRG - ELISA Echinococcus IgG	LDBIO - WB IgG ECHINOCOCCUS	K COHEN Excellent: 1.00

ANALITICAL SENSITIVITY		
DIESE - CHORUS Echinococcus IgG	DRG - ELISA Echinococcus IgG	LDBIO - WB IgG ECHINOCOCCUS
++	++	+++
neg sample detected at the following dilution		
dil 1:1000 (175µg proteine)	dil 1:1000 (175µg proteine)	dil 1:2000 (130µg proteine)