Supplementary Materials:

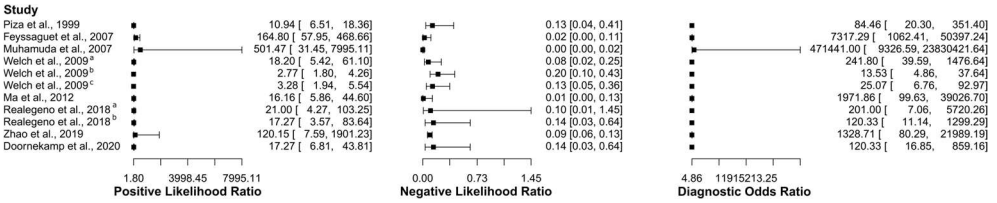


Figure S1. Study data and paired forest plot of the Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio of Enzyme-Linked Immunosorbent Assay (ELISA) for human rabies diagnosis. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [25,45,46,48,54,55,59,60].

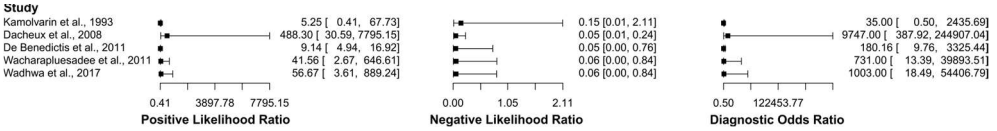


Figure S2. Study data and paired forest plot of the Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio of Reverse Transcription Polymerase Chain Reaction (RT-PCR) for human rabies diagnosis. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [43,44,47,57,58].

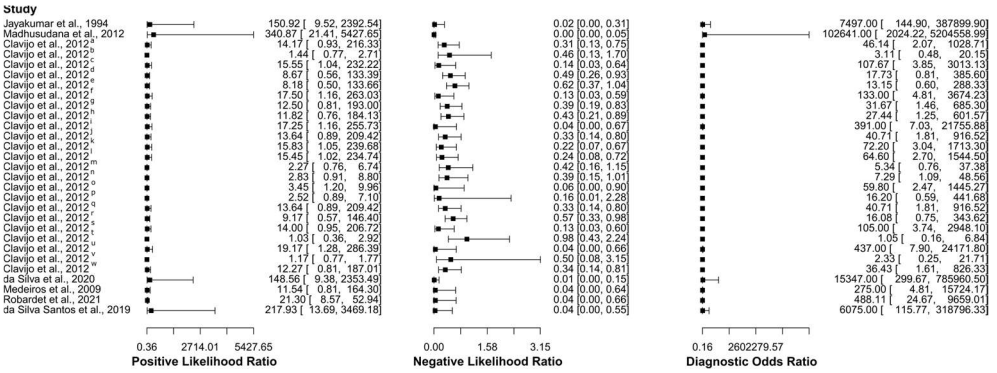


Figure S3. Study data and paired forest plot of the Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio of Direct Fluorescent Antibody Test (DFAT) for dog rabies diagnosis. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [28,52,53,67,72,73,75].

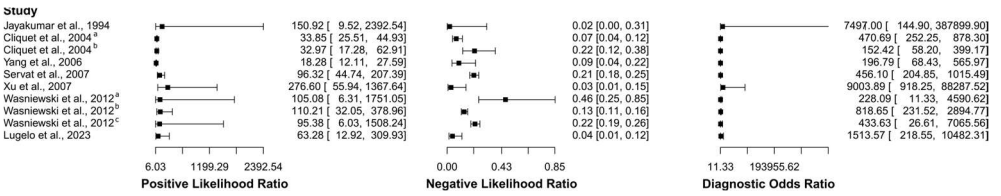


Figure S4. Study data and paired forest plot of the Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio of Enzyme-Linked Immunosorbent Assay (ELISA) for dog rabies diagnosis. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [69,75,80,93–95,97,101].

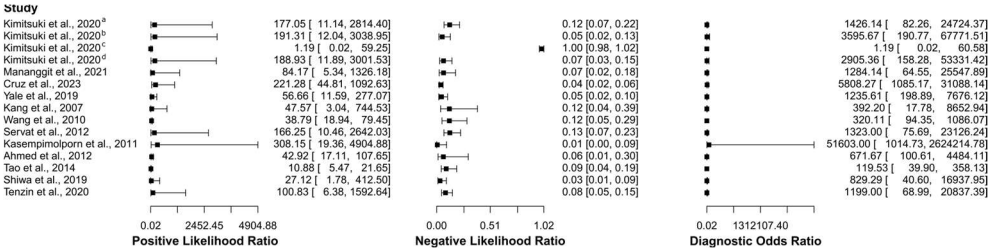


Figure S5. Study data and paired forest plot of the Positive Likelihood, Negative likelihood, and Diagnostic Odds ratios of Rapid Immunochromatographic Tests (RIT) for rabies diagnosis in dogs. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [61,71,76–78,81,86–89,92,96].

