

antineoplastic drug 2

2025-4-16

يوم العلم

* microtubul inhibitors



Vinca alkaloid

Cell cycle Specific

* bind to tubular protein (tubulin)

↳ lead to

depolymerization

* prevent formation of mitotic spindle



Vincristine.

vinblastine

not myelotoxic

toxic to Bone marrow (myelotoxic)

neurotoxic

least neurotoxic

Taxanes

✓ polymerization

but prevent separation of chromosomes

use in

Breast & Ovarian Cancer



6) One of these paired cytotoxic agents have similar mechanism of action?

- a. Vincristine and paclitaxel.
- b. Etoposide and paclitaxel.
- c. Docetaxel and paclitaxel.
- d. Docetaxel and etoposide.
- e. Vincristine and etoposide.

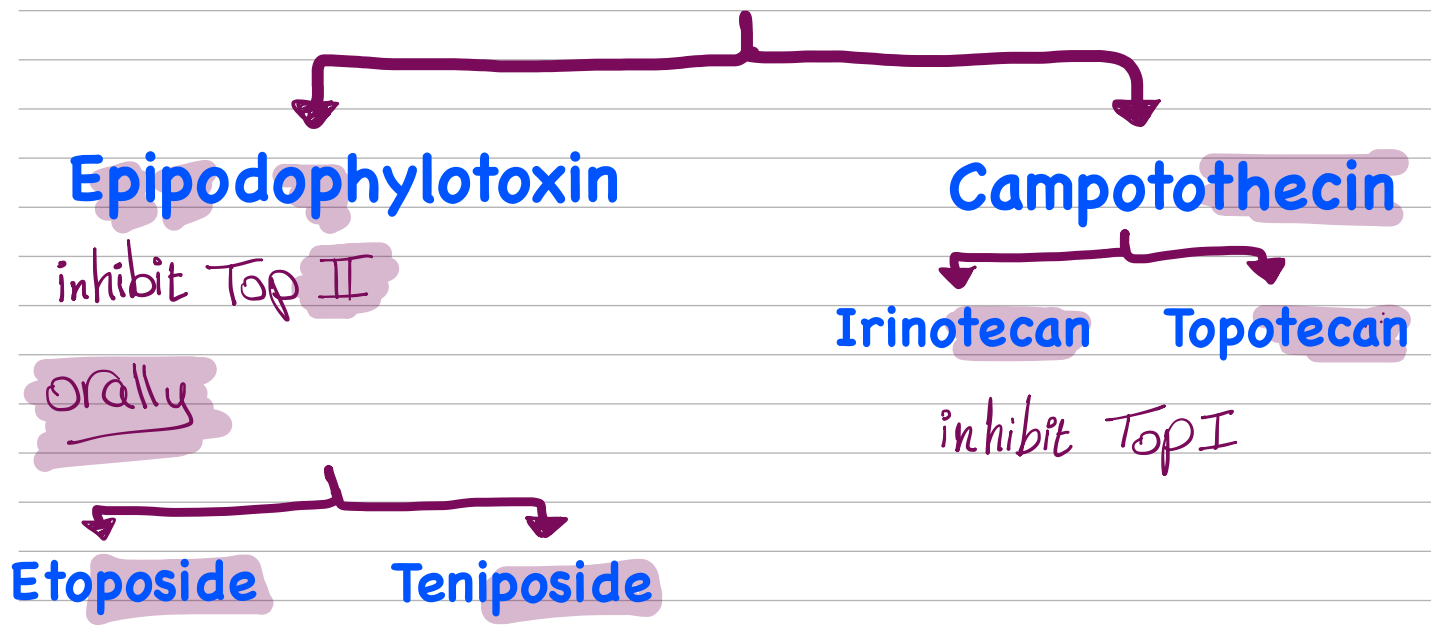
Ans : c

خلصوا احفظوا انهم عكس بعضه البعض
فيها [B] هو بتعمل

toxicity of BU (myelotoxic)
وفاشل neurotoxic زوفايل

* Topoisomerase inhibitors

- * inhibit (Topo..) to there function → مؤثرها تكمن في قهر ال DNA
- * cause DNA breaks
- * cell cycle specific



لما د وادال anticancer يكونه orally يكونه + فيه كثير عيب
 بوفر وقت ودهم المريض ورواحه على المستشفى
 وحتى تخفيفه الضغط على المستشفى من تدبير أسرة ومهارة

* أغلب ال anticancer drug
 ↳ IV ← يؤخذو

* Steroid hormones and their antagonists

* **Tamoxifen** * كلو مهم
estrogen antagonist

* Selective estrogen-receptor modulator

* weak estrogenic activity \rightarrow (effect 100%)
بس يعني بدل هو بصر قلنا 5%

inhibition tumor growth of Breast Cancer

* first line in estrogen-positive breast cancer

orally

AEs = skin rash, vaginal bleeding
and discharge, hypercalcemia
endometrial cancer, thromboembolism

* حاي الاعراض
تسبب
علا وجود ال
Hormon

* Monoclonal AB

AB against specific tumor Ag

Trastuzumab

* For epidermal

growth factor receptor

HER-2/neu

* approved IV for treatment

metastatic breast cancer

↳ in patient whose tumor

overexpress HER/neu

AEs

Congestive heart failure (rare)

fever & chills

Bevacizumab

* antiangiogenesis

For

↳ vascular endothelial growth factor (VEGF)

* approved IV → first line

drug against metastatic

colorectal cancer

Rituximab

for CD20⁺ B cell

* For

↳ non-Hodgkin lymphoma

Others ☺

* platinum coordination complexes ☺

platin ← مذكور بالاسم في الادوية الكيميائية

platinum ← بلاتين

platinum bind to DNA and forms cross links between neighboring guanines

AE ☺

nephrotoxicity,

ototoxicity,

neurotoxicity

les, drug-drug interaction

* Tyrosine Kinase inhibitors

Imatinib

inhibit bcr-abl tyrosin Kinase
prevent the phosphorylation of tyrosin

inhibit subsequent step that lead
to cell proliferation

* Orally for

Chronic myelogenous leukemia

AE:

fluid retention • Edema

hepatotoxicity •

neutropenia ←

Genfitinib

* for - epidermal
growth factor
receptor

* Treatment of
non-small cell
Lung Cancer

* Orally

AE:

* acne-like skin rashes

diarrhea • nausea

can manageable هو قابل للإدارة

3) Which one the following is a Tyrosine kinase inhibitor?

- Cisplatin.
- Tamoxifen.
- Irinotecan.
- Gefitinib. XXX
- Paclitaxel.

الحمد لله

* كلام الدكتور
لي ابي قصير لدواء فعين لهم
ال AE الي رز عليهم الدكتور وهران (المذكورين في الترخيص)
اسماء الادوية كالمين تابعين!

لو أن أحدكم همهم بإزالة
QALAM.FARIS
جبل وهو واثق بالله لأزاله

Done by Noor

أدعولي 😊