



ICT 2023

28th International
Congress on Thrombosis

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Sérgio Barroso, MD



Declaration of Conflict Of Interest

I have the following potential conflict(s) of interest to report

LeoPharma: consulting, clinical research, advisory boards

Pfizer: advisory boards

Bayer: advisory boards

Sanofi : advisory boards

Daiichi Sankyo: advisory boards



AGENDA

- Background of Cancer Associated VTE
- Thrombocytopenia definition
- Risk factors for Bleeding and Thrombosis
- VTE recurrence or progression
- VTE prophylaxis and treatment algorithms
- Summary and Conclusions

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ **Background of Cancer Associated VTE**

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ Venous thromboembolism (VTE) is one of the major complications in patients with cancer, with a four to seven-fold higher risk than healthy individuals. ⁽¹⁻³⁾.
- ❖ Furthermore, it is the second leading cause of death in patients with cancer following underlying malignant disease progression ⁽¹⁻³⁾.
- ❖ In addition, patients with cancer-associated VTE had three times increased risk of hospitalizations, and the treatment of whom is frequently associated with delay or discontinuation of chemotherapy for underlying cancer treatment ^(4, 5)

1. Khorana AA, Francis CW, Culakova E, Kuderer NM, Lyman GH. Thromboembolism is a leading cause of death in cancer patients receiving outpatient chemotherapy. *J Thromb Haemost* 2007;5:632-4. 2. Prandoni P, Lensing AW, Piccioli A, et al. Recurrent venous thromboembolism and bleeding complications during anticoagulant treatment in patients with cancer and venous thrombosis. *Blood* 2002;100:3484-8. 3. Connolly GC, Francis CW. Cancer-associated thrombosis. *Hematology Am Soc Hematol Educ Program* 2013;2013:684-91. 4. Khorana AA, Dalal MR, Lin J, Connolly GC. Health care costs associated with venous thromboembolism in selected high-risk ambulatory patients with solid tumors undergoing chemotherapy in the United States. *Clinicoecon Outcomes Res* 2013;5:101-8. 5. Sørensen HT, Mellekjær L, Olsen JH, Baron JA. Prognosis of cancers associated with venous thromboembolism. *N Engl J Med* 2000;343:1846-50.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ Moreover, VTE developing in patients with cancer is also associated with two to six times increased risk in mortality ⁽⁵⁾.
- ❖ Thus, prompt diagnosis and optimal therapeutic strategies for VTE in patients with cancer essential.
- ❖ However, despite the appropriate anticoagulation treatment in cancer-associated VTE, patients have a relatively higher risk of complications, such as recurrent VTE and major bleeding, than those without cancer ^(2, 6).

5. Sørensen HT, Møllekjær L, Olsen JH, Baron JA. Prognosis of cancers associated with venous thromboembolism. *N Engl J Med* 2000;343:1846-50. 6. Hutten BA, Prins MH, Gent M, Ginsberg J, Tijssen JG, Büller HR. Incidence of recurrent thromboembolic and bleeding complications among patients with venous thromboembolism in relation to both malignancy and achieved international normalized ratio: a retrospective analysis. *J Clin Oncol* 2000;18:3078-83.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ Over the past 20 years, low-molecular-weight-heparins (LMWHs) have been recommended as a standard of care for acute and long-term treatment of cancer-associated VTE based on the landmark trials comparing LMWHs to a vitamin K antagonist ^(7, 8).
- ❖ Direct oral anticoagulants (DOACs) are attractive new therapeutic drugs for treating VTE in patients with cancer because of the convenience of oral administration, rapid onset of action, and predictable efficacy and safety ⁽⁹⁾.
- ❖ Recently, several large randomized phase 3 trials evaluating the effectiveness and safety of direct oral anticoagulants (DOACs) compared to LMWH in treating cancer-associated VTE have been reported and DOACS are now standard therapies too ⁽¹⁰⁻¹³⁾.

