



## INTRODUCTION

A few data has been collected on the use of herbal medicines and the potential risks of herb drug interactions (HDI) with anticancer drugs (ACD).

## AIM and OBJECTIVES

The aim is to collect epidemiological data on the consumption of medicinal plants by patients on ACD and to assess the potential HDI and their knowledge among patients and their physicians.

## MATERIALS and METHODS

### Collect epidemiological data

✓ Creation of an heteo-survey

✓ Selection criteria : patients with ACD

✓ Interviews with patients between january 2018 and august 2019 (patients hospitalized and outpatients)

### Investigate the potential HDI

✓ Databases : Hédrine, MSKCC

### Assess the awareness regarding the consumption and the potential of interaction

✓ Creation of a questionnaire for the hematologists at the UHC of Nantes and the general practionners

## RESULTS

Patients hospitalized	Outpatients
N = 110	N = 59
Sex ratio H/F = 1,2	Sex ration H/F = 1,1
Average age = 56 years	Average age = 67 years
44 (40%) consumed phytotherapy products	10 (17%) consumed phytotherapy products
Average = 3 products	Average = 2,4 products
10 interactions (prevalence of 27%)	8 interactions (prevalence of 80%)
18 patients aware of the risk of HDI	2 patients aware of the risk of HDI

ACD	Plant	Nature of the HDI	ACD	Plant	Nature of the HDI
Cytarabine Etoposide	Lemon	Lemon is a weak inhibitor of CYP3A4 and can increase the concentrations of ACD	Lenalidomide	Aloe vera	Increase of the hypokalemia
Cytarabine Etoposide	Green Mint	Mint is a weak activator of CYP3A4 and can decrease the concentration of ACD	Lenalidomide	Ginkgo Biloba	Increase in the risk of bleeding
Cytarabine Etoposide	Green Mint	Enhancement of the hepatotoxicity: this ACD are hepatotoxic and green mint weakly hepatotoxic	Lenalidomide	Red vine	Increase in the risk of bleeding
Cytarabine Etoposide	Cranberry	Cranberry is a weak inhibitor of CYP3A4 and can increase the concentrations of ACD	Lenalidomide	Cinnamon	Increase in the hepatotoxicity
Cytarabine Etoposide	Cranberry	Enhancement of the immunodepression induced by this ACD by cranberry, which is trombocytopenic	Lenalidomide	Turmeric	Increase in the risk of bleeding
			Lenalidomide	Thyme	Increase in the risk of bleeding
			Lenalidomide	Rosemary	Increase in the risk of bleeding
			Lenalidomide	Green Mint	Increase in the hepatotoxicity

**7 hematologist (47%) and 14 general practitioner (29%) answered the questionnaire**

→ None of the hematologists recommended the use of phytotherapy (not enough training, treatment not effective) while 71% of the general practitioners regularly recommended its use (for sleep disorders, anxiety, depression)

→ 57% of the hematologists and 79% of the general practitioners are aware of the risk of HDI

→ The majority wishes to benefit from a training in phytotherapy and wishes that a guide regarding HDI would be available.

## CONCLUSION

The results obtained show that the consumption of herbal medicine in patients on ACD is common, as well as HDI. Yet, patients and physicians appear to be poorly or not informed about those interactions.

The pharmacist has a major role to play in this context.