

eTable 7: Results of meta-analyses involving RT-QulC and subgroup analyses based on QUADAS-2 quality and clinical criteria

Abbreviations of domains and criteria can be found in eTable 3.

FPR: false positive rate

NaN: not a number (correlation cannot be calculated)

SD: standard deviation

TPR: true positive rate

7 studies that investigated RT-QulC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
All studies											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
Aβ42 investigated											
Definite, probable, and possible sCJD cases	1								x		
Definite and probable sCJD cases	1								x		
Definite sCJD cases	1								x		
Aβ42 not investigated											
Definite, probable, and possible sCJD cases	6	0.42	0.15	1.00	x	x	x	x		x	x
Definite and probable sCJD cases	6	0.42	0.15	1.00	x	x	x	x		x	x
Definite sCJD cases	5	0.38	0.92	1.00	x	x	x	x		x	
Case-control studies											
Definite, probable, and possible sCJD cases	1				x						
Definite and probable sCJD cases	1				x						
Definite sCJD cases	1				x						
Cohort studies											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
D01 excl. high risk of bias (≥3 / 3 criteria)											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	7 studies that investigated RT-QulC (x: included in respective analysis)						
					Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
D01 excl. high risk of bias (≥2 / 3 criteria)											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
D01 excl. high risk of bias (≥1 / 3 criteria)											
Definite, probable, and possible sCJD cases	5	0.70	0.06	-1.00			x	x	x	x	x
Definite and probable sCJD cases	5	0.68	0.06	-1.00			x	x	x	x	x
Definite sCJD cases	4	0.59	0.22	1.00			x	x	x	x	
D02 excl. high risk of bias (≥1 / 2 criteria)											
Definite, probable, and possible sCJD cases	4	0.35	0.03	1.00		x	x			x	x
Definite and probable sCJD cases	4	0.35	0.03	1.00		x	x			x	x
Definite sCJD cases	3	0	0.00	NaN		x	x			x	
D03 excl. high risk of bias (≥1 / 2 criteria)											
Definite, probable, and possible sCJD cases	6	0.71	0.40	1.00	x	x	x	x	x	x	
Definite and probable sCJD cases	6	0.70	0.41	1.00	x	x	x	x	x	x	
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
D04 excl. high risk of bias (≥3 / 4 criteria)											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
D04 excl. high risk of bias (≥2 / 4 criteria)											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
D04 excl. high risk of bias (≥1 / 4 criteria)											
Definite, probable, and possible sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite and probable sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite sCJD cases	5	0.38	0.92	1.00	x	x	x	x		x	
D05 excl. poor applicability (≥1 / 3 criteria)											

7 studies that investigated RT-QuIC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
Definite, probable, and possible sCJD cases	6	0.70	0.02	-1.00	x		x	x	x	x	x
Definite and probable sCJD cases	6	0.68	0.02	-1.00	x		x	x	x	x	x
Definite sCJD cases	5	0.63	0.39	1.00	x		x	x	x	x	
Disease duration not reported											
Definite, probable, and possible sCJD cases	2	0.55	0.08	-1.00		x					x
Definite and probable sCJD cases	2	0.55	0.08	-1.00		x					x
Definite sCJD cases	1					x					
Disease duration reported											
Definite, probable, and possible sCJD cases	5	0.74	0.43	1.00	x		x	x	x	x	
Definite and probable sCJD cases	5	0.72	0.44	1.00	x		x	x	x	x	
Definite sCJD cases	5	0.63	0.39	1.00	x		x	x	x	x	
K01 excl. high risk of bias											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
K01 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
K02 excl. high risk of bias											
Definite, probable, and possible sCJD cases	5	0.70	0.06	-1.00			x	x	x	x	x
Definite and probable sCJD cases	5	0.68	0.06	-1.00			x	x	x	x	x
Definite sCJD cases	4	0.59	0.22	1.00			x	x	x	x	
K02 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	5	0.70	0.06	-1.00			x	x	x	x	x
Definite and probable sCJD cases	5	0.68	0.06	-1.00			x	x	x	x	x
Definite sCJD cases	4	0.59	0.22	1.00			x	x	x	x	
K03 excl. high risk of bias											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x

7 studies that investigated RT-QuIC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
K03 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	5	0.68	0.12	-1.00		x		x	x	x	x
Definite and probable sCJD cases	5	0.66	0.12	-1.00		x		x	x	x	x
Definite sCJD cases	4	0.51	0.11	-1.00		x		x	x	x	
K04 excl. high risk of bias											
Definite, probable, and possible sCJD cases	5	0.37	0.06	1.00	x	x	x			x	x
Definite and probable sCJD cases	5	0.37	0.06	1.00	x	x	x			x	x
Definite sCJD cases	4	0	0.00	NaN	x	x	x			x	
K04 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	1									x	
Definite and probable sCJD cases	1									x	
Definite sCJD cases	1									x	
K05 excl. high risk of bias											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
K05 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	5	0.77	0.10	-1.00		x	x	x	x		x
Definite and probable sCJD cases	5	0.76	0.10	-1.00		x	x	x	x		x
Definite sCJD cases	4	0.62	1.41	1.00		x	x	x	x		
K07 excl. high risk of bias											
Definite, probable, and possible sCJD cases	6	0.71	0.40	1.00	x	x	x	x	x	x	
Definite and probable sCJD cases	6	0.70	0.41	1.00	x	x	x	x	x	x	
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K07 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	2	0.94	1.45	1.00				x	x		
Definite and probable sCJD cases	2	0.92	1.38	1.00				x	x		

