



VTE treatment planning: A mixed-methods analysis of clinical challenges, knowledge, and confidence gaps in selecting evidence-based treatment

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INTRODUCTION

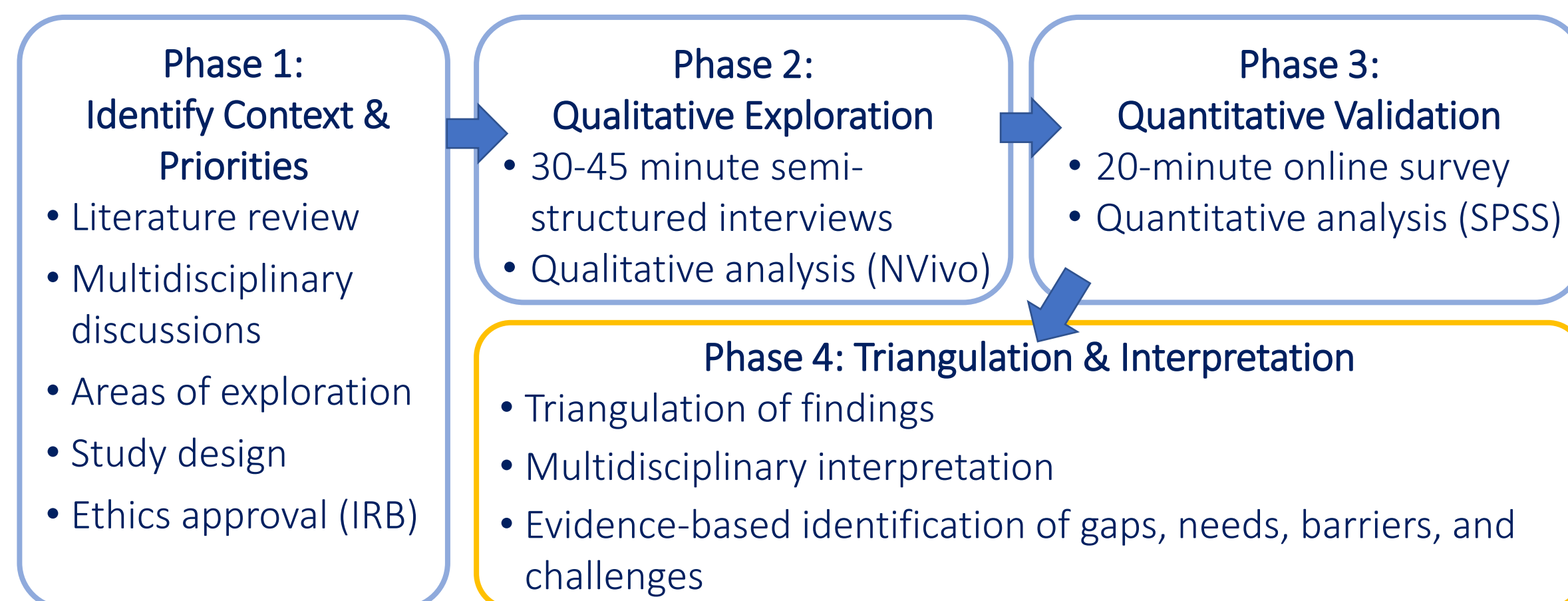
- Underutilization of direct oral anticoagulants (DOACs) in treatment of venous thromboembolism (VTE):
 - Despite DOACs utilization being addressed in guidelines, including those specific to patients with cancer¹.
- Complexity of patient profiles as potential barrier to uptake of optimal VTE treatment².

AIM

- Identify barriers and practice gaps (with their respective causalities) related to:
 - Secondary prevention of VTE in patients with a first occurrence.
 - Treatment and management of risks associated with VTE in cancer.
- Findings presented here specific to underutilization of DOACs.

METHOD & SAMPLE

- Mixed-methods study with physicians from 5 specialties practicing in the US.



