

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 81868

Title: The Evolving Paradigm of Thrombolysis Thrombolytics in Pulmonary Embolism: A Comprehensive Review of Clinical Manifestations, Indications, Contraindications, Recent Advances and Guidelines to Diagnosis and Management

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05040484

Position: Editorial Board

Academic degree: MD, PhD

Professional title: Assistant Professor, Doctor, Professor, Research Scientist

Reviewer's Country/Territory: Russia

Author's Country/Territory: United States

Manuscript submission date: 2022-11-26

Reviewer chosen by: AI Technique

Reviewer accepted review: 2023-01-01 21:48

Reviewer performed review: 2023-01-09 21:44

Review time: 7 Days and 23 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty

Creativity or innovation of this manuscript	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Good <input checked="" type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No creativity or innovation
Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

This is an interesting review, but the Methods section is redundant here. It is needed if the review is systematic and done on the basis of accepted rules. This review, as I understand it, is literary, so this section is not needed here.

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Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06139999

Position: Peer Reviewer

Academic degree: MD, PhD

Professional title: Associate Chief Physician, Associate Professor, Surgeon

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2022-11-26

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-01-05 07:13

Reviewer performed review: 2023-01-13 01:14

Review time: 7 Days and 18 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Novelty of this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No novelty

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Scientific significance of the conclusion in this manuscript	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Good <input type="checkbox"/> Grade C: Fair <input type="checkbox"/> Grade D: No scientific significance
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Peer-reviewer statements	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous
	Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SPECIFIC COMMENTS TO AUTHORS

The authors investigated the evolving Paradigm of thrombolysis in pulmonary embolism and performed a comprehensive review of clinical manifestations, indications, contraindications, recent advances and guidelines to diagnosis and management. It is impressive and good. I have several questions for the authors: 1. I would suggest to revise thrombolytics to thrombolysis. 2. There is no doubt that patients with unstable hemodynamics require thrombolysis, but I insist that part of patients with sub-massive or intermediate-risk PE also required thrombolysis. The mortality for these patients still ranged from 3% to 15%. Do you find any evidence or literature to identify those patients with intermediate-risk PE would get benefit from thrombolysis? 3. Endovascular treatment, including CDT, MPT, or catheter aspiration with or without fragmentation is a promising method for high-risk PE, especially under the support of ECMO. I would suggest the authors to add it in the conclusion. 4. I would suggest to delete "Systemic

thrombolytics are not recommended if the patient is hemodynamically stable. " in the conclusion section. 5. "Except in cases where there is a contraindication, systemic thrombolytics are recommended for high-risk and part intermediate-risk PE" is advised in the conclusion.