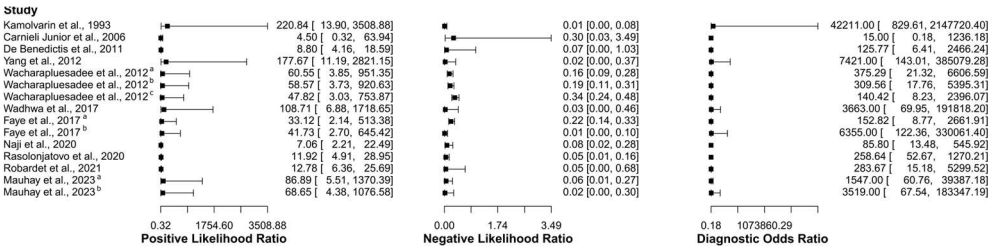


Figure S6. Study data and paired forest plot of the Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio of Reverse Transcription Polymerase Chain Reaction (RT-PCR) for rabies diagnosis in dogs. Positive Likelihood ratio, Negative likelihood ratio, and Diagnostic Odds ratio are reported with a mean (95% confidence limit). The Forest plot depicts the estimated sensitivity and specificity (black squares) and its 95% confidence limits (horizontal black line) [28,44,47,58,64,74,82,83,85,91,102].

Table S1. PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Yes, Title
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Yes
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Yes, Introduction
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Yes, Introduction
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Yes, Selection criteria and data extraction
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Yes, Search strategy
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Yes, Search strategy
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Yes, Selection criteria and data extraction
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Yes, Selection criteria and data extraction
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Yes, Selection criteria and data extraction
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Yes, Selection criteria and data extraction
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Not applicable
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Not applicable
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Yes, Data collection and management
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Yes, Data collection

Section and Topic	Item #	Checklist item	Location where item is reported
			and management
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Yes, Data collection and management
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Yes, Statistical analysis
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Yes, Statistical analysis
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Yes, Statistical analysis
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Not applicable
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Not applicable
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Yes, Results
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Yes, Results
Study characteristics	17	Cite each included study and present its characteristics.	Yes, Results
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Not applicable
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Yes, Results
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Yes, Results
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Yes, Results
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Yes, Results
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Yes, Results
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Not applicable
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Not applicable
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Yes, Discussion
	23b	Discuss any limitations of the evidence included in the review.	Yes, Discussion
	23c	Discuss any limitations of the review processes used.	Yes, Discussion

Section and Topic	Item #	Checklist item	Location where item is reported
	23d	Discuss implications of the results for practice, policy, and future research.	Yes, Discussion
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Yes, Study protocol
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Yes, Study protocol
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Yes, Study protocol
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Yes, Grant information
Competing interests	26	Declare any competing interests of review authors.	Yes, Competing interests
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Yes, Dataset availability statement

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

Table S2. Search strings for the systematic review on the diagnostic accuracy of rabies lab tests

Item	Diagnostic Test	Search string
1	Reverse Transcription Polymerase Chain Reaction	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND RT-PCR
2	Real Time Reverse Transcription Polymerase Chain Reaction	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Real Time RT-PCR
3	Reverse Transcription Loop-Mediated Isothermal Amplification	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND RT-LAMP
4	lustered Regularly Interspaced Short Palindromic Repeats	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND CRISPR
5	Next generation sequencing	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Next generation sequencing
6	Rapid Fluorescent Focus Inhibition Test	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Rapid Fluorescent Focus Inhibition Test
7	Enzyme-Linked Immunosorbent Assay	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Enzyme-Linked Immunosorbent Assay
8	Immunohistochemistry	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Immunohistochemistry
9	Fluorescent Antibody Technique	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Fluorescent Antibody Technique
10	Immunochromatographic Assay	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Immunochromatographic Assay
11	Lateral Flow	(rabies[MeSH Terms]) AND (sensitivity and specificity[MeSH Terms]) AND Lateral Flow