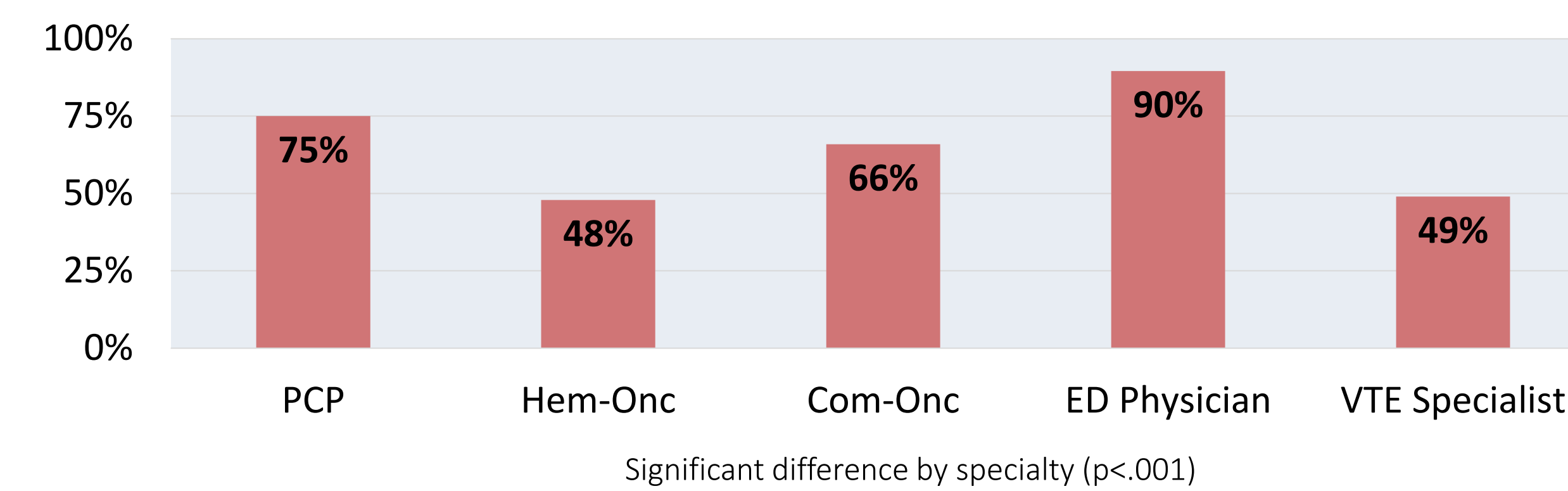
Profession	Interviews	Surveys
Primary Care Physicians	4	52
Hematologist-Oncologists	4	48
Community Oncologists	4	44
Emergency Department Physicians	5	48
VTE Specialists*	4	49
Total	21	241

