Tissue factor pathway inhibitor is associated with risk of venous thromboembolism and all-cause mortality in patients with cancer

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Supplement

Methods

Study population

The Vienna Cancer and Thrombosis study (CATS) was designed to elucidate risk factors for cancer-associated VTE. Patients were followed for a maximum of 2 years for the primary outcome VTE and/or secondary outcome all-cause mortality. Exclusion criteria included chemotherapy or VTE in the last 3 months, indication for long-term anticoagulation, and overt viral or bacterial infection, radiotherapy, or surgery 2 weeks prior to study inclusion. Patients had to be older than 18 years, have histologically confirmed cancer and provide written informed consent.

No routine screening for VTE was performed during follow-up. In case of deep vein thrombosis (DVT), duplex/compression sonography or venography was required for event confirmation and computed tomography or ventilation/perfusion lung scan for confirmation of pulmonary embolism (PE). All events were adjudicated by a committee consisting of independent specialists in the field of radiology, vascular medicine (angiology), or nuclear medicine.

Sample preparation

Samples were centrifuged for 10 minutes at 3,000 RCF at 18°C and stored at -80°C for measurements in series. For the measurement of soluble P-selectin (sP-selectin) and extracellular vesicle (EV)- associated TF activity, the citrated blood was centrifuged at 1,500 RCF for 15 minutes, and to obtain platelet free plasma a second centrifugation step at 13,400 RCF for 2 minutes was performed.