7. Lee AY, Levine MN, Baker RI, et al. Low-molecular-weight heparin versus a coumarin for the prevention of recurrent venous thromboembolism in patients with cancer. *N Engl J Med* 2003;349:146-53. 8. Lee AYY, Kamphuisen PW, Meyer G, et al. Tinzaparin vs warfarin for treatment of acute venous thromboembolism in patients with active cancer: a randomized clinical trial. *JAMA* 2015;314:677-86. 9. Yhim HY, Choi WI, Kim SH, et al. Long-term rivaroxaban for the treatment of acute venous thromboembolism in patients with active cancer in a prospective multicenter trial. *Korean J Intern Med* 2019;34:1125-35. 10. Raskob GE, van Es N, Verhamme P, et al. Edoxaban for the treatment of cancer-associated venous thromboembolism. *N Engl J Med* 2018;378:615-24. 11. Young AM, Marshall A, Thirlwall J, et al. Comparison of an oral factor Xa inhibitor with low molecular weight heparin in patients with cancer with venous thromboembolism: results of a randomized trial (SELECT-D). *J Clin Oncol* 2018;36:2017-23. 12. Agnelli G, Becattini C, Meyer G, et al. Apixaban for the treatment of venous thromboembolism associated with cancer. *N Engl J Med* 2020;382:1599-607. 13. McBane RD 2nd, Wysokinski WE, Le-Rademacher JG, et al. Apixaban and dalteparin in active malignancy-associated venous thromboembolism: the ADAM VTE trial. *J Thromb Haemost* 2020;18:411-21.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Table 1. Study characteristics of major pivotal trials comparing DOAC with LMWH.

	Hokusai VTE Cancer	SELECT-D	ADAM VTE	CARAVAGGIO
Trial design	Non-inferiority phase 3	Pilot	Superiority phase 3	Non-inferiority phase 3
Sample size	1,046	406	287	1,155
DOAC arm	LMWH for 5 days then edoxaban 60 mg/day PO	Rivaroxaban 15 mg PO twice a day for 21 days, then 20 mg PO once a day	Apixaban 10 mg PO twice a day for 7 days, then 5 mg PO twice a day	Apixaban 10 mg PO twice a day for 7 days, then 5 mg PO twice a day
LMWH arm		Dalteparin 200 U/kg daily for 1 month followed by 150 U/kg daily		
Dose reduction of DOAC	Edoxaban 30 mg/day PO in patients with < 60 kg of body weight; creatinine clearance 30–50 mL/min; drug-to-drug interactions	N/A	N/A	N/A
Treatment duration	12 months	6 months	6 months	6 months
Type of qualifying VTE	Acute symptomatic or incidentally detected lower extremity proximal DVT or PE of segmental or more proximal pulmonary artery	Acute symptomatic lower extremity proximal DVT, symptomatic PE, or incidental PE	Acute lower extremity or upper extremity DVT, PE, splanchnic vein, or cerebral vein thrombosis	Acute symptomatic or incidentally detected lower extremity proximal DVT or PE of segmental or more proximal pulmonary artery
Cancer excluded	Basal cell/squamous cell cancer of the skin	Basal cell/squamous cell cancer of the skin Esophageal or gastroesophageal cancer	Basal cell/squamous cell cancer of the skin	Basal cell/squamous cell cancer of the skin Primary brain tumor Intracerebral metastasis Acute leukemia
Primary outcome	Composite of recurrent VTE or major bleeding	Recurrent VTE	Major bleeding	Recurrent VTE Major bleeding

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ **Thrombocytopenia definition**

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Thrombocytopenia

- ❖ Defined as platelet counts of $< 100,000/\text{micL}$, is a common complication in patients with cancer and is associated with either adverse events of anti-cancer therapy or the underlying disease itself.
- ❖ This increases the risk of bleeding complications in patients with cancer-associated VTE, but the risk of recurrent VTE was not reduced ^(14, 16).
- ❖ The main consideration for VTE treatment in these patients is balancing the risk of such bleeding complications and the recurrent VTE.
- ❖ Furthermore, prolonged thrombocytopenia (> 30 days) in patients with CAT is associated with a greater than four-fold increased risk of recurrent venous thromboembolism (VTE). The rates of bleeding in this population range from 7% to 33%, and the rates of recurrent thrombosis range from 10% to 44% ⁽¹⁷⁾

