TITLE PAGE

Title: Evaluation of the diagnostic accuracy of laboratory-based screening for hepatitis C in dried blood spot samples: A systematic review and meta-analysis

Running head: HCV screening in DBS samples

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Salvador Resino: conceptualization, formal analysis, writing – original draft, supervision

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Supplemental File 12. Meta-regression of potential sources of
heterogeneity for HCV-RNA detection tests.

Meta-Regression(Study performed after 2010)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	7,648	0,4887	0,0000	----	----
S	-0,321	0,2923	0,3008	----	----
CP_2010	-0,772	1,2115	0,5399	0,46	(0,03;7,16)

Tau-squared estimate = 0,1218 (Convergence is achieved after 7 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies = 12
Filter OFF
Add 1/2 to all cells of the studies with zero

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Meta-Regression(HIV coinfection)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	7,903	0,5027	0,0000	----	----
S	-0,330	0,2818	0,2714	----	----
HIV	-1,490	0,9604	0,1553	0,23	(0,03;1,98)

Tau-squared estimate = 0,0000 (Convergence is achieved after 1 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies = 12
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Meta-Regression (Study performed in LMICs)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	7,701	0,5266	0,0000	----	----
S	-0,237	0,3241	0,4830	----	----
LMICs	-0,771	1,1578	0,5222	0,46	(0,03;6,35)

Tau-squared estimate = 0,0000 (Convergence is achieved after 1 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies = 12
Filter OFF
Add 1/2 to all cells of the studies with zero

Meta-Regression(Study Size weights)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	8,275	0,6304	0,0000	----	----
S	-0,261	0,2859	0,3844	----	----
PCR	-1,456	0,8653	0,1268	0,23	(0,03;1,65)

Tau-squared estimate = 0,0000 (Convergence is achieved after 1 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies = 12
Filter OFF

Add 1/2 to all cells of the studies with zero

Meta-Regression(HCV-RNA prevalence)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	7,413	2,7803	0,0258	----	----
S	-0,343	0,3252	0,3197	----	----
Prevalence	0,002	0,0430	0,9709	1,00	(0,91;1,10)

Tau-squared estimate = 0,0900 (Convergence is achieved after 8 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies =   12
Filter OFF
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Meta-Regression(Capillary or venous DBS samples)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	6,320	0,8672	0,0000	----	----
S	-0,467	0,2924	0,1448	----	----
Capilar_DBS	1,569	1,0021	0,1519	4,80	(0,50;46,34)

Tau-squared estimate = 0,0000 (Convergence is achieved after 1 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies =   12
Filter OFF
Add 1/2 to all cells of the studies with zero

Meta-Regression(Multivariate analysis)

Var	Coeff.	Std. Err.	p - value	RDOR	[95%CI]
Cte.	3,229	5,3307	0,5774	----	----
S	-0,348	0,4530	0,4856	----	----
CP_2010	-0,258	1,8639	0,8964	0,77	(0,00;136,52)
HIV	-3,153	2,3130	0,2445	0,04	(0,00;26,28)
LMICs	-2,632	2,5837	0,3659	0,07	(0,00;93,80)
PCR	0,947	2,5010	0,7242	2,58	(0,00;2672,47)
Prevalence	0,065	0,0739	0,4294	1,07	(0,87;1,31)
Capilar_DBS	1,612	1,6478	0,3834	5,01	(0,05;486,07)

Tau-squared estimate = 0,0000 (Convergence is achieved after 1 iterations)
Restricted Maximum Likelihood estimation (REML)

No. studies =   12
Filter OFF
Add 1/2 to all cells of the studies with zero

Abbreviations:
After_2010, study performed after 2010
Capillary DBS, capillary or venous DBS samples
CI, confidence interval
Coeff., coefficient
Cte., constant term in the equation;
HCV test, type of HCV detection test (PCR or TMA)
HIV, HIV coinfection
LMICs, study performed in LMICs
NA (---), not available

Prevalence, HCV-RNA prevalence
RDOR, relative diagnostic odds ratio
S, indicator of threshold.
Std. Err., standard error
Var., variables