*Cardiologists, Hematologists, Pulmonologists, and Vascular Medicine Specialists

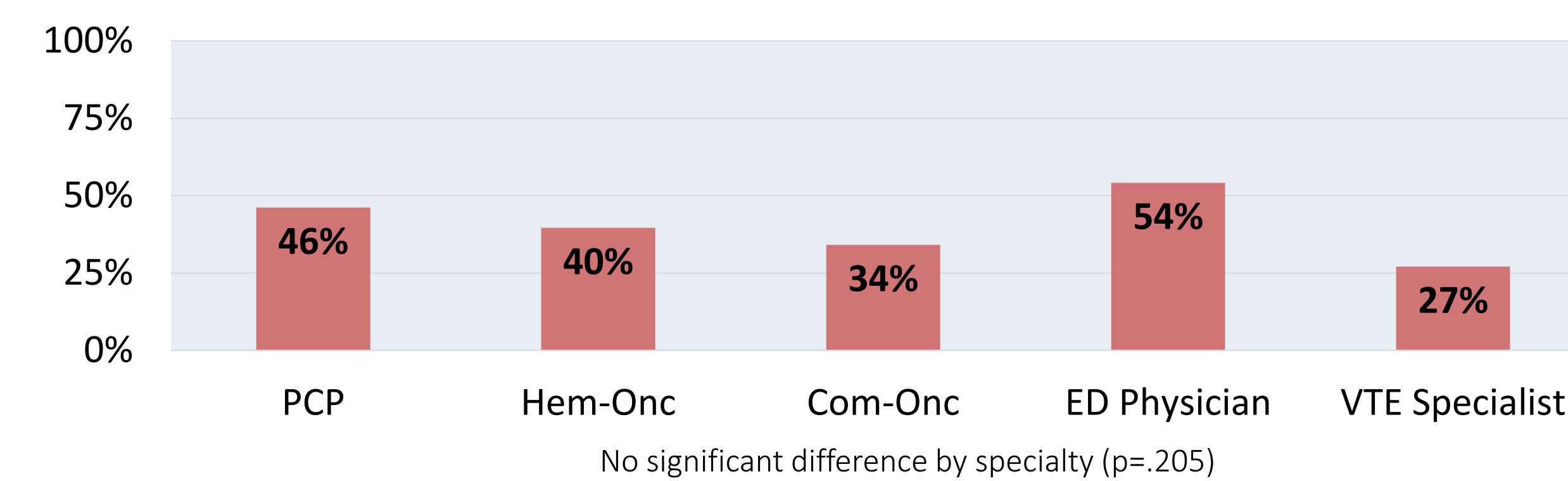
RESULTS

- **Lack of knowledge** of latest randomized control trials and of treatment guidelines among non-VTE specialists.

% Knowledge Gap: Findings from the Latest Randomized Control Trials on VTE Treatments (n=241)

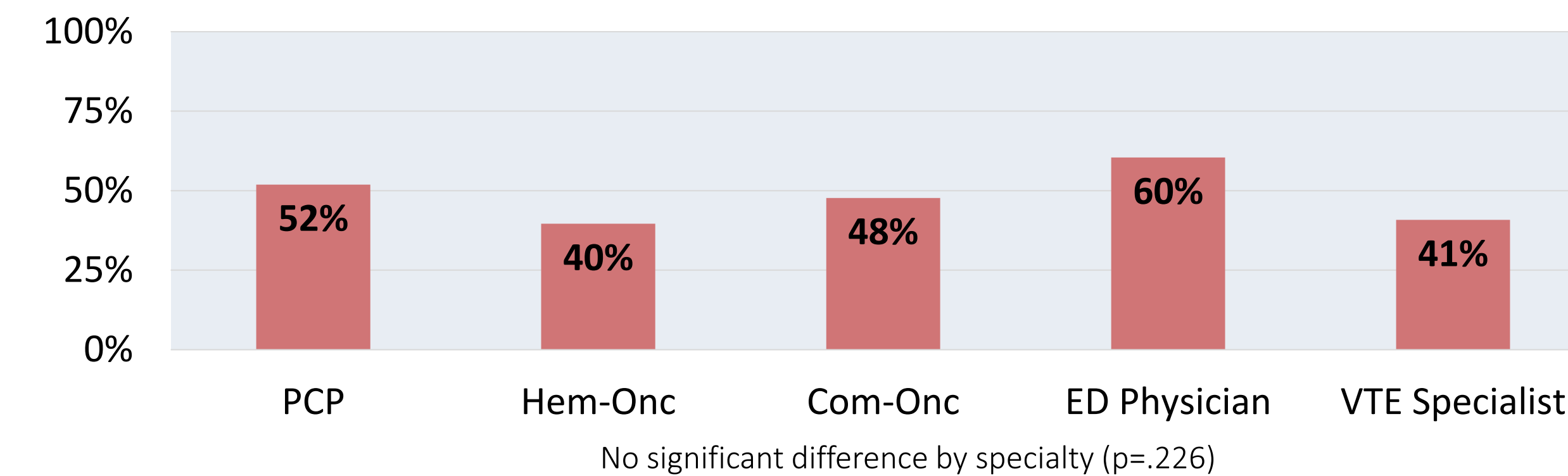


% Knowledge Gap: Guidelines Related to Treatment Decisions for VTE (n=240)



- Health care providers self-reported sub-optimal **knowledge of new treatments**.

% Knowledge Gap: Recently FDA-approved Treatments for VTE (n=241)