14 Samuelson Bannow BR, Lee AYY, Khorana AA, et al. Management of anticoagulation for cancer-associated thrombosis in patients with thrombocytopenia: a systematic review. Res Pract Thromb Haemost 2018;2:664-9. 15 Kopolovic I, Lee AY, Wu C. Management and outcomes of cancer-associated venous thromboembolism in patients with concomitant thrombocytopenia: a retrospective cohort study. Ann Hematol 2015;94:329-36. 16 Samuelson Bannow BT, Lee A, Khorana AA, et al. Management of cancer-associated thrombosis in patients with thrombocytopenia: guidance from the SSC of the ISTH. J Thromb Haemost 2018; 16:1246-9. 17 Khanal N, Bociek RG, Chen B, Vose JM, Armitage JO, Bierman PJ, Maness LJ, Lunning MA, Gundabolu K, Bhatt VR. Venous thromboembolism in patients with hematologic malignancy and thrombocytopenia. Am J Hematol 2016; 91: E468-E72.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ Decisions about whether to use anticoagulation in patients with thrombocytopenia must balance the risks of thrombosis and thrombosis progression with the risks of bleeding due to thrombocytopenia as well as other bleeding risk factors.
- ❖ There is no simple formula for calculating which risk (thrombosis or bleeding) is greater
- ❖ There is no anticoagulant that can reduce thrombotic risk without also increasing bleeding risk
- ❖ The expected duration of these risks may also influence decision-making, taking in to account the patient's values and preferences

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

◆ Risk Factors for Bleeding and Thrombosis

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Risk factors for bleeding and thrombosis

- ❖ Bleeding and thrombosis risks are increased in individuals with cancer, and sometimes the same individual can have both
- ❖ **Bleeding** – The risk of bleeding in individuals with malignancy is higher than in the general population. This is due to many factors,^(18,19)
 - Recent major bleeding
 - Platelet count <50,000/microL(<10000/microL)
 - Hematopoietic stem cell transplant
 - Coagulation abnormalities
 - Platelet function defects
 - Older age – Older age, especially >75 years
 - Fall risk

18.Kim K, Yamashita Y, Morimoto T, et al. Risk Factors for Major Bleeding during Prolonged Anticoagulation Therapy in Patients with Venous Thromboembolism: From the COMMAND VTE Registry. *Thromb Haemost* 2019; 119:1498. 19.Nishimoto Y, Yamashita Y, Kim K, et al. Risk Factors for Major Bleeding During Anticoagulation Therapy in Cancer-Associated Venous Thromboembolism - From the COMMAND VTE Registry. *Circ J* 2020; 84:2006.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ For individuals with VTE who have an increased risk of bleeding, there are a number of options for preventing VTE progression or recurrence including: ^(18,19)
 - ❖ The use of lower-dose anticoagulation (either prophylactic dose or reducing the dose by half)
 - ❖ Temporarily holding the anticoagulant (especially if bleeding risk factors are transient),
 - ❖ Placement of an inferior vena cava (IVC) filter.
- ❖ Decisions of which of these options to use are highly patient-dependent and must include patient preferences

18. Kim K, Yamashita Y, Morimoto T, et al. Risk Factors for Major Bleeding during Prolonged Anticoagulation Therapy in Patients with Venous Thromboembolism: From the COMMAND VTE Registry. *Thromb Haemost* 2019; 119:1498. 19. Nishimoto Y, Yamashita Y, Kim K, et al. Risk Factors for Major Bleeding During Anticoagulation Therapy in Cancer-Associated Venous Thromboembolism - From the COMMAND VTE Registry. *Circ J* 2020; 84:2006.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Risk factors for bleeding and thrombosis in cancer patients