7 studies that investigated RT-QuIC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
Definite sCJD cases	2	0.82	1.13	1.00				x	x		
K08 excl. high risk of bias											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K09 excl. high risk of bias											
Definite, probable, and possible sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite and probable sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite sCJD cases	5	0.38	0.92	1.00	x	x	x	x		x	
K09 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite and probable sCJD cases	5	0.46	1.17	1.00	x	x	x	x		x	
Definite sCJD cases	5	0.38	0.92	1.00	x	x	x	x		x	
K10 excl. high risk of bias											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K10 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K11 excl. high/unclear risk of bias											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K12 excl. poor applicability											
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	

7 studies that investigated RT-QulC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
K12 excl. poor/unclear applicability											
Definite, probable, and possible sCJD cases	6	0.71	0.40	1.00	x	x	x	x	x	x	
Definite and probable sCJD cases	6	0.70	0.41	1.00	x	x	x	x	x	x	
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
K13 excl. poor applicability											
Definite, probable, and possible sCJD cases	6	0.70	0.02	-1.00	x		x	x	x	x	x
Definite and probable sCJD cases	6	0.68	0.02	-1.00	x		x	x	x	x	x
Definite sCJD cases	5	0.63	0.39	1.00	x		x	x	x	x	
K13 excl. poor/unclear applicability											
Definite, probable, and possible sCJD cases	6	0.70	0.02	-1.00	x		x	x	x	x	x
Definite and probable sCJD cases	6	0.68	0.02	-1.00	x		x	x	x	x	x
Definite sCJD cases	5	0.63	0.39	1.00	x		x	x	x	x	
Male-to-female ratio <0.75											
Definite, probable, and possible sCJD cases	1				x						
Definite and probable sCJD cases	1				x						
Definite sCJD cases	1				x						
Male-to-female ratio >1											
Definite, probable, and possible sCJD cases	3	0	0.00	NaN			x			x	x
Definite and probable sCJD cases	3	0	0.00	NaN			x			x	x
Definite sCJD cases	2	0	0.00	NaN			x			x	
Male-to-female ratio 0.75–1											
Definite, probable, and possible sCJD cases	3	0.74	1.30	1.00		x		x	x		
Definite and probable sCJD cases	3	0.73	1.23	1.00		x		x	x		
Definite sCJD cases	3	0.56	0.89	1.00		x		x	x		
Median age >65 years											
Definite, probable, and possible sCJD cases	6	0.69	0.09	-1.00	x	x		x	x	x	x
Definite and probable sCJD cases	6	0.68	0.09	-1.00	x	x		x	x	x	x
Definite sCJD cases	5	0.60	0.16	1.00	x	x		x	x	x	
Studies >2009											

7 studies that investigated RT-QulC (x: included in respective analysis)

Level of certainty of sCJD diagnosis	Studies included	SD (TPR)	SD (FPR)	Corr.	Abu-Rumeileh	Bizzi	Fiorini	Franceschini	Lattanzio	Rhoads	Simon
Definite, probable, and possible sCJD cases	7	0.69	0.04	-1.00	x	x	x	x	x	x	x
Definite and probable sCJD cases	7	0.67	0.04	-1.00	x	x	x	x	x	x	x
Definite sCJD cases	6	0.60	0.35	1.00	x	x	x	x	x	x	
Studies with a priori cut-off											
Definite, probable, and possible sCJD cases	6	0.68	0.07	-1.00		x	x	x	x	x	x
Definite and probable sCJD cases	6	0.67	0.07	-1.00		x	x	x	x	x	x
Definite sCJD cases	5	0.53	0.16	1.00		x	x	x	x	x	
Study sample: not only definite cases											
Definite, probable, and possible sCJD cases	3	0.89	1.87	1.00			x	x	x		
Definite and probable sCJD cases	3	0.87	1.80	1.00			x	x	x		
Definite sCJD cases	3	0.75	1.56	1.00			x	x	x		
Study sample: only definite cases											
Definite, probable, and possible sCJD cases	4	0.36	0.02	1.00	x	x				x	x
Definite and probable sCJD cases	4	0.36	0.02	1.00	x	x				x	x
Definite sCJD cases	3	0.26	0.11	1.00	x	x				x	