

# ANTINEOPLASTIC DRUGS AND THROMBOSIS: ANALYSIS OF A COHORT OF PATIENTS WITH CANCER-ASSOCIATED THROMBOSIS

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## BACKGROUND AND IMPORTANCE

Cancer is associated with various factors that increase thrombotic risk. Incidence of cancer-associated thrombosis (CAT) is related:

- Type of tumour
- Staging
- Antineoplastic treatment.

**VENOUS THROMBOEMBOLIC DISEASE**

10-20% of CANCER patients

HIGH MORBIMORTALITY

## AIM AND OBJECTIVES



Identify the **thrombotic risk** in a cohort of patients with a CAT.



Analyse the **prevalence** of antineoplastic drugs thrombosis-related

## MATERIAL AND METHODS

RETROSPECTIVE  
OBSERVATIONAL STUDY  
2019



Third-level hospital



Oncological patients  
with CAT diagnosis

- > Biodemographical
- > Clinical
- > Antineoplastic treatment

Different sources\* associate some antineoplastic drugs to CAT: 5-fluorouracil, cisplatin, doxorubicin, paclitaxel, antiangiogenic drugs

ASCO GUIDELINES 2019

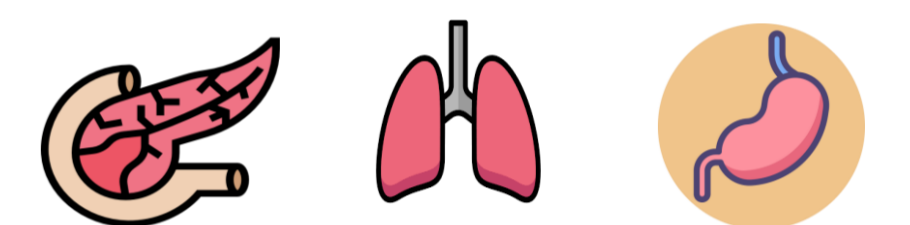


Most related  
tumours to CAT



A. VERY HIGH RISK: STOMACH, PANCREAS

B. HIGH RISK: Lung, lymphoma, gynaecological, bladder, testicles and kidneys



Khorana Risk Score  
(KRS)



Scale to assess **thrombotic risk** in cancer population prior to the initiation of chemotherapy

- Tumour location
- BMI > 35
- Haemoglobin < 10g/dl
- Leukocytes > 11,000/μl
- Platelets > 350,000/μl

3: high risk  
2: intermediate risk  
0: low risk



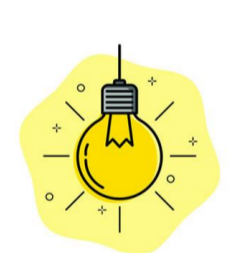
## RESULTS



50 (48% men) oncological patients  
Median age of 68(54-75) years



When CAT occurs:



42 (84%) patients were receiving antineoplastic treatment. 23 (55%) of these associated with CAT



paclitaxel (30.7%), 5-fluorouracil (30.7%), cisplatin (15.4%), bevacizumab (7.7%), cetuximab (7.7%), doxorubicin (7.7%), others (15.4%)



According to ASCO Guidelines: 46% of patients had a tumour location associated with CAT



A. VERY HIGH RISK: STOMACH (10%), PANCREAS (10%)

B. HIGH RISK: Lung (14%), gynaecological (6%), kidney (4%) and testicle (2%)



According to Khorana Risk Score (KRS)



THROMBOTIC RISK	PATIENTS (%)	TREATMENT ASSOCIATED WITH CAT (%)
HIGH	14	20
INTERMEDIATE	50	61
LOW	36	55



50% with  
2 CAT-related drugs

## CONCLUSION AND RELEVANCE

- ✓ A high number of patients (55%) received oncological treatment associated with CAT.
- ✓ An important number of patients (64%) presented intermediate or high risk.
- ✓ The majority of patients who were receiving oncological drugs associated with CAT presented low or intermediate risk of thrombosis according to KRS.

These results could be used to analyse the need to initiate thromboembolic prophylaxis in certain groups, beyond those of high risk.



\*References:

- Venous Thromboembolism Prophylaxis and Treatment in Patients With Cancer: ASCO Clinical Practice Guideline Update.
- Thrombotic Risk from Chemotherapy and Other Cancer Therapies.