❖ Thrombosis

- ❖ The risk of cancer-associated VTE is influenced by tumor type, location, stage, time since diagnosis patient comorbidities and certain cancer therapies⁽²⁰⁾
- ❖ Is especially high in bulky or metastatic tumors, certain tumor types (eg, pancreatic or gastric cancer, brain tumors, acute leukemia, multiple myeloma), certain cancer chemotherapies (eg, asparaginase, immunomodulatory drugs (IMiDs; thalidomide, lenalidomide) ^(21, 22, 23,24)
- ❖ The overall/cumulative risk of VTE in individuals with cancer has been estimated at approximately 10 to 15 percent ⁽²⁴⁾

20.Blom JW, Doggen CJ, Osanto S, Rosendaal FR. Malignancies, prothrombotic mutations, and the risk of venous thrombosis. JAMA 2005; 293:715. 21.Chew HK, Wun T, Harvey D, et al. Incidence of venous thromboembolism and its effect on survival among patients with common cancers. Arch Intern Med 2006; 166:458. 22.Anderson LA, Moore SC, Gridley G, et al. Concomitant and antecedent deep venous thrombosis and cancer survival in male US veterans. Leuk Lymphoma 2011; 52:764. 23.De Martino RR, Goodney PP, Spangler EL, et al. Variation in thromboembolic complications among patients undergoing commonly performed cancer operations. J Vasc Surg 2012; 55:1035. 24.Hultcrantz M, Björkholm M, Dickman PW, et al. Risk for Arterial and Venous Thrombosis in Patients With Myeloproliferative Neoplasms: A Population-Based Cohort Study. Ann Intern Med 2018; 168:317.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Risk of VTE progression (or recurrence)

- ❖ Is greatest in the initial 30 days after the acute VTE event. Thus, after 30 days, thrombotic risk is expected to decrease, and these individuals are treated as low thrombotic risk.
- ❖ Other risk factors for VTE progression are related to the size and location of the thromboembolism, and whether the risk factor(s) for VTE were transient or permanent
- ❖ For individuals with cancer, the presence of active cancer or chemotherapy and lower performance status are strong risk factors for VTE progression. (21, 22, 23,24)

20.Blom JW, Doggen CJ, Osanto S, Rosendaal FR. Malignancies, prothrombotic mutations, and the risk of venous thrombosis. JAMA 2005; 293:715. 21.Chew HK, Wun T, Harvey D, et al. Incidence of venous thromboembolism and its effect on survival among patients with common cancers. Arch Intern Med 2006; 166:458. 22.Anderson LA, Moore SC, Gridley G, et al. Concomitant and antecedent deep venous thrombosis and cancer survival in male US veterans. Leuk Lymphoma 2011; 52:764. 23.De Martino RR, Goodney PP, Spangler EL, et al. Variation in thromboembolic complications among patients undergoing commonly performed cancer operations. J Vasc Surg 2012; 55:1035. 24.Hultcrantz M, Björkholm M, Dickman PW, et al. Risk for Arterial and Venous Thrombosis in Patients With Myeloproliferative Neoplasms: A Population-Based Cohort Study. Ann Intern Med 2018; 168:317.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ Primary VTE Prophylaxis

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

Primary VTE prophylaxis

- ❖ Is generally considered safe with platelet counts **above 50,000/microL**, but there are limited data regarding the safety of primary thromboprophylaxis in more severe thrombocytopenia.⁽²⁵⁾
- ❖ The approach to prophylactic anticoagulation for individuals with platelet counts <50,000/microL is more controversial. In general, do not use anticoagulation for VTE prophylaxis if the platelet count is **below the 20,000 to 30,000/microL** range.⁽²⁵⁾
- ❖ For individuals with platelet counts **above this range but below 50,000/microL**, use of prophylactic anticoagulation is individualized; it may be appropriate in those with an especially high thromboembolic risk (eg, high-risk malignancy, history of thrombosis).⁽²⁵⁾

