SUPPLEMENTARY

Supplementary 1. STrengthening the Reporting of OBservational studies in Epidemiology (STROBE)

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

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|	Item No	Recommendation	page
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	3
Objectives	3	State specific objectives, including any prespecified hypotheses	3
Methods			
Study design	4	Present key elements of study design early in the paper	4-5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4-5
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants	4-5
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	4-5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	4-5
Bias	9	Describe any efforts to address potential sources of bias	4-5
Study size	10	Explain how the study size was arrived at	5
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	5
		(*b*) Describe any methods used to examine subgroups and interactions	5
		(*c*) Explain how missing data were addressed	na
		(*d*) If applicable, describe analytical methods taking account of sampling strategy	na
		(*e*) Describe any sensitivity analyses	na
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	5-10
		(b) Give reasons for non-participation at each stage	5-10
		(c) Consider use of a flow diagram	5-10
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	5-10
		(b) Indicate number of participants with missing data for each variable of interest	5-10
Outcome data	15*	Report numbers of outcome events or summary measures	5-10
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make	5-10

		clear which confounders were adjusted for and why they were included	
		(b) Report category boundaries when continuous variables were categorized	5-10
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	na
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	na

Discussion

Key results	18	Summarise key results with reference to study objectives	
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	11-14
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	11-14
Generalisability	21	Discuss the generalisability (external validity) of the study results	11-14

Other information

Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	15

Supplementary 2. Additional results
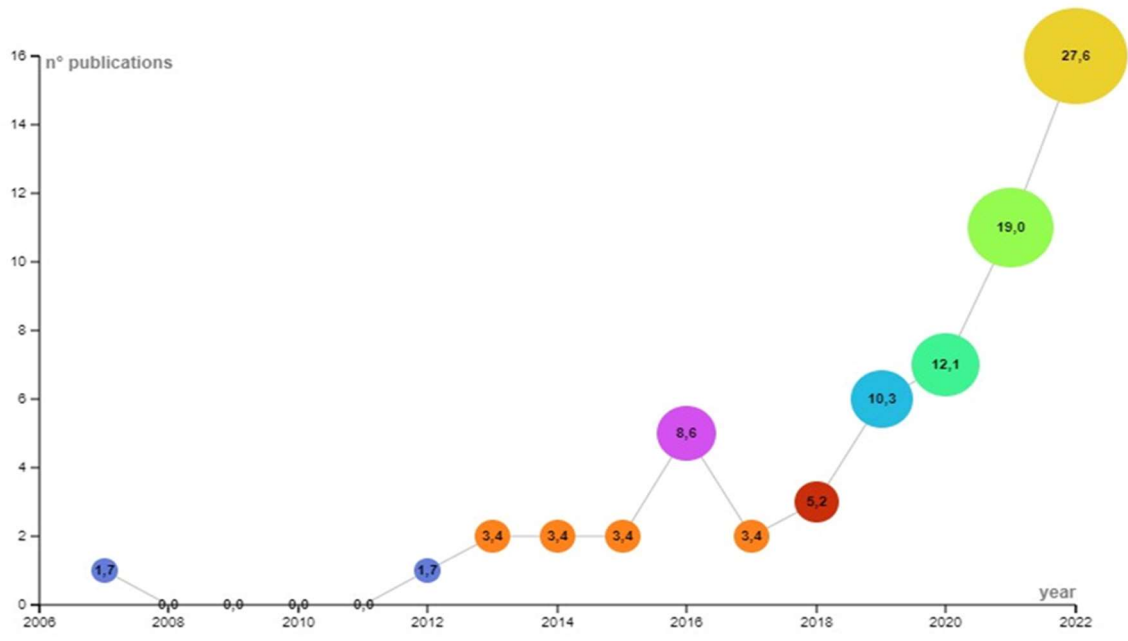
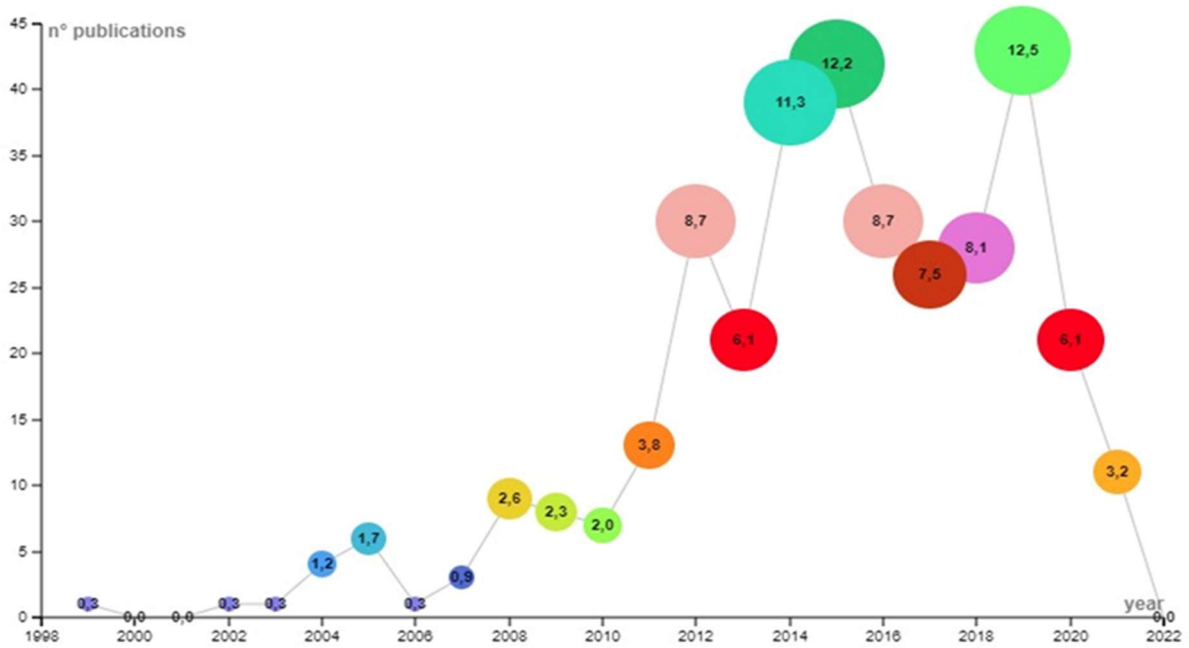# Figure S1. Trend of SRs publication on VR for stroke
rehabilitation, from 2007 to 2022. Bubbles report the size of publications each year.

