

## Supplementary data

STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	Page 1, Line 7	This retrospective analyzed the effect of EGBLI combined with triangle health management on IV.
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 1, Line 7	This retrospective study analyzed 321 IV patients, found the intervention significantly improved clinical efficacy, hemodynamics and symptoms compared to conventional treatment.
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 2, Line 16-18	IV affects 50-60% of people over 65, traditional therapies have limitations. EGBLI's bioactive components may synergize with triangle health management.
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 2, Line 20	This exploratory study aims to investigate the synergistic mechanism of the two interventions in IV treatment.
Methods				
Study design	4	Present key elements of study design early in the paper	Page 3, Line 25-29	This is a retrospective study, enrolled 321 patients, used random allocation and blinded assessors to control bias.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 1, Line 11; Page 3, Line 25	Study conducted at The First Affiliated Hospital of Soochow University, enrolled patients from Jan to Jun 2024.
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Page 3, Line 32-34	Inclusion: confirmed IV, first onset, complete records, >18.

		<p><i>Case-control study</i>—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls</p> <p><i>Cross-sectional study</i>—Give the eligibility criteria, and the sources and methods of selection of participants</p>		Exclusion: other causes, unconscious, severe organ damage, tumors, stroke.
		<p>(b) <i>Cohort study</i>—For matched studies, give matching criteria and number of exposed and unexposed</p> <p><i>Case-control study</i>—For matched studies, give matching criteria and the number of controls per case</p>	Page 3, Line 29	Non-matched study, baseline data of two groups had no significant difference, good comparability.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 3, Line 37-53	Exposure: EGBLI + triangle health management. Control: conventional treatment. Outcomes: efficacy, hemodynamics, nutrition, function scores.
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	Page 3, Line 53	All indicators were measured with unified methods, outcome assessors were blinded to group assignments.
Bias	9	Describe any efforts to address potential sources of bias	Page 3, Line 29	We used strict inclusion criteria, random allocation, blinded assessors to address potential bias.
Study size	10	Explain how the study size was arrived at	Page 3, Line 27	Sample size calculated by <i>GPower</i> , required 114 per group, enrolled 177 controls and 144 observations.

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Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 3, Line 42-45	Only DHI score was categorized into 3 tiers for stratified management, other variables analyzed as original data.
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Page 3, Line 55	Used SPSS 24.0, chi-square and t-test, compared baseline confounders and found no group difference.
		(b) Describe any methods used to examine subgroups and interactions	Not applicable	
		(c) Explain how missing data were addressed	Page 3, Line 32	Inclusion required complete medical records, no missing data for key variables.
		(d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy	Page 3, Line 29	All patients completed 4-week treatment and assessment, no loss to follow-up.12(e)   /   No sensitivity analysis performed.
		(e) Describe any sensitivity analyses	Not applicable	
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	Page 3, Line 27-29	Screened patients, enrolled 321 eligible patients, all completed treatment and analysis, no dropout.
		(b) Give reasons for non-participation at each stage	Page 3, Line 34	Excluded patients who met exclusion criteria, no non-participation after enrollment.
		(c) Consider use of a flow diagram	Not applicable	
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 3, Line 29	Baseline characteristics including age, sex, comorbidities had no significant difference between groups.
		(b) Indicate number of participants with missing data for each variable of interest	Page 3, Line 32	All patients had complete medical records, no missing data for any key variable.
		(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	Page 3, Line 37	Treatment cycle was 4 weeks, no long-term follow-up set for this retrospective study.
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time	Page 4, Line 60-75	Observation group had higher effective rate, better hemodynamics, endothelial

				function, nutrition and function scores than controls.
		<i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure	Not applicable	
		<i>Cross-sectional study</i> —Report numbers of outcome events or summary measures	Not applicable	
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Page 4, Line 60-75	Reported unadjusted results and precise p values, no adjusted analysis needed as baseline was balanced.
		(b) Report category boundaries when continuous variables were categorized	Page 5, Line 79	The intervention significantly improved outcomes in IV patients, with 92.36% total effective rate in observation group.
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not applicable	

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Not applicable	
Discussion				
Key results	18	Summarise key results with reference to study objectives	Page 5, Line 79	The intervention significantly improved outcomes in IV patients, with 92.36% total effective rate in observation group.
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	Page 5, Line 88	Limitations: retrospective design, short duration, small sample size, unconfirmed causal links between indicators.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 5, Line 79-92	The intervention has good clinical efficacy, but limitations need further prospective trials to verify.
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 5, Line 92	Single-center, short-term design limits generalizability, need multi-center studies to verify the results.
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	Page 6, Line 101	There was no funding, no funder participated in the study design or analysis.

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).