25. Tufano A, Guida A, Di Minno MN, et al. Prevention of venous thromboembolism in medical patients with thrombocytopenia or with platelet dysfunction: A review of the literature. *Semin Thromb Hemost* 2011; 37:267. UpToDate. Anticoagulation in individuals with thrombocytopenia. https://www.uptodate.com/contents/anticoagulation-in-individuals-with-thrombocytopenia?search=thrombocytopenia%20cancer&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4#H326640521. Accessed June 2023

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ Treatment VTE

Managing antithrombotic therapy in challenging scenarios

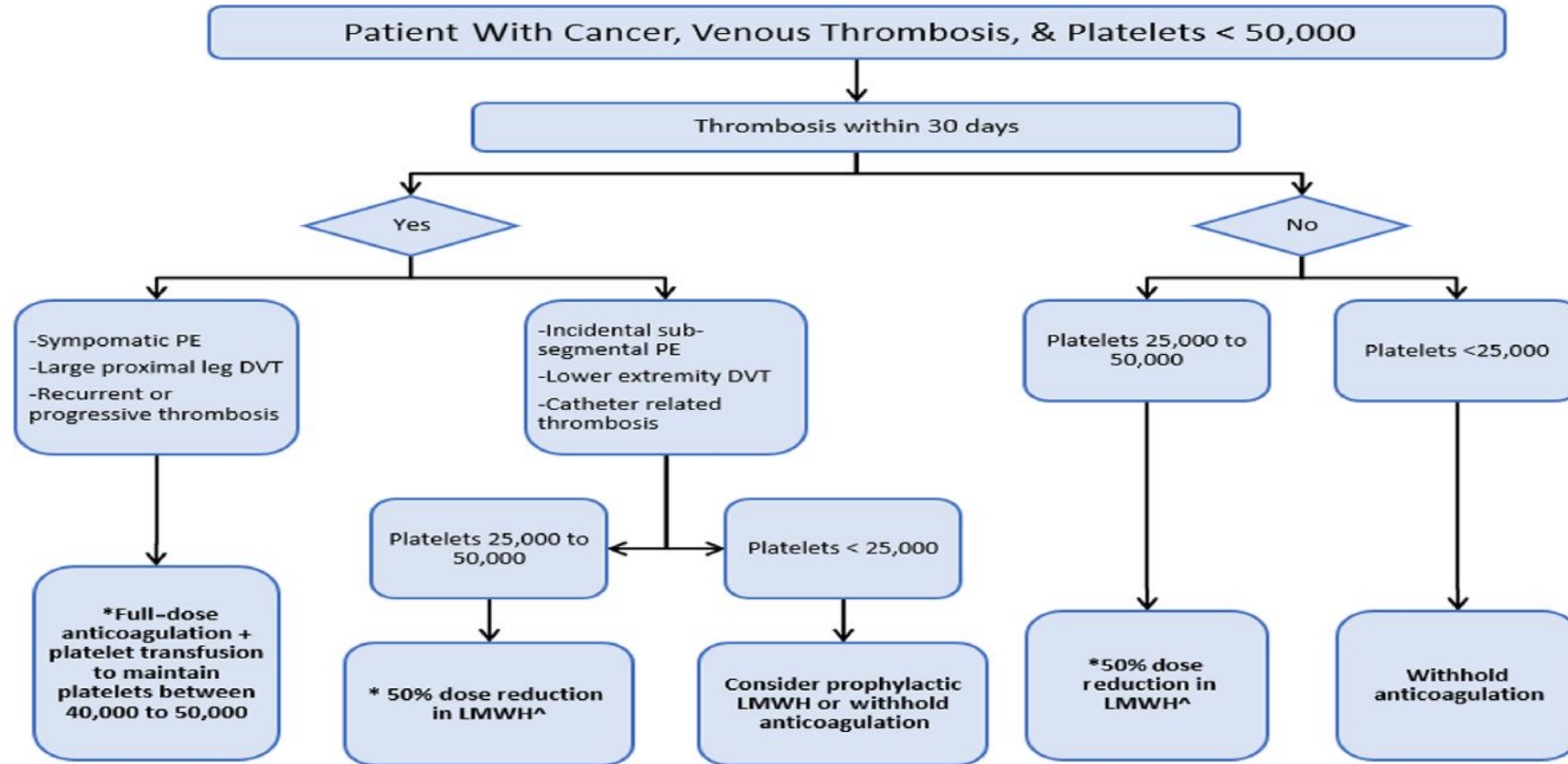
Patients with cancer at risk of thrombocytopenia