6 # Figure S2. Trend of publications of unique primary studies
7 # included in SRs from 1999 to 2021.

8 **Bubbles report the percentage of publications each year.**

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10 # Table S1. Journals of published systematic reviews

11

Journal	Overall (n=58)	
	n	%
Ann N Y Acad Sci	1	1,7
American Journal of Physical Medicine & Rehabilitation.	2	3,4
Archives of Physical Medicine and Rehabilitation	3	5,2
BioMed Research International	2	3,4
Brain Injury	1	1,7
Brazilian Journal of Physical Therapy	1	1,7
Clinical Rehabilitation	2	3,4
Cochrane	1	1,7
Disability and Rehabilitation: Assistive Technology	3	5,2
European Stroke Journal	1	1,7
Fisioter. Pesqui.	1	1,7
Frontiers in Aging Neuroscience	1	1,7
Frontiers in Neurology	1	1,7
Frontiers in Systems Neuroscience	1	1,7
Games Health J.	2	3,4
Int J Environ Res Public Health	1	1,7
Italian Journal of physiotherapy	1	1,7
J Med Internet Res	2	3,4
J Neural Eng.	1	1,7
J Neuroeng Rehabil	3	5,2
J Stroke Cerebrovasc Dis.	5	8,6
Journal of Advanced Nursing	1	1,7
Journal of Clinical Medicine	1	1,7
Journal of Exercise Rehabilitation	1	1,7
Journal of Modern Rehabilitation	1	1,7
Journal of Physiotherapy (Elsevier)	1	1,7
Malaysian Journal of Medicine and Health Sciences.	1	1,7
Manual Therapy, Posturology & Rehabilitation Journal	1	1,7
NeuroRehabilitation	1	1,7
Neurorehabilitation & Neural Repair	1	1,7