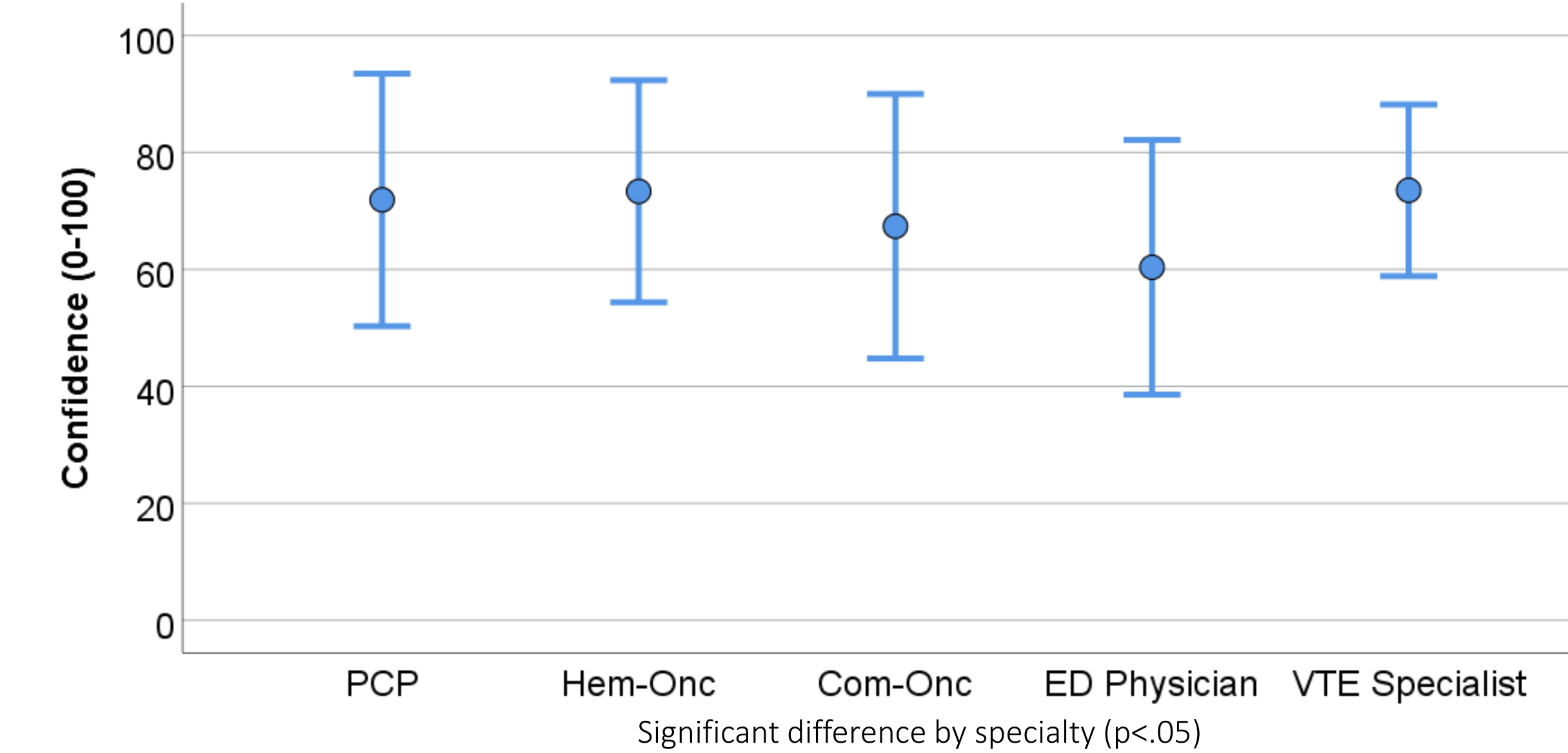


CONCLUSIONS

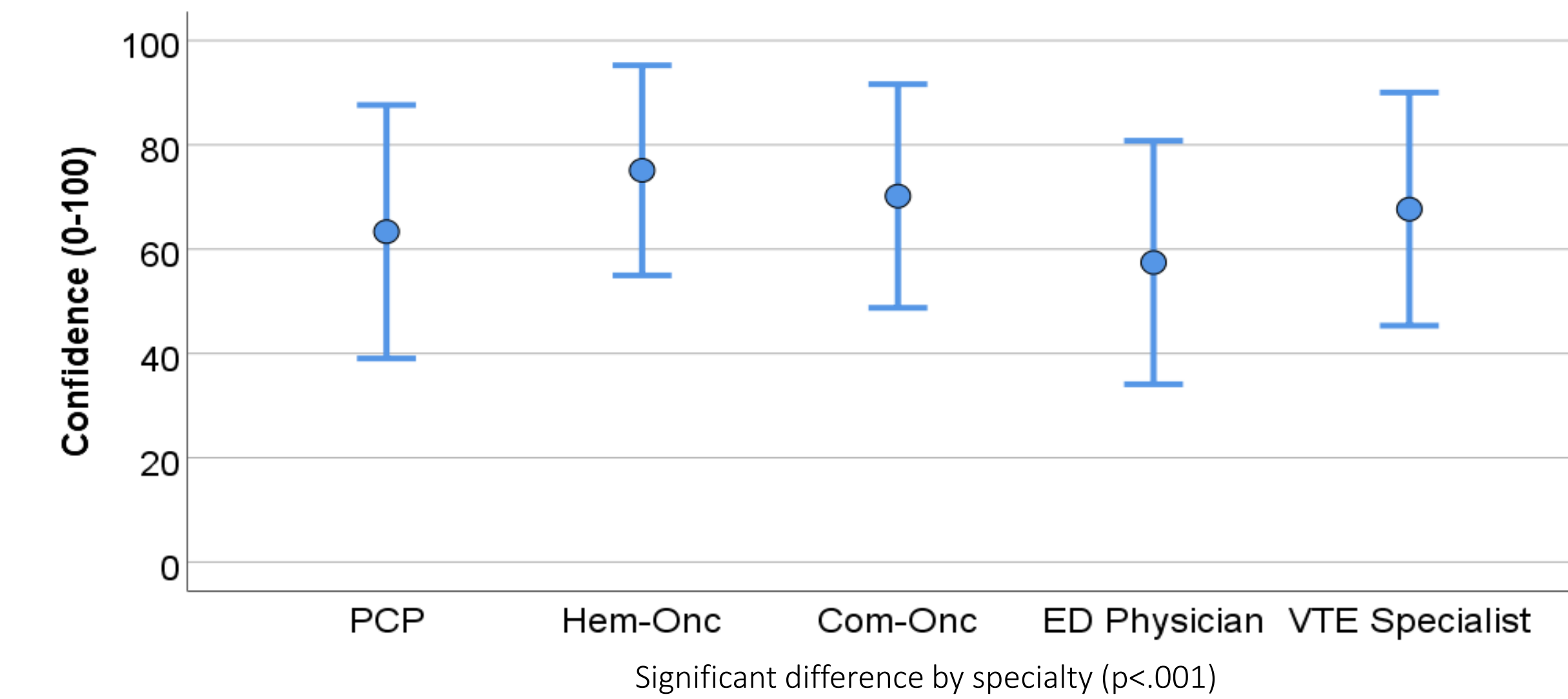
- This study demonstrates the need for education supporting HCPs' decision-making using DOACs for treating VTE in cancer patients and in acute settings.
- While HCPs generally understand the benefits of DOACs, they lack confidence in guidelines and can overweigh the risks of complication in more constrained and potentially riskier scenarios.

- **Suboptimal mean confidence levels** adapting treatment decisions based on patient profile information and substantive variation within sub-groups.

Confidence Deciding Which Type of VTE Treatment to Use According to Specific Patient Profile (n=241)



Confidence Using DOACs/NOACs with Cancer Patients (n=240)



- Qualitative data corroborates **low knowledge and confidence levels**, revealing HCPs' underlying doubts regarding DOACs safety, clarity of antithrombotic guidelines, and applicability to cancer.
- Could lead to **conservative approach to treatment** (avoiding DOACs).

"With cancer patients often times their comorbidities make decision-making more challenging. They may have metastatic disease that puts them at high risk for bleeding or, if they do bleed, at high risk for morbidity related to a bleed, particularly if they have intracranial metastases or spinal metastases. [...] Some of these patients are very advanced, and by the time they're diagnosed with VTE it's pretty much the end of the road. So, discussions about what their goals of care are and end-of-life decision-making—we're not always equipped to do that very well."

— ED Physician

"NOACs, those new anticoagulants, are still not approved in the cancer treatment patients, so technically we still need to use Coumadin if you want to be going by the book. [...] so it's a challenge, because Coumadin is an old drug and it's hard to monitor. Because of their cancer, a patient may have problems with their monitoring parameters, which could be falsely elevated or decreased."

— Community Oncologist

REFERENCES

1. Mariani MV, Magnocavallo M, Straito M, et al: Direct oral anticoagulants versus vitamin K antagonists in patients with atrial fibrillation and cancer a meta-analysis. Journal of Thrombosis and Thrombolysis 51:419-429, 2021
2. Khalil J, Bensaïd B, Elkacemi H, et al: Venous thromboembolism in cancer patients: an underestimated major health problem. World J Surg Oncol 13:204, 2015

DISCLOSURE

This study was financially supported by education research funds from Bristol-Myers Squibb.