

## Hemostasis & Malignancy Subcommittee

Person responsible (Chair / Principal Investigator): Jeffrey Zwicker

### Description Abstract

We are proposing a new SSC guidance statement on “Anticoagulant Therapy in Patients with Brain Tumors, an ISTH SSC Guidance Statement.”

Patients with brain tumors, both primary and metastatic, have a high risk of venous thromboembolism (VTE). Early onset of anticoagulant therapy can decrease the risk of pulmonary embolism (PE)-related mortality and/or embolization of deep venous thrombosis (DVT). However, patients with brain tumors are also at increased risk of intracranial hemorrhage (ICH). ICH is associated with high risk of mortality, and the risk of mortality is increased in the setting of anticoagulant therapy (Fernando et. al., Stroke 2021). There is limited evidence regarding the optimal anticoagulant strategy in patients with brain tumors to balance the competing risk of ICH with the benefit of reduction in VTE-associated morbidity and mortality. As such, current cancer and VTE guidelines vary in recommendations with some stating brain tumors as a contraindication to and some encouraging use of anticoagulant therapy. Therefore, we aim to review the literature and propose guidance on use of anticoagulant therapy in patients with brain tumors and VTE.

1. **Participating Subcommittee co-chairs:** Drs. Avi Leader, Kristen Sanfilippo, Anna Falanga, Gerald Soff, and Jeffrey Zwicker

### Statement of Purpose

Given the limited data on the safety and efficacy of anticoagulant therapy in patients with brain tumors, they were excluded from some of the randomized trials for treatment of cancer-associated VTE and were enrolled in small numbers in others, there is lack of consensus of the best approach on the role of anticoagulant therapy in patients with cancer-associated VTE and brain tumors. A more standardized approach, based on the evidence available, may offer guidance to therapy until further data are available.

Our objective is to develop a guidance for patients with brain tumors and cancer-associated VTE.

### Content Outline

- Scope and methodology, including background and definitions of terms
- Comprehensive review and summary of literature
- Guidance statements, with level of evidence, based on current data to include:
  - o Safety for different types of anticoagulants

## SSC Subcommittee Project/Collaborative Project

- Bleeding risk associated with anticoagulants in different tumor types
- Risks of ICH with antiplatelet agents
- Duration of anticoagulation
- Use of IVC filters
- Anticoagulation management following neurosurgery

### **Expected timeline:**

- January 2023: First Meeting to review clinical questions of interest (e.g., in patients with primary brain tumors and acute VTE) to be followed by literature search.
- April 2023: Second meeting to summarize findings and any analyses.
- June 2023: First Draft of Recommendations (to be presented at ISTH 2023)
- July 2023: Draft Manuscript for co-author review
- August 2023: Submit to JTH

**Expected outcomes** (ie. publications): SSC guidance document

Publication type (SSC Communication or Guidance document):

The manuscript publication requirements by *JTH* are recognized by the writing committee and will be adhered to.