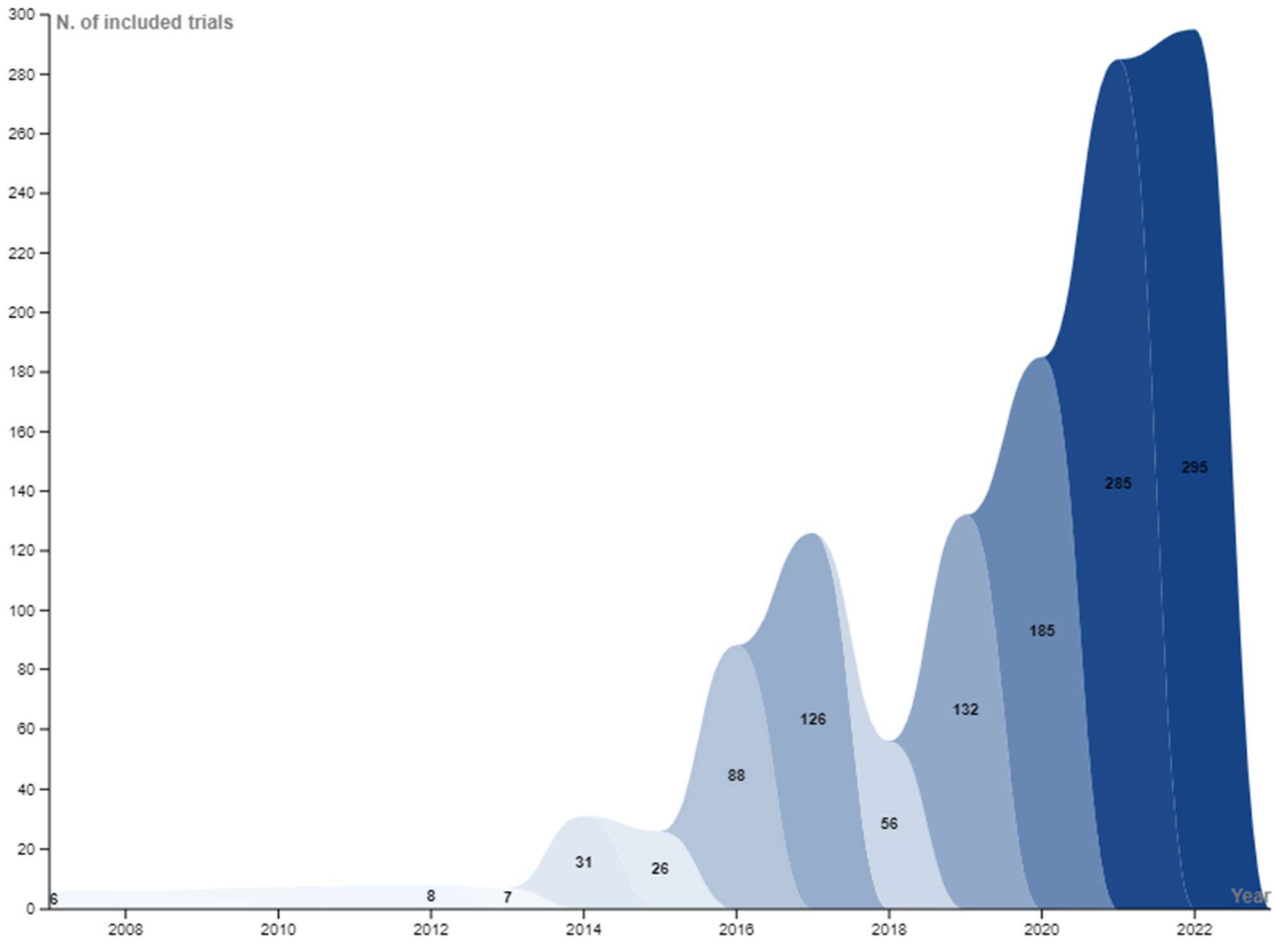|		
PLoS ONE	1	1,7
Physical Therapy	1	1,7
Physical Therapy Reviews	1	1,7
Physiotherapy	1	1,7
Physiotherapy Theory and Practice	1	1,7
Sensors (Basel)	1	1,7
Sport i Turystyka	1	1,7
Topics in Stroke Rehabilitation	4	6,9
Grey literature	2	3,4
	58	100

