

## CHEMOTHERAPY

# Reduced incidence of major bleeds with semuloparin

Venous thromboembolism is a common complication of treatment in patients with cancer owing to the aging population and use of prothrombotic agents. Chemotherapy is a recognized risk factor for venous thromboembolism, and this

complication is associated with significant morbidity and mortality. This adverse effect can lead to interruption of chemotherapy and unnecessary hospitalization, which can ultimately affect the quality of life of patients.

Evidence from randomized controlled trials of a clinical benefit of antithrombotic prophylaxis are limited, and the most up-to-date guidelines indicate that further studies are needed before antithrombotic prophylaxis is recommended routinely for ambulatory patients with cancer receiving chemotherapy. Now, the SAVE-ONCO double-blind, randomized, multicenter study published by Giancarlo Agnelli and colleagues has shown that the ultra-low-molecular weight heparin, semuloparin, reduces the incidence of deep-vein thrombosis as well as fatal and non-fatal pulmonary embolism.

This large trial included 3,212 patients with locally advanced or metastatic solid tumors from a total of 395 centers based in 47 countries. The efficacy and safety of semuloparin for prophylaxis, which was

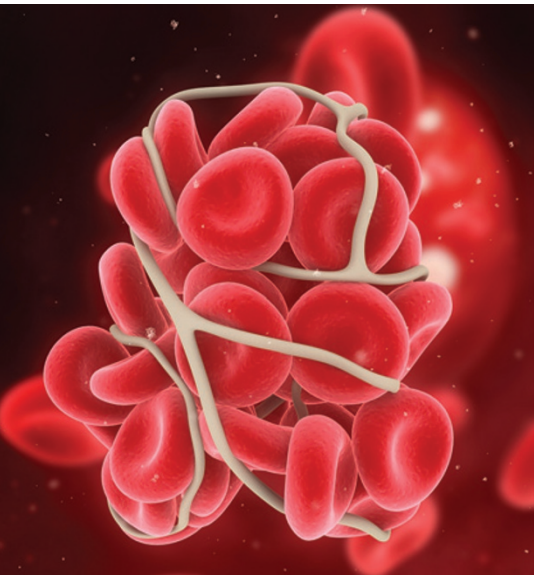
administered by subcutaneous injection for a median duration of 3.5 months, was assessed. Patients were randomly assigned to receive a once daily 20 mg dose of semuloparin or placebo until there was a change of chemotherapy regimen.

The overall survival did not differ significantly between the two arms, and the incidence of adverse events was similar for both groups. Importantly, the overall incidence of major and non-major bleeding events was also comparable between patients receiving semuloparin or placebo.

In their article, the researchers conclude “this study shows that semuloparin, compared with placebo, reduces the incidence of venous thromboembolism in patients with locally advanced or metastatic cancer, with no apparent increase in major bleeding.”

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**Original article** Agnelli, G. *et al.* Semuloparin for thromboprophylaxis in patients receiving chemotherapy for cancer. *N. Engl. J. Med.* **366**, 601–609 (2012).



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