Treatment

- ❖ According to the SSC of the ISTH ⁽²⁶⁾, LMWH is the preferred anticoagulant for treating acute cancer-associated VTE with thrombocytopenia, and full-dose anticoagulation is recommended if platelet counts are **≥50,000/micL**.
- ❖ If platelet counts decline **<50,000/micL**, treatment strategies should be based on the degree of thrombocytopenia, VTE type, and recurrence risk.
 - ❖ If patients have symptomatic segmental or more proximal PE, proximal DVT, or recurrent VTE, full-dose anticoagulation with transfusion support to maintain platelet counts **>50,000/micL** is suggested.
- ❖ For patients **with low-risk features for recurrence** (i.e., incidental subsegmental PE or isolated distal DVT, or subacute or chronic VTE) it is feasible to administer a half or the prophylactic dose of LMWH.
- ❖ For patients with platelet levels **<25,000/micL**, temporary anticoagulation discontinuation should be considered in any circumstance.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia



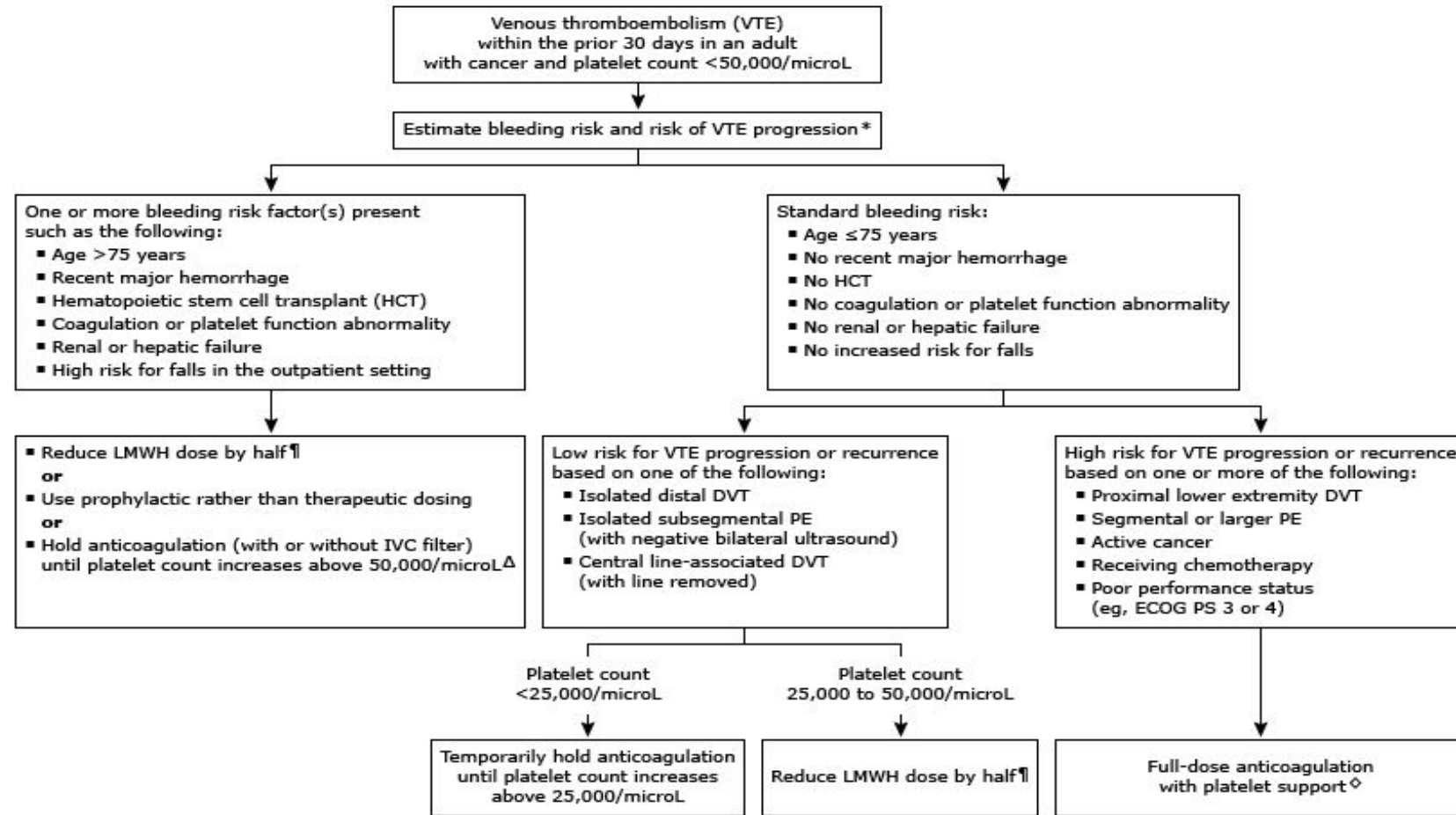
*As platelet counts improve or from time changes, the approach should change accordingly.

^Recommendation for dose reduction and do not change frequency (round to closest prefilled syringe)

Samuelson Bannow et. al. Journal of Thrombosis and Haemostasis. 2018 Jun; 16(6):1246-1249

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia



26 Samuelson Bannow BT, Lee A, Khorana AA, et al. Management of cancer-associated thrombosis in patients with thrombocytopenia: guidance from the SSC of the ISTH. *J Thromb Haemost* 2018; 16:1246-9. UpToDate. Anticoagulation in individuals with thrombocytopenia. https://www.uptodate.com/contents/anticoagulation-in-individuals-with-thrombocytopenia?search=thrombocytopenia%20cancer&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4#H326640521. Accessed June 2023

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

DOACS

- ❖ There is a lack of data on the use of DOACs in patients with cancer-associated VTE and thrombocytopenia because major pivotal trials of DOACs on cancer-associated VTE did not include patients with platelet counts $< 50,000\text{--}100,000/\mu\text{L}$ at baseline (11, 19-21)
- ❖ In a recent small multicenter prospective study evaluating the risk of hemorrhage and recurrent VTE in patients with cancer-associated VTE and concurrent thrombocytopenia (platelet counts $< 100,000/\mu\text{L}$) modified dose anticoagulation, including 2.5 mg apixaban twice daily and 10 mg rivaroxaban daily, has shown to be a safe alternative approach. (22)
- ❖ Thus, DOACs needed to be investigated in patients with cancer with VTE and thrombocytopenia

11. Young AM, Marshall A, Thirlwall J, et al. Comparison of an oral factor Xa inhibitor with low molecular weight heparin in patients with cancer with venous thromboembolism: results of a randomized trial (SELECT-D). *J Clin Oncol* 2018;36:2017-23. 19. van Es N, Di Nisio M, Bleker SM, et al. Edoxaban for treatment of venous thromboembolism in patients with cancer. Rationale and design of the Hokusai VTE-cancer study. *Thromb Haemost* 2015;114:1268-76. 20. Agnelli G, Becattini C, Bauersachs R, et al. Apixaban versus dalteparin for the treatment of acute venous thromboembolism in patients with cancer: the Caravaggio study. *Thromb Haemost* 2018;118:1668-78. 21. McBane II R, Loprinzi CL, Ashrani A, et al. Apixaban and dalteparin in active malignancy associated venous thromboembolism. The ADAM VTE trial. *Thromb Haemost* 2017;117:1952-61.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ Summary and Conclusions

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ There are no randomized trials comparing different approaches to reducing the risks of VTE or VTE progression in people with cancer and thrombocytopenia.
- ❖ Supporting evidence regarding outcomes of cancer-associated VTE in individuals with concomitant thrombocytopenia comes from observational (often retrospective) studies.
- ❖ In general they describe successful anticoagulation for VTE, with dose adjustments for more severe thrombocytopenia; bleeding complications were rare.

Carney BJ, Wang TF, Ren S, et al. Anticoagulation in cancer-associated thromboembolism with thrombocytopenia: a prospective, multicenter cohort study. *Blood Adv* 2021; 5:5546. Mantha S, Miao Y, Wills J, et al. Enoxaparin dose reduction for thrombocytopenia in patients with cancer: a quality assessment study. *J Thromb Thrombolysis* 2017; 43:514. Kopolovic I, Lee AY, Wu C. Management and outcomes of cancer-associated venous thromboembolism in patients with concomitant thrombocytopenia: a retrospective cohort study. *Ann Hematol* 2015; 94:329. Raskob GE, van Es N, Verhamme P, et al. Edoxaban for the Treatment of Cancer-Associated Venous Thromboembolism. *N Engl J Med* 2018; 378:615. Kamphuisen PW, Lee AYY, Meyer G, et al. Clinically relevant bleeding in cancer patients treated for venous thromboembolism from the CATCH study. *J Thromb Haemost* 2018; 16:1069.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

- ❖ Anticoagulation is generally well tolerated, and mortality from VTE may be greater than mortality from bleeding in most populations.
- ❖ Exceptions to the greater risk of mortality from thrombosis than bleeding include:
 - ❖ Hematopoietic stem cell transplant (HCT) recipients, for whom bleeding (including fatal bleeding) was more common than VTE;
 - ❖ Individuals with brain tumors;
 - ❖ Catheter-associated VTE, which may be treated locally (eg, with catheter removal).

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ Prophylaxis

- ❖ For those with counts between 25,000 and 50,000/microL, CAT prophylaxis is individualized
- ❖ For counts below 25,000/micL, prophylactic anticoagulation generally is not used.

❖ Treatment

- ❖ **For platelet counts of 50,000/microL or above**, anticoagulation for VTE treatment can be administered according to established protocols
- ❖ **For platelet counts between 25,000 and 50,000/microL**, anticoagulation is suggested. The rationale is that morbidity from thrombosis is likely to be greater than morbidity from bleeding.
- ❖ **High risk of progression/recurrence**
 - ❖ Full dose anticoagulation with platelet support (to raise the platelet count above 50,000/microL), for most individuals with a high risk of VTE progression or recurrence who do not have additional bleeding risk factors other than thrombocytopenia.
 - ❖ In those patients whereby transfusion support is not practical or feasible, we should use half-dose anticoagulation.

26 Samuelson Bannow BT, Lee A, Khorana AA, et al. Management of cancer-associated thrombosis in patients with thrombocytopenia: guidance from the SSC of the ISTH. J Thromb Haemost 2018; 16:1246-9. UpToDate, Anticoagulation in individuals with thrombocytopenia. https://www.uptodate.com/contents/anticoagulation-in-individuals-with-thrombocytopenia?search=thrombocytopenia%20cancer&source=search_result&selectedTitle=4~150&usage_type=default&display_rank=4#H326640521. Accessed June 2023

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia

❖ Treatment

- ❖ **Low risk of VTE progression/recurrence or high risk of bleeding**
 - ❖ Half-dose anticoagulation
 - ❖ Other options include prophylactic-dose anticoagulation or temporarily holding anticoagulation,
 - ❖ Insertion of an inferior vena cava (IVC) filter.
- ❖ Individuals with VTE may reasonably make different choices depending on their specific circumstances, bleeding risk factors, and VTE recurrence risk.
- ❖ Additional considerations may apply to individuals undergoing hematopoietic cell transplant, those with a central venous catheter, and certain malignancies such as multiple myeloma, pancreatic cancer, or brain tumors.

Managing antithrombotic therapy in challenging scenarios

Patients with cancer at risk of thrombocytopenia



ICT 2023

28th International
Congress on Thrombosis



Sérgio Barroso, MD
sergio.vilelas.barroso@lusiadas.com
Hospital Lusíadas Amadora