12

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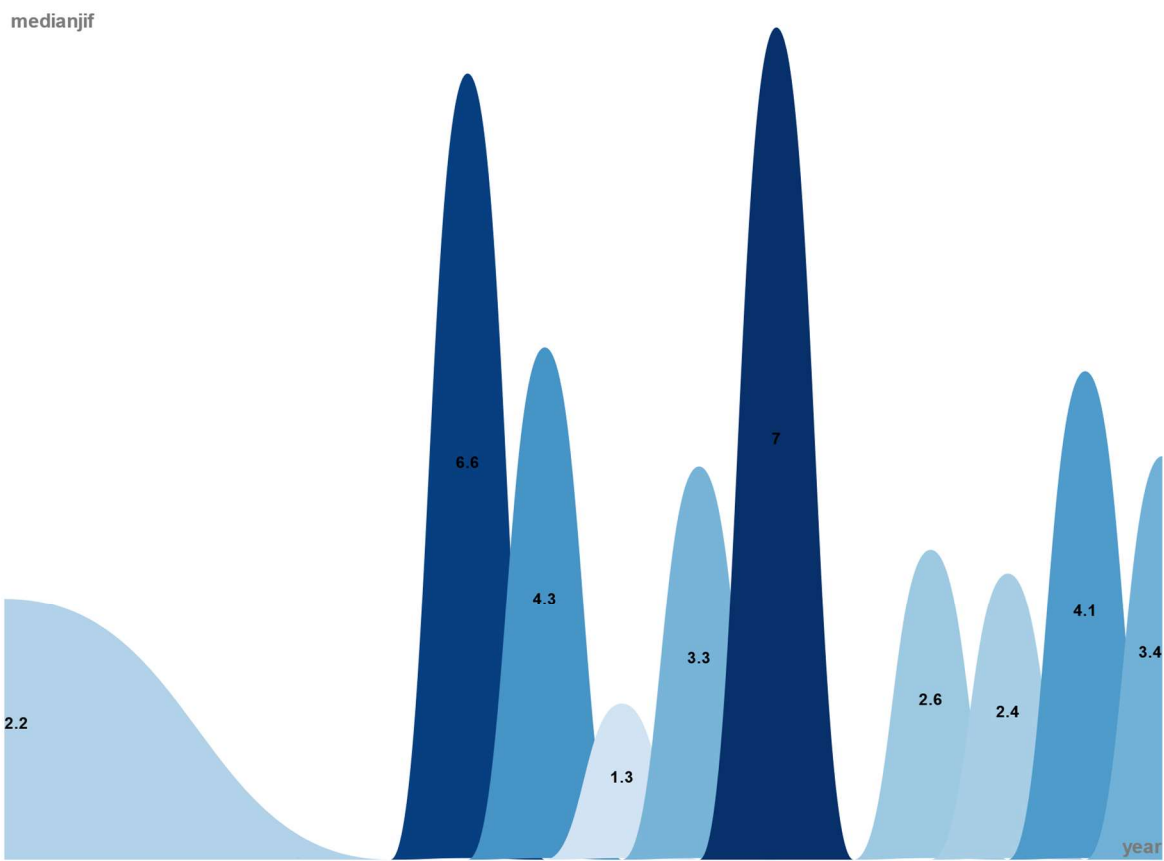
Figure S3. Median journal impact factor of published SR over years
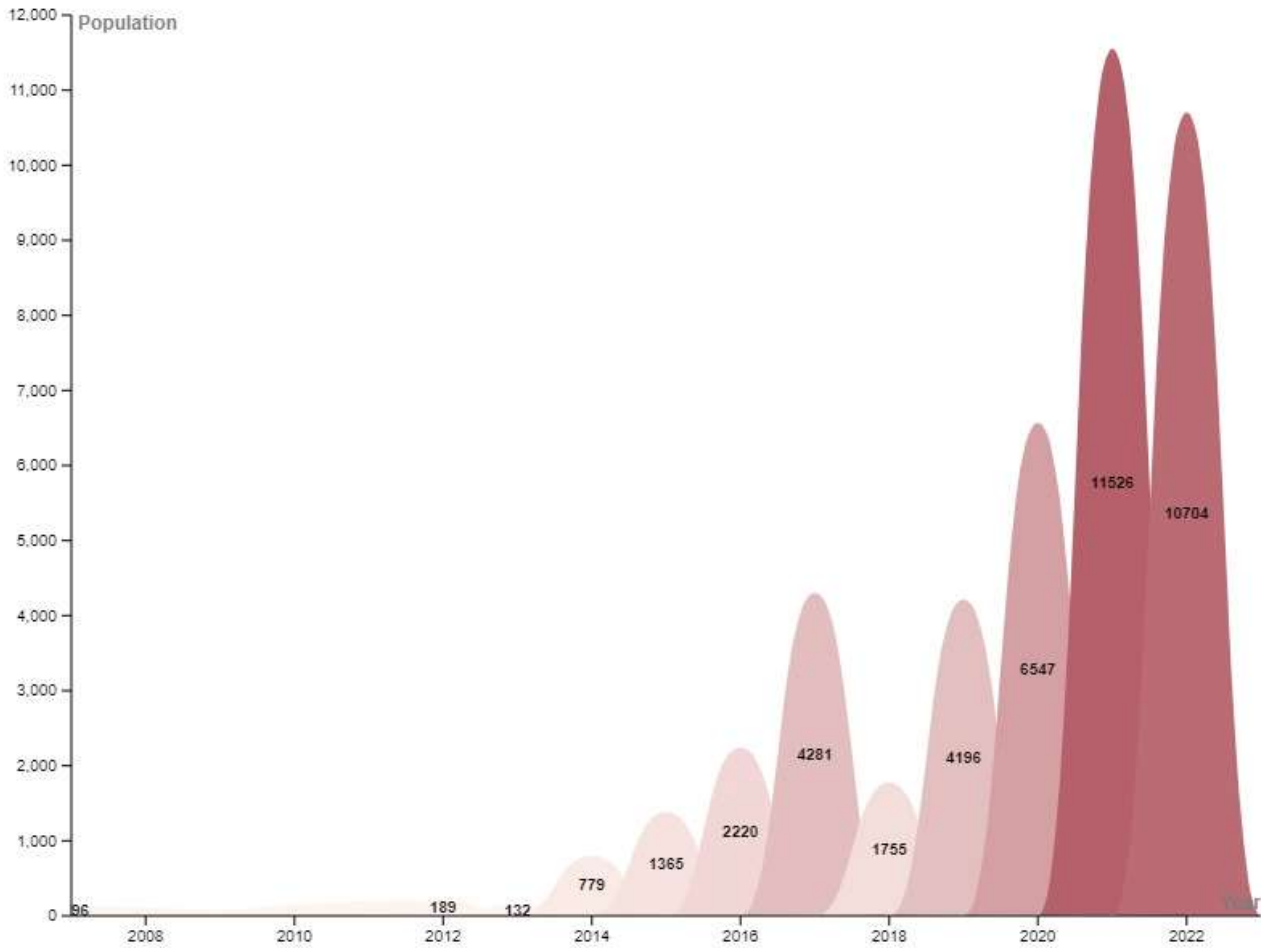
16

Figure S4. N° of included primary studies in the SRs over years

Figure S5. N° of participants enrolled by primary studies included in the SRs over years

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Figure S6. Risk of bias item in SRs

Legend:1-Question and inclusion; 2-Protocol; 3-Study design; 4-Comprehensive search; 5-Study selection; 6-Data extraction; 7-Excluded studied justification; 8-Included studied details; 9-Risk of Bias; 10-Source of funding of included studies; 11-Appropriate statistical methods for analysis; 12-Rob on meta-analyses; 13-Rob on individual studies; 14-Explanation for heterogeneity; 15-Publication bias; 16-Conflict of interest. Items 2-4-7-9-11-13-15